SOLICITATION, OFFER AND AWARD

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING	PAGE
➤		1 OF 427

2. CONTRACT NO.	3. SOLICITATION NO.	4. TYPE OF SOLICITATION	5. DATE ISSUED	6. REQUISITION/PURCHASE NO.
NAS10-02026	RFP 10-01-0001	☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)	September 24, 2001	M022129

7. ISSUED BY CODE	8. ADDRESS OFFER TO *(If other than Item 7)*
JOHN F. KENNEDY SPACE CENTER, NASA MAIL CODE: SEB-ELVIS KENNEDY SPACE CENTER, FL 32899	

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

SOLICITATION

9. Sealed offers in original and **(See L-7)** copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if hand carried, in the depository located in **(See Article L-6)** until **(See Article L-6)** local time, on **(See Article L-6)**. CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L. Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: ➤	A. NAME	B. TELEPHONE NO. *(NO COLLECT CALLS)* AREA CODE	NUMBER	EXT.	C. EMAIL ADDRESS
	Roger A. MacLeod	(321)	867-2879		roger.macleod-1@ksc.nasa.gov

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OFFER *(Must be fully completed by offeror)*

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within **180** calendar days *(60 calendar days unless a different period is inserted by the offeror)* from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT ➤ *(See Section I, clause No. 52-232-8)*	10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %

14. ACKNOWLEDGMENT OF AMENDMENTS *(The offeror acknowledges receipt of amendments to the SOLICITATION).* For offerors and related documents numbered and dated:	AMENDMENT NO	DATE	AMENDMENT NO	DATE
	1	10/3/2001	4	11/7/2001
	2	10/24/2001	5	3/7/2002
	3	11/1/2001	6	4/2/2002

15. NAME AND ADDRESS OF OFFEROR	CODE 71-086-9563	FACILITY 05BD6	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*
	Analex Corporation 5904 Richmond Hwy Alexandria, VA 22303		Christopher Pestak Senior Vice President

15B. TELEPHONE NO. *(Include area code)*	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE – ENTER ☒ SUCH ADDRESS IN SCHEDULE	17. SIGNATURE	18. OFFER DATE
216-977-0257			6/3/02

AWARD *(To be completed by Government)*

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
CLIN 1001 – CLIN 1012	$53,900,997.00	VA/VA-90302.ISC/2550C/400000/54/02

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION	23. SUBMIT INVOICES TO ADDRESS SHOWN IN: ➤ *(4 copies unless otherwise specified)*	ITEM
☐ 10 U.S.C. 2304(c) ( ) ☐ 41 U.S.C. 253(c) ( )		See G-3 & G-5

24. ADMINISTERED BY *(If other than Item 7)* CODE	25. PAYMENT WILL BE MADE BY CODE
	NASA/KSC GENERAL ACCOUNTING A/P GG-B-C2 KENNEDY SPACE CENTER, FL 32899

26. NAME OF CONTRACTING OFFICER *(Type or print)*	27. UNITED STATES OF AMERICA	28. AWARD DATE
James E. Hattaway, Jr.	*(Signature of Contracting Officer)*	6-5-02

IMPORTANT – Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

Attachment 3

PART I – THE SCHEDULE
SECTION B
SUPPLIES OR SERVICES AND PRICE/COSTS

B-1 SCHEDULE OF SUPPLIES OR SERVICES

The Contractor shall provide all non-personal services necessary to furnish the Contract Line Item Numbers (CLINs) to NASA as described in Section C, C-1, "Scope of Work" and in accordance with Attachment J-1, "Statement of Work" on a fixed price/cost plus award fee basis and Indefinite-Delivery Indefinite-Quantity effort as required.

1.0 Phase-In Period (Performance Period: KSC: June 1, 2002 – July 7, 2002, VAFB: June 1-30, 2002)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
1001	**Phase-In Period (Firm-Fixed-Price)** Phase-in period between award and initiation of the basic period of performance, not to exceed 30 calendar days in accordance with SOW 2.0.	1	Lot	$ .00

BASIC PERIOD – Expendable Launch Vehicle Integrated Support for a 3-year, three-month performance period.

(Performance Period: KSC: July 8, 2002 – September 30, 2005, VAFB: July 1, 2002 – September 30, 2005)

1.1 Basic Contract Core Requirements (Fixed Price Award Fee)

The Contractor shall provide the necessary services to accomplish the following technical services in accordance with the SOW. Pricing for Section 1.0 of the SOW is deemed to be included in the CLIN prices below.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT ($)
1002	**ELV Program Management Support in accordance with SOW 3.0**				
1002A	ELV Program Management Support (FY02)	3	MO		
1002B	ELV Program Management Support (FY03)	12	MO		
1002C	ELV Program Management Support (FY04)	12	MO		
1002D	ELV Program Management Support (FY05)	12	MO		

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
1003	**Safety and Mission Assurance in accordance with SOW 4.0.**				
1003A	Safety and Mission Assurance (FY02)	**3**	**MO**		
1003B	Safety and Mission Assurance (FY03)	**12**	**MO**		
1003C	Safety and Mission Assurance (FY04)	**12**	**MO**		
1003D	Safety and Mission Assurance (FY05)	**12**	**MO**		
1004	**Launch Site Support Engineering (LSSE) in accordance with SO**				
1004A	LSSE (FY02)	**3**	**MO**		
1004B	LSSE (FY03)	**12**	**MO**		
1004C	LSSE (FY04)	**12**	**MO**		
1004D	LSSE (FY05)	**12**	**MO**		
1005	**Technical Integration Services in accordance with SOW 6.0**				
1005A	Technical Integration Services (FY02)	**3**	**MO**		
1005B	Technical Integration Services (FY03)	**12**	**MO**		
1005C	Technical Integration Services (FY04)	**12**	**MO**		
1005D	Technical Integration Services (FY05)	**12**	**MO**		
1006	**Communication and Telemetry in accordance with SOW 7.0**				
1006A	Communication and Telemetry (FY02)	**3**	**MO**		
1006B	Communication and Telemetry (FY03)	**12**	**MO**		
1006C	Communication and Telemetry (FY04)	**12**	**MO**		
1006D	Communication and Telemetry (FY05)	**12**	**MO**		
1007	**Vandenberg AFB Unique in accordance with SOW 8.0**				
1007A	Vandenberg AFB Unique (FY02)	**3**	**MO**		
1007B	Vandenberg AFB Unique (FY03)	**12**	**MO**		
1007C	Vandenberg AFB Unique (FY04)	**12**	**MO**		
1007D	Vandenberg AFB Unique (FY05)	**12**	**MO**		

Table B-1 CLINS 1002 -1007 Overall Fixed-Price and Award Fee By Period
(Prior to Modification 102 Bifurcated Award Fee Plans)

Award Fee Period	Start	End	Fixed-Price	Maximum Available Award Fee	Maximum Total Amount
1st Period	7/1/02	9/30/02			
2nd Period	10/01/02	03/31/03			
3rd Period	04/01/03	09/30/03			
		FY 03 Total			
4th Period	10/01/03	03/31/04			
5th Period	04/01/04	09/30/04			
		FY 04 Total			
6th Period	10/01/04	03/31/05			
7th Period	04/01/05	09/30/05			
		FY 05 Total			

Table B-1a CLIN 1003D S&MA Fixed-Price and Award Fee By Period

Award Fee Period	Start	End	S&MA Fixed-Price	Max Avail Award Fee S&MA	Maximum Total Amount
7th Period	04/01/05	09/30/05			
	FY05 7th Period Total				
	Total Basic Period				

Maximum Available Award Fee shall be included in provision B-3 "AWARD FEE"

1.2 Mission Direct Support (IDIQ)

The Government reserves the right to order fixed price, Indefinite Deliver/Indefinite Quantity (IDIQ) mission direct support services, independent of core requirements, under these CLINs from the items listed below. The Contracting Officer may order the services any time by written notice to the Contractor in accordance with the ordering procedures set forth in Section H of this contract. Task orders will be performance-based and will be restricted to the acquisition of "outcomes" where the period of performance and discrete task objectives will be limited to work and products that can be defined and priced.

The services furnished under this IDIQ article supplement and are in addition to the services furnished under the contract's core requirements. Notwithstanding the issuance or pendency of a task/delivery order, the Contractor will not be entitled to additional payment, beyond the contract price for core requirements, for any work already required (as to substance, quantity and schedule) under the contract's/SOW core requirements provisions.

Hourly Rates for Mission-Direct Support Services

SOW	Rate Type	Description	Ordering Unit
9.1	Individual Composite	A combined average rate for one hour of service performed by a single skilled worker from Safety & Mission Assurance, Launch Site Support Engineering, ***or*** Technical Integration Services outside of core hours at KSC or VAFB.	Worker Hour
.2	Individual Composite	A combined average rate for one hour of service performed by a single skilled worker from VAFB Operations, Troubleshooting ***or*** Repair outside of core hours.	Worker Hour
9.3	Full Crew Composite	A combined crew rate for one hour of service performed by a **full** crew supporting Communications and Telemetry outside of core hours. There are separate rates depending upon location of service at KSC or at VAFB.	Crew Hour
9.4	Reduced Crew Composite	A combined crew rate for one hour of service performed by a **reduced** crew supporting Communications and Telemetry outside of core hours. There are separate rates depending upon location of service at KSC or VAFB.	Crew Hour
9.5	Individual Composite	A combined average rate for one hour of a single skilled worker performing On-Call Troubleshooting or Repair outside of core hours.	Worker Hour

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
1008	**Mission Direct Support Services** The Contractor shall accept task orders issued only by the Contracting Officer. The Contractor shall provide the services as ordered to accomplish the following.			
1008A	**Additional Support for Safety and Mission Assurance, Launch Site Support Engineering, and Technical Integration Services, in accordance with SOW 9.1**	**As Ordered**	**Hr**	**See Table B-1.1**
1008B	**Additional Support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2**			
1008BA	Scheduled support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2	As Ordered	Hr	See Table B-1.1
1008BB	Call-out support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2	As Ordered	Hr	See Table B-1.1
1008C	**Hourly Support for Communication and Telemetry Outside of Core Work Shift in accordance with SOW 9.3**			
1008CA	KSC Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-1.1
1008CB	VAFB Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-1.1
1008D	**Reduced Support for Communications and Telemetry Outside of Core Work Shift in accordance with SOW 9.4**			
1008DA	KSC Reduced Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-1.1
1008DB	VAFB Reduced Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-1.1
1008E	**On-Call Troubleshooting and Repair Support in accordance with SOW 9.5**			
1008EA	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Communication Technician at KSC.	As Ordered	Hr	See Table B-1.1

1008EB	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Communication Technician at VAFB.	As Ordered	Hr	See Table B-1.1
1008EC	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Manager at VAFB.	As Ordered	Hr	See Table B-1.1
1008F	**Guard Services at VAFB in accordance with SOW 9.6**	**As Ordered**	**Hr**	**See Table B-1.2**
1008G	**Access Control Monitors (ACM) at VAFB in accordance with SOW 9.7**	**As Ordered**	**Hr**	**See Table B-1.3**

Upon identification of a task(s) by the Contracting Officer, a request to the Contractor for "estimated" number of hours/units required to complete the identified task(s), and subsequent negotiation of agreed to hours/units, the Government may issue task orders utilizing the Contractor 's fully burdened, fixed-price rates shown in Table B-1.1 to B-1.3. The price in each year includes all direct costs (including shift differentials as applicable), applicable indirect cots and anticipated profit.

Table B-1.1 HOURLY LABOR RATES

HOURLY LABOR RATES (Composite Skills Mix and Burdened)	**FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED**			
	2002	**2003**	**2004**	**2005**
CLIN 1008A (SOW 9.1)				
CLIN 1008BA (SOW 9.2)				
CLIN 1008BB (SOW 9.2)				
CLIN 1008CA (SOW 9.3)				
CLIN 1008CB (SOW 9.3)				
CLIN 1008DA (SOW 9.4)				
CLIN 1008DB (SOW 9.4)				
CLIN 1008EA (SOW 9.5)				
CLIN 1008EB (SOW 9.5)				
CLIN 1008EC (SOW 9.5)				

Table B-1.2 *24-HOUR SHIFT/ACCESS POINT RATES*

24-HOUR SHIFT/ACCESS POINT RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED			
	2002	2003	2004	2005
CLIN 1008F (SOW 9.6)				

Table B-1.3 *24-HOUR RATES*

24-HOUR RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED			
	2002	2003	2004	2005
CLIN 1008G (SOW 9.7)				

Public Affairs Support (IDIQ)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
1008H	Satellite Uplink Services for NASA Public Affairs Support in accordance with SOW 9.8	As Ordered	24 Hrs	See Table B-1.4
1008I	Public Affairs Support in accordance with SOW 9.9	As Ordered	50 guests	See Table B-1.5
1008J	Public Affairs Support accordance with SOW 9.9	As Ordered	25 guests	See Table B-1.5

The Contracting Officer may issue task orders utilizing the Contractor's fixed-prices as shown in Table B-1.4 and 1.5. The price in each year includes all direct costs (including shift differentials as applicable), applicable indirect cots and anticipated profit.

Table B-1.4 *Satellite Uplink Services for NASA Public Affairs Support (SOW 9.8)*

FIRM FIXED PRICE 24-HOUR SUPPORT	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED			
	2002	2003	2004	2005
CLIN 1008H (Uplink Services)				

Table B-1.5 Public Affairs Support in accordance with SOW 9.9

FIRM FIXED PRICE SUPPORT SERVICES	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED			
	2002	2003	2004	2005
CLIN 1008I (50 Guests)				
CLIN 1008J (Per Additional 25 Guests)				

Table B-1.6 Mission Direct and Fleet Support Task Orders Completed Under CLIN 1008

Task Order Number	Description/Mission	Firm Fixed Price
1009	Communications and Telemetry	
1010	Safety and Mission Assurance	
1011	Troubleshooting and Repair	
1012	Launch Site Support Engineering	
1013	Engineering Assistants	
1014	Mission Integration Coordinator	
1015	Communications and Telemetry	
1016	Safety and Mission Assurance	
1017	Troubleshooting and Repair	
1018	Launch Site Support Engineering	
1019	Engineering Assistants	
1020	Mission Integration Coordinator	
1022	Safety and Mission Assurance	
1027	Engineering Assistants	
1028	Mission Integration Coordinator	
1029	Communications and Telemetry	
1031	Mission Integration Coordinator	
	SUBTOTAL	

Task Order Number	Description/Mission	Firm Fixed Price
1032	Communications and Telemetry	
1034	Troubleshooting and Repair	
1035	Launch Site Support Engineering	
1036	Safety and Mission Assurance	
1037	Mission Integration Coordinator	
1038	Communications and Telemetry	
1039	Launch Site Support Engineering	
1040	Engineering Assistants	
1041	Mission Integration Coordinator	
1043	Launch Site Support Engineering	
1045	Safety and Mission Assurance	
1046	Troubleshooting and Repair	
1052	Communications and Telemetry	
1053	Safety and Mission Assurance	
1054	Troubleshooting and Repair	
1055	Mission Integration Coordinator	
1057	Engineering Assistants	
6001	Pegasus Orbview 3 Mission	
6002	Delta IV DSCS B6 Mission	
6003	NOAA-N Mission	
6004	SCISAT Mission	
6005	Titan IV B-36 Mission	
6006	Delta IV DSCS B6 (Air Force Support) Mission	
6008	DMSP Mission	
6009	NROL-18 Mission	
	SUBTOTAL (Includes Subtotal from pg. 8)	

Task Order Number	Description/Mission	Firm Fixed Price
6010	SWIFT Mission	
6011	GPS 2R10 Mission	
6012	UHF-11 Mission	
6013	ROCSat Mission	
6014	AMC-10 Mission	
6015	MbSAT Mission	
6016	B39-DSP 22 Mission	
6017	GPS II R 11 Mission	
6018	Delta IV Heavy Demo	
6019	Aura Mission	
6020	Messenger Mission	
6021	Superbird 6 Mission	
6022	GPS IIR 12 Mission	
6023	AMC-11 Mission	
6024	NROL-1 Mission	
6025	Arrow Mission	
6026	DART Mission	
6028	GPS IIR13 Mission	
6029	NOAA-N Mission	
6030	5th SLS Mission	
6031	Deep Impact Mission	
6032	AMC-16 Mission	
6033	B-30 NROL-16 Mission	
6035	Inmarsat Mission	
6036	TacSat (Falcon X)	
6037	NROL-23 Mission	
6040	MRO Mission Support	
6041	GPS IIR14 Mission	
6042	Cobra Dane	
6043	Minotaur	
9000	GPB Mission Support	
9200	SIRTF Mission Support	
	TOTAL (Includes Subtotal from 8.1)	

1.3 Cost Basis (Non Fee Bearing)

The dynamic nature of ELV integrated support items makes it impossible to accurately predict Contractor acquired property (CAP), and travel/per-diem. The Government will account for these requirements as separate CLINs and has baselined these costs as indicated in the CLINs below. Materials, supplies and travel, shall be paid at cost, non-fee bearing, in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The Contractor shall retain original vendor receipts and furnish them to the Contracting Officer upon request to substantiate billings. These items will be excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
1009/1010	**Cost Basis (Non-Fee Bearing)** The Contractor shall provide Contractor Acquired Property that must be authorized in accordance with NFS 1845.502-70 subject to a determination by the Contracting Officer that is allocable to the contract and reasonably necessary, to support performance of fixed price CLINs 1002-1008 in accordance with the SOW.			

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
1009	**Contractor Acquired Property (CAP)** The Contractor shall provide CAP in accordance with the requirements of the SOW.	-	-	
1009A	CAP (FY02)	6	MO	
1009B	CAP (FY03)	12	MO	
1009C	CAP (FY04)	12	MO	
1009D	CAP (FY05)	12	MO	
1010	**Travel and Per Diem** The Contractor shall perform travel as required in accordance with the requirements set forth in the SOW.	--	--	
1010A	Travel (FY02)	6	MO	
1010B	Travel (FY03)	12	MO	
1010C	Travel (FY04)	12	MO	
1010D	Travel (FY05)	12	MO	

Note 1: Cost Basis (Non-Fee-Bearing) Contractor Acquired Property (CAP)

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Contractor Acquired Property will be reimbursed for incurred costs on a non-fee bearing basis. All Contractor-acquired property must be authorized by the contract and is subject to a determination by the Contracting Officer that is allocable to the contract and reasonably necessary.

During contract performance the Contractor is required to procure items for which the nature and quantity would not be expected to be included in fixed price requirements (SOW 3.0-8.0). Only specific categories of items will be allowable to be acquired under this CLIN. These types of items include NASA customer transient office supplies, all expendable, consumable supplies and materials, (e.g., magnetic tapes, strip charts, clean room garments, components and piece parts); all mobile and lift equipment, shop and calibration equipment, communications equipment, and maintenance equipment.

Note2: Travel and Per Diem

Pursuant to Title 11, Section 21 of the Federal Civilian Employee and Contractor Travel Expense Act of 1985 (PL 99-234), reimbursement for travel associated with fixed price effort shall be in accordance with the provisions of FAR 31.205-46.

1.4 Vehicle Engineering and Analysis (CPAF)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	TOTAL ESTIMATED COST	AWARD FEE
1011	**Vehicle Engineering and Analysis in accordance with SOW 10.0** (Cost-Plus-Award-Fee)		**(See Provision B-3 and Table B-1.7)**

Table B-1.7 ***CLIN 1011 Estimated Cost and Award Fee By Award Fee Period***

Award Fee Period	Start	End	Estimated Cost	Award Fee	Total Amount
1st Period	07/01/02	09/30/02			
	FY 02 Total				
2nd Period	10/01/02	03/31/03			
3rd Period	04/01/03	09/30/03			
	FY 03 Total				
4th Period	10/01/03	03/31/04			
5th Period	04/01/04	09/30/04			
	FY 04 Total				
6th Period	10/01/04	03/31/05			
7th Period	04/01/05	09/30/05			
	FY 05 Total				
Total Basic Period					

1.5 Facility Upgrade/Modification/Repair, Design and Construction. (Fixed-price, Indefinite delivery, Indefinite quantity)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
1012	Facility Upgrade/Modification/Repair	As Ordered	JOB	$ TBD *

Task/delivery orders for facilities modifications, design, and/or construction may be issued to the Contractor at the sole discretion of the Contracting Officer. It is agreed that work requests for Facility Upgrade/Modification/Repair, Design and Construction items may be issued as fixed price task orders during the term of the contract, and that the Government has no obligation to issue any such work request. In the event any suck task/delivery orders are issued, they will be in accordance with task ordering procedures in Section H.

Table B-1.8 Facility Upgrade/Modification/Repair, Design and Construction Task Orders Issued Under CLIN 1012

Task Order Number	Description	Firm Fixed Price
Mod 04	Assessment of VAFB Building 836 Contamination	$
TO 1007	VAFB Conference Room	$
TO 2001	VAFB Antenna Connection	$
TO 2002	Replace Door Seals	$
TO 2003	450 Foot Tower Demolition	$
TO 2004	Repair of Crane in Bldg. 1610 VAFB	*
TO 2005	LVDC Bldg. 836 VAFB Upgrade	
Total		

1.6 Maintenance and Repair of ELVIS Operated Communication & Telemetry (C&T) Equipment Exceeding $500.00

The contractor is responsible for Maintenance and Repair (MAR) of all Section J, Attachment J-4a, Installation Accountable Property (IAP), supporting Statement of Work Section 7.1.3, Communications and Telemetry. MAR costs which exceed $500 shall be coordinated with the NASA technical monitor to accomplish a cost-effective and prompt repair. The contractor shall have written concurrence from the Government-assigned technical monitor prior to authorizing maintenance or repair activities which exceed $500. The contractor will be reimbursed for MAR that exceeds $500 for incurred costs on a non-fee-bearing basis in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billing. MAR will be reimbursed on actual cost and is excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
1013	**Communication and Telemetry Maintenance and Repair that Exceed $500 (MAR)** in accordance with the requirements of SOW paragraph 7.1.3	-	-	*See Note 1*
1013A	MAR (FY 05)	2	MO	

NOTE 1: Cost Basis (Non-Fee-Bearing) Maintenance and Repair that Exceeds $500.

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Maintenance and Repair will be reimbursed for incurred costs on a non-fee bearing basis. All maintenance and repair that exceed $500 must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

1.7 Maintenance and Repair at Vandenberg Air Force Base (VAFB) Exceeding $1,000

The contractor is responsible for Maintenance and Repair (MAR) of equipment at VAFB as identified in Section J, Attachment J-4a, Installation Accountable Property (IAP), which supports Statement of Work (SOW) Section 8.1.1. MAR costs which exceed $1,000 shall be coordinated with the NASA technical monitor to accomplish a cost-effective and prompt repair. The contractor shall have written concurrence from the Government- assigned technical monitor prior to authorizing maintenance or repair activities, which exceed $1,000. The contractor will be reimbursed for MAR that exceeds $1,000 for incurred costs on a non-fee-bearing basis in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billing. MAR will be reimbursed on actual cost and is excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
1014	**Maintenance and Repair that Exceeds $1,000 (MAR)** in accordance with the requirements of SOW paragraph 8.1.1	-	-	*See Note 1*
1014A	MAR (FY 05)	2	MO	

NOTE 1: Cost Basis (Non-Fee-Bearing) Maintenance and Repair that Exceeds 1,000.

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Maintenance and Repair will be reimbursed for incurred costs on a non-fee bearing basis. All maintenance and repair that exceed $1,000 must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

Table B-1.9 Summary BASIC Period (FY 2002 thru FY 2005)

FIRM-FIXED PRICE (PHASE-IN)	CLIN 1001	$
FIXED-PRICE: OVERALL	CLINS 1002, 1004, 1005, 1006 & 1007	$
MAX AVAILABLE AWARD FEE: OVERALL	CLINS 1002, 1004, 1005, 1006 & 1007	$
FIXED-PRICE: S&MA (Beginning Period 7)	CLIN 1003	$
MAX AVAILABLE AWARD FEE: S&MA	CLIN 1003	$
MISSION DIRECT/FLEET SUPPORT (IDIQ)	CLIN 1008	$
CAP AND TRAVEL	CLINS 1009 &1010	$
ESTIMATED COST - SOW 10.0	CLIN 1011	$
MAXIMUM AVAILABLE AWARD FEE: SOW 10.0	CLIN 1011	$
FACILITY UPGRADE/MODIFICATION/ REPAIR, DESIGN AND CONSTRUCTION (IDIQ)	CLIN 1012	$
MAINTENANCE AND REPAIR C&T	CLIN 1013	$
MAINTENANCE AND REPAIR AT VAFB	CLIN 1014	$
TOTAL ESTIMATED CONTRACT VALUE	CLINS 1001–1014	$

OPTION 1 - Expendable Launch Vehicle Integrated Support. The Government reserves the right to exercise an option for a 3-year performance period. The Contracting Officer will exercise options in accordance with the procedures at FAR Subpart 17.2

(Performance Period: October 1, 2005 - September 30, 2008)

2.1 Contract Core Requirements (Fixed Price Award Fee)

The Contractor shall provide the necessary services to accomplish the following technical services in accordance with the SOW. Pricing for Section 1.0 of the SOW is deemed to be included in the CLIN prices below.

(Next Page is 11)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
2002	**ELV Program Management Support in accordance with SOW 3.0**				
2002A	ELV Program Management Support (FY06)	**12**	**MO**		
2002B	ELV Program Management Support (FY07)	**12**	**MO**		
2002C	ELV Program Management Support (FY08)	**12**	**MO**		
2003	**Safety and Mission Assurance in accordance with SOW 4.0**				
2003A	Safety and Mission Assurance (FY06)	**12**	**MO**		
2003B	Safety and Mission Assurance (FY07)	**12**	**MO**		
2003C	Safety and Mission Assurance (FY08)	**12**	**MO**		
2004	**Launch Site Support Engineering (LSSE) in accordance with SOV**				
2004A	LSSE (FY06)	**12**	**MO**		
2004B	LSSE (FY07)	**12**	**MO**		
2004C	LSSE (FY08)	**12**	**MO**		
2005	**Technical Integration Services in accordance with SOW 6.0**				
2005A	Technical Integration Services (FY06)	**12**	**MO**		
2005B	Technical Integration Services (FY07)	**12**	**MO**		
2005C	Technical Integration Services (FY08)	**12**	**MO**		

2006	**Communications and Telemetry in accordance with SOW 7.0**		
2006A	Communications and Telemetry (FY06)	**12**	**MO**
2006B	Communications and Telemetry (FY07)	**12**	**MO**
2006C	Communications and Telemetry (FY08)	**12**	**MO**
2007	Vandenberg AFB Unique in accordance with SOW 8.0		
2007A	Vandenberg AFB Unique (FY06)	**12**	**MO**
2007B	Vandenberg AFB Unique (FY07)	**12**	**MO**
2007C	Vandenberg AFB Unique (FY08)	**1**	**LOT**

*CLIN 2007C separates to 11 months a[illegible] and 1 month (Sept 08) o[illegible]
Fee shall be included in provision B-3 "AWARD FEE".

Table B-2 CLINS 2002, 2004, 2005, 2006 & 2007 Fixed-Price and Award Fee By Period

Award Fee Period	Start	End	Fixed-Price	Max Avail Award Fee	Maximum Total Amount
8th Period	10/01/05	03/31/06			
9th Period	04/01/06	09/30/06			
	FY 06 Total			$	$
10th Period	10/01/06	03/31/07			
11th Period	04/01/07	09/30/07			
	FY 07 Total			$	$
12th Period	10/01/07	03/31/08			
13th Period	04/01/08	[illegible]			
	FY 08 Total			$	$

Table B-2a CLIN 2003 S&MA Fix[illegible]

Award Fee Period	Start	End	F[illegible]	I[illegible]
8th Period	10/01/05	03/31/06		
9th Period	04/01/06	09/30/06		
	FY 06 Total		[illegible]	$
10th Period	10/01/06	03/31/07		
11th Period	04/01/07	09/30/07		
	FY 07 Total		[illegible]	$
12th Period	10/01/07	03/31/08		
13th Period	04/01/08	09/30/08		
	FY 08 Total		$	$
	Total Option 1 Period		[illegible]	$

2.2 Mission Direct Support (IDIQ)

The Government reserves the right to order fixed price, Indefinite Delivery/Indefinite Quantity (IDIQ) mission direct support services, independent of core requirements, under these CLINs from the items listed below. The Contracting Officer may order the services any time by written notice to the Contractor in accordance with the ordering procedures set forth in Section H of this contract. Task orders will be performance-based and will be restricted to the acquisition of "outcomes" where the period of performance and discrete task objectives will be limited to work and products that can be defined and priced.

The services furnished under this IDIQ article supplement and are in addition to the services furnished under the contract's core requirements. Notwithstanding the issuance or pendency of a task/delivery order, the Contractor will not be entitled to additional payment, beyond the contract price for core requirements, for any work already required (as to substance, quantity and schedule) under the contract's/SOW core requirements provisions.

Hourly Rates for Mission-Direct Support Services

SOW	Rate Type	Description	Ordering Unit
9.1	Individual Composite	A combined average rate for one hour of service performed by a single skilled worker from Safety & Mission Assurance, Launch Site Support Engineering, ***or*** Technical Integration Services outside of core hours at KSC or VAFB.	Worker Hour
9.2	Individual Composite	A combined average rate for one hour of service performed by a single skilled worker from VAFB Operations, Troubleshooting ***or*** Repair outside of core hours.	Worker Hour
9.3	Full Crew Composite	A combined crew rate for one hour of service performed by a **full** crew supporting Communications and Telemetry outside of core hours. There are separate rates depending upon location of service at KSC or at VAFB.	Crew Hour
9.4	Reduced Crew Composite	A combined crew rate for one hour of service performed by a **reduced** crew supporting Communications and Telemetry outside of core hours. There are separate rates depending upon location of service at KSC or VAFB.	Crew Hour
9.5	Individual Composite	A combined average rate for one hour of a single skilled worker performing On-Call Troubleshooting or Repair outside of core hours.	Worker Hour

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	Total Amount ($)
2008	**Mission Direct Support Services** The Contractor shall accept task orders issued only by the Contracting Officer. The Contractor shall provide the services as ordered to accomplish the following.			
2008A	**Additional Support for Safety and Mission Assurance, Launch Site Support Engineering, and Technical Integration Services, in accordance with SOW 9.1**	**As Ordered**	Hr	**See Table B-2.1**
2008B	**Additional Support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2.**			
2008BA	Scheduled support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2.	As Ordered	Hr	See Table B-2.1
2008BB	Call-out support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2.	As Ordered	Hr	See Table B-2.1
2008C	**Hourly Support for Communications and Telemetry Outside of Core Work Shift in accordance with SOW 9.3.**			
2008CA	KSC Hourly Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-2.1
2008CB	VAFB Hourly Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-2.1
2008D	**Reduced Support for Communications and Telemetry Outside of Core Work Shift in accordance with SOW 9.4.**			
2008DA	KSC Reduced Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-2.1
2008DB	VAFB Reduced Support for Communications and Telemetry Outside of Core Work Shift.	As Ordered	Hr	See Table B-2.1

2008E	**On-Call Troubleshooting and Repair Support in accordance with SOW 9.5.**			
2008EA	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Communication Technician at KSC.	As Ordered	Hr	See Table B-2.1
2008EB	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Communication Technician at VAFB.	As Ordered	Hr	See Table B-2.1
2008EC	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Manager at VAFB.	As Ordered	Hr	See Table B-2.1
2008F	**Guard Services at VAFB in accordance with SOW 9.6**	**As Ordered**	**24 hrs**	**See Table B-2.2**
2008G	**Access Control Monitors (ACM) at VAFB in accordance with SOW 9.7**	**As Ordered**	**24 hrs**	**See Table B-2.3**

Upon identification of a task(s) by the Contracting Officer, a request to the Contractor for estimated number of hours/units required to complete the identified task(s), and subsequent negotiation of agreed to hours/units, the Government may issue task orders utilizing the Contractor 's fully burdened, fixed-price rates shown in Table B-2.1 to B-2.3. The price in each year includes all direct costs (including shift differentials as applicable), applicable indirect costs and anticipated profit.

Table B-2.1 HOURLY LABOR RATES

HOURLY LABOR RATES (Composite Skills Mix and Burdened)	**FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED**		
	2006	**2007**	**2008**
CLIN 2008A (SOW 9.1)			
CLIN 2008BA (SOW 9.2)			
CLIN 2008BB (SOW 9.2)			
CLIN 2008CA (SOW 9.3)			
CLIN 2008CB (SOW 9.3)			
CLIN 2008DA (SOW 9.4)			
CLIN 2008DB (SOW 9.4)			
CLIN 2008EA (SOW 9.5)			
CLIN 2008EB (SOW 9.5)			
CLIN 2008EC (SOW 9.5)			

Table B-2.2 24-HOUR SHIFT/ACCESS POINT RATES

24-HOUR SHIFT/ACCESS POINT RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED		
	2006	2007	2008
CLIN 2008F (SOW 9.6)			

Table B-2.3 24-HOUR RATES

24-HOUR RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED		
	2006	2007	2008
CLIN 2008G (SOW 9.7)			

Public Affairs Support (IDIQ)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
2008H	Satellite Uplink Services for NASA Public Affairs Support in accordance with SOW 9.8	As Ordered	24 Hrs	See Table B-2.4
2008I	Public Affairs Support in accordance with SOW 9.9	As Ordered	50 guests	See Table B-2.5
2008J	Public Affairs Support accordance with SOW 9.9	As Ordered	25 guests	See Table B-2.5

The Contracting Officer may issue task orders utilizing the Contractor's fixed-prices as shown in Table B-2.4 and 2.5. The price in each year includes all direct costs (including shift differentials as applicable), applicable indirect costs and anticipated profit.

Table B-2.4 Satellite Uplink Services for NASA Public Affairs Support (SOW 9.8)

FIRM FIXED PRICE 24-HOUR SUPPORT	FIRM FIXED-PRICE PER UNIT ($) IN FISCAL YEAR ORDERED		
	2006	2007	2008
Uplink Services			

Table B-2.5 Public Affairs Support in accordance with SOW 9.9

FIRM FIXED PRICE SUPPORT SERVICES	FIRM FIXED-PRICE PER UNIT ($) IN FISCAL YEAR ORDERED		
	2006	2007	2008
50 Guests			
Per Additional 25 Guests			

Table 2.6 Mission Direct and Fleet Support Task Orders Completed Under CLIN 2008

Task Order Number	Description/Mission	Firm Fixed Price
1058	Fleet/Troubleshooting and Repair	
1059	Fleet/Mission Integration Coordinator	
1060	Fleet/Safety and Mission Assurance	
1064	Fleet/Troubleshooting and Repair	
1068	Fleet/Safety and Mission Assurance	
6027	Mission / DSP-23	
6043	Mission / STP-R1 Minotaur	
6046	Mission / COSMIC	
6047	Mission / MITEX	
6048	Mission / ASTRA	
6049	Mission / STEREO	
6050	Mission / NROL-21	
6052	Mission / DMSP-17	
6053	Mission / GPS IIR-16	
6057	Mission / AIM	
6058	Mission / WGS-F1 (AF)	
6060	Mission / NROL-30	
6061	Mission / COSMO-1	
6064	Mission / GPS IIR-17	
6065	Mission / WGS-F1 (ULA)	
6066	Mission / NROL-24	
6070	Mission / GPS IIR-18	
	TOTAL	

Voice & Data Satellite Support (IDIQ)

The Government reserves the right to order fixed price, Indefinite-Delivery/Indefinite-Quantity (IDIQ) mission direct satellite support services, independent of core requirements, under CLIN 2008K in accordance with SOW 9.10. The Contracting Officer may order the services by written notice to the contractor in accordance with the ordering procedures set forth in Section H of this contract. Task orders will be individually negotiated for each mission.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
2008K	Mission Communications: Voice and Data Support via Satellite in accordance with SOW 9.10	As Ordered	As Ordered	To Be Negotiated At Task Order Level

Task Order Number	Description	Firm-Fixed Price
TO 6074	IBEX Satellite Support - Basic Services	$
	TOTAL	$

2.3 Cost Basis (Non-Fee Bearing) for CLINs 2002-2008

The dynamic nature of the LSP integrated support items makes it impossible to accurately predict contractor-acquired property (CAP), and travel/per-diem. The Government will account for these requirements as separate CLINs and has baselined these costs as indicated in the CLINs below. Materials, supplies and travel, shall be paid at cost, non-fee bearing, in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the Contracting Officer upon request to substantiate billings. These items will be excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	Total Estimated Amount
2009/2010	***Cost Basis (Non-fee bearing)*** The contractor shall provide the Contractor-Acquired Property that must be authorized, and is subject to a determination by the Contracting Officer that it is allocable to the contract and reasonably necessary, for effort related to fixed-price core requirements and travel as required to support performance of fixed price CLINs 2002-2008 in accordance with the SOW.			
2009	**Contractor-Acquired Property (CAP)** The Contractor shall provide CAP, defined in NFS 1845.502-70, in accordance with the requirements of the SOW.	-	-	***See Note 1***
2009A	CAP (FY06)	**12**	**MO**	
2009B	CAP (FY07)	**12**	**MO**	
2009C	CAP (FY08)	**12**	**MO**	
2010	**Travel and Per Diem** The contractor shall perform travel as required in accordance with the requirements set forth in the SOW			
2010A	Travel (FY06)	**12**	**MO**	
2010B	Travel (FY07)	**12**	**MO**	
2010C	Travel (FY08)	**12**	**MO**	

Note 1: Cost Basis (Non-Fee-Bearing) Contractor Acquired Property (CAP).

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Contractor Acquired Property will be reimbursed for incurred costs on a non-fee bearing basis. All Contractor - acquired property must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

During contract performance, the Contractor is required to procure items for which the nature and quantity would not be expected to be included in fixed price requirements (SOW 3.0 – 8.0). Only specific categories of items will be allowable to be acquired under this CLIN. These types of items include NASA customer transient office supplies, all expendable, consumable supplies and materials, (e.g., magnetic tapes, strip charts, clean room garments, components and piece parts); all mobile and lift equipment, shop and calibration equipment, communications equipment, and maintenance equipment.

NOTE 2: Travel and Per Diem

Pursuant to Title 11, Section 21 of the Federal Civilian Employee and Contractor Travel Expense Act of 1985 (PL 99-234), reimbursement for travel associated with fixed price effort shall be in accordance with the provisions of FAR 31.205-46.

2.4 Vehicle Engineering and Analysis (CPAF)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	TOTAL ESTIMATED COST	AWARD FEE
2011	**Vehicle Engineering and Analysis in accordance with SOW 10.0** (Cost-Plus-Award-Fee)		**(See Provision B-3)**

For purposed of award fee evaluation, the total estimated cost by award fee period is as follows:

Table 2.4 Total Estimated Cost by FY and Award Fee Period

Award Fee Period	Start	End	Total Estimated Cost	Maximum Award Fee	Total Amount
8th Period	10/1/2005	3/31/2006			
9th Period	4/1/2006	9/30/2006			
	FY 06 Total				
10th Period	10/1/2006	3/31/2007			
11th Period	4/1/2007	9/30/2007			
	FY 07 Total				
12th Period	10/1/2007	3/31/2008			
13th Period	4/1/2008	9/30/2008			
	FY 08 Total				
	Total Option Period				

2.5 Facility Upgrade/Modification/Repair, Design and Construction. (Fixed-price, Indefinite delivery, Indefinite quantity)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
2012	**Facility Upgrade/Modification/Repair, Design and Construction in accordance with SOW 11.0**	**As Ordered**	**JO**	**$ TBD***

The Government reserves the right to order Facility Upgrade/Modification/Repair, Design and Construction projects under this CLIN. The Contracting Officer may order the services any time by written notice to the Contractor from 10/01/2005 through 09/30/2008. The Contractor shall provide the necessary effort in accordance with SOW 11.0

* *To be determined*

Task/delivery orders for facilities modifications, design, and/or construction may be issued to the Contractor at the sole discretion of the Contracting Officer. It is agreed that work requests for Facility Upgrade/Modification/Repair, Design and Construction items may be issued as fixed price task orders during the term of the contract, and that the Government has no obligation to issue any such work request. In the event any such task/delivery orders are issued, they will in accordance with task ordering procedures in Section H.

Task Order Number	Description	Firm-Fixed Price
TO 2007 thru Mod. 1	Bdlg. 840 Office Modifications	$
TO 2009	Bldg. 836 Restroom Modifications	$
TO 2010	Bldg. 836 HVAC	$
TO 2011	Sidewalk Lighting & Antenna Pad Installation	$
TO 2012	Bldg. 836 Mezzanine Duct Modifications	$
TO 2013	Bldg. 836 Electrical Study	$
TO 2014	Bldg. 836 Generator/UPS Replacement	$
TO 2015	Temporary Modular Offices Adjacent Bldg. 836	$
TO 2016	Bldg. 836 Roof & Doors	$
Total		$

2.6 Maintenance and Repair of ELVIS Operated Communication & Telemetry Equipment Exceeding $500

The contractor is responsible for Maintenance and Repair (MAR) of all Section J, Attachment J-4a, Installation Accountable Property (IAP), supporting Statement of Work Section 7.1.3, Communications and Telemetry. MAR costs which exceed $500 shall be coordinated with the NASA technical monitor to accomplish a cost-effective and prompt repair. The contractor shall have written concurrence from the Government-assigned technical monitor prior to authorizing maintenance or repair activities, which exceed $500. The contractor will be reimbursed for MAR that exceeds $500 for incurred costs on a non-fee-bearing basis in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billing. MAR will be reimbursed on actual cost and is excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
2013	**Communication and Telemetry Maintenance and Repair that Exceed $500 (MAR)** in accordance with the requirements of SOW paragraph 7.1.3	-	-	*See Note 1*
2013A	MAR (FY 06)	12	MO	$
2013B	MAR (FY 07)	12	MO	$
2013C	MAR (FY 08)	12	MO	$

NOTE 1: Cost Basis (Non-Fee-Bearing) Maintenance and Repair that Exceeds $500. The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Maintenance and Repair will be reimbursed for incurred costs on a non-fee bearing basis. All maintenance and repair that exceed $500 must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

2.7 Maintenance and Repair at VAFB Exceeding $1,000

The contractor is responsible for Maintenance and Repair (MAR) of equipment at VAFB as identified in Section J, Attachment J-4a, Installation Accountable Property (IAP), which supports Statement of Work (SOW) Section 8.1.1, as well as for urgent MAR requirements identified by the NASA technical monitor at VAFB for other areas of Statement of Work (SOW) Section 8.0 Vandenberg Air Force Base Unique Support. MAR costs which exceed $1,000 shall be coordinated with the NASA technical monitor to accomplish a cost-effective and prompt repair. The contractor shall have written concurrence from the Government- assigned technical monitor prior to authorizing maintenance or repair activities, which exceed $1,000. The contractor will be reimbursed for MAR that exceeds $1,000 for incurred costs on a non-fee-bearing basis in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billing. MAR will be reimbursed on actual cost and is excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
2014	**Maintenance and Repair that Exceeds $1,000 (MAR)** in accordance with the requirements of SOW paragraph 8.1.1	-	-	*See Note 1*
2014A	MAR (FY 06)	12	MO	$
2014B	MAR (FY 07)	12	MO	$
2014C	MAR (FY 08)	12	MO	$

NOTE 1: Cost Basis (Non-Fee-Bearing) Maintenance and Repair that Exceeds $1,000.
The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Maintenance and Repair will be reimbursed for incurred costs on a non-fee bearing basis. All maintenance and repair that exceed $1,000 must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

2.8 Cost Basis (Non-Fee-Bearing) for Cost Reimbursable SOW 10.5 Information Technology (IT) Support

The Government will account for contractor-acquired property (CAP) requirements as a separate CLIN for the cost-reimbursable SOW 10.5, and has baselined these costs as indicated in the CLIN below. Materials, supplies, and equipment shall be paid at cost, non-fee bearing, in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the Contracting Officer upon request to substantiate billings.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	Total Estimated Amount
2015 / 2016	***Cost Basis (Non-fee bearing)*** The contractor shall provide the Contractor-Acquired Property that must be authorized, and is subject to a determination by the Contracting Officer that it is allocable to the contract and reasonably necessary, for effort related to cost reimbursable IT requirements to support performance of CLIN 2011.			
2015	**IT Contractor-Acquired Property (IT CAP)** The Contractor shall provide CAP, defined in NFS 1845.502-70, in accordance with the requirements of the SOW, for FY08.	12	MO	
2016	**IT Contractor-Acquired Property (IT CAP) for the Mission Analysis Lab (MAL)** The Contractor shall provide CAP, defined in NFS 1845.502-70, for the Mission Analysis Lab in accordance with the requirements of SOW 10.5, for the Mission Analysis Lab for FY08.	12	MO	

Note 1: Cost Basis (Non-Fee-Bearing) Contractor- Acquired Property (CAP).

The Not-To-Exceed (NTE) amount is the ceiling for these cost-reimbursable line items. Contractor-Acquired Property will be reimbursed for incurred costs on a non-fee bearing basis. All Contractor-Acquired property must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

Only specific categories of items will be allowable to be acquired under this CLIN. These types of items include Information Technology (IT) hardware and software, as well as IT maintenance/support agreements.

Table B-2.6 Summary Option Period 1 (FY 2006 thru FY 2008)

FIXED-PRICE: OVERALL	CLINS 2002, 2004, 2005, 2006 & 2007	$
[illegible]	[illegible]	
FIXED-PRICE: S&MA	CLIN 2003	$
[illegible]	[illegible]	$
MISSION DIRECT/FLEET SUPPORT (IDIQ)	CLIN 2008	$
CAP AND TRAVEL	CLINS 2009 &2010	$
ESTIMATED COST – SOW 10.0	CLIN 2011	$
[illegible]	[illegible]	$
FACILITY UPGRADE/MODIFICATION/ REPAIR, DESIGN AND CONSTRUCTION (IDIQ)	CLIN 2012	$
MAINTENANCE AND REPAIR C&T	CLIN 2013	$
MAINTENANCE AND REPAIR AT VAFB	CLIN 2014	$
IT CAP	CLIN 2015	$
IT CAP-MAL	CLIN 2016	$
[illegible]	[illegible]	$

OPTION 2 – Expendable Launch Vehicle Integrated Support. The Government reserves the right to exercise an option for a 3-year performance period. The Contracting Officer will exercise options in accordance with the procedures at FAR subpart 17.2

(Performance Period: October 1, 2008 – September 30,2011)

3.1 Contract Core Requirements (Fixed Price Award Fee)

The Contractor shall provide the necessary services to accomplish the following technical services in accordance with the SOW. Pricing for Section 1.0 of the SOW is deemed to be included in the CLIN prices below.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT ($
3002	**Program Management in accordance with SOW 3.0**				
3002A	ELV Program Management Support (FY09)	**12**	**MO**		
3002B	ELV Program Management Support (FY10)	**12**	**MO**		
3002C	ELV Program Management Support (FY11)	**12**	**MO**		
3003	**Safety and Mission Assurance in accordance with SOW 4.0**				
3003A	Safety and Mission Assurance (FY09)	**12**	**MO**		
3003B	Safety and Mission Assurance (FY10)	**12**	**MO**		
3003C	Safety and Mission Assurance (FY11)	**12**	**MO**		
3004	**Launch Site Support Engineering (LSSE) in accordance with S**				
3004A	LSSE (FY09)	**12**	**MO**		
3004B	LSSE (FY10)	**12**	**MO**		
3004C	LSSE (FY11)	**12**	**MO**		
3005	**Technical Integration Services in accordance with SOW 6.0**				
3005A	Technical Integration Services (FY09)	**12**	**MO**		
3005B	Technical Integration Services (FY10)	**12**	**MO**		
3005C	Technical Integration Services (FY11)	**12**	**MO**		
3006	**Communications and Telemetry in accordance with SOW 7.0**				
3006A	Communications and Telemetry (FY09)	**12**	**MO**		
3006B	Communications and Telemetry (FY10)	**12**	**MO**		
3006C	Communications and Telemetry (FY11)	**12**	**MO**		
3007	**Vandenberg AFB Unique in accordance with SOW 8.0**				
3007A	Vandenberg AFB Unique (FY09)	**12**	**MO**		
3007B	Vandenberg AFB Unique (FY10)	**12**	**MO**		
3007C	Vandenberg AFB Unique (FY11)	**12**	**MO**		

Maximum Available Award Fee shall be included in provision B-3 "AWARD FEE."

Table 3.0 ***CLINS 3002, 3004, 3005, 3006 & 3007 Fixed-Price and Award Fee By Period***

Award Fee Period	Start	End	Fixed-Price	Max Available Award Fee	Maximum Total Amount
14th Period	10/01/08	03/31/09			
15th Period	04/01/09	09/30/09			
		FY 09 Total			
16th Period	10/01/09	03/31/10			
17th Period	04/01/10	09/30/10			
		FY 10 Total			
18th Period	10/01/10	03/31/11			
19th Period	04/01/11	09/30/11			
		FY 11 Total			

Table 3.0a ***CLIN 3003 S&MA Fixed-Price and Award Fee by Period***

Award Fee Period	Start	End	S&MA Fixed-Price	Max Avail Award Fee S&MA	Maximum Total Amount
14th Period	10/01/08	03/31/09			
15th Period	04/01/09	09/30/09			
		FY 09 Total	$		
16th Period	10/01/09	03/31/10			
17th Period	04/01/10	09/30/10			
		FY 10 Total	$		
18th Period	10/01/10	03/31/11			
19th Period	04/01/11	09/30/11			
		FY 11 Total	$		
		Total Option 2 Period			

3.2 Mission Direct Support (IDIQ)

The Government reserves the right to order fixed price, Indefinite Delivery/Indefinite Quantity (IDIQ) mission direct support services, independent of core requirements, under these CLINs from the items listed below. The Contracting Officer may order the services any time by written notice to the Contractor in accordance with the ordering procedures set forth in Section H of this contract. Task orders will be performance-based and will be restricted to the acquisition of "outcomes" where the period of performance and discrete task objectives will be limited to work and products that can be defined and priced.

The services furnished under this IDIQ article supplement and are in addition to the services furnished under the contract's core requirements. Notwithstanding the issuance or pendency of a task/delivery order, the Contractor will not be entitled to additional payment, beyond the contract price for core requirements, for any work already required (as to substance, quantity and schedule) under the contract's/SOW core requirements provisions.

Hourly Rates for Mission-Direct Support Services

SOW	Rate Type	Description	Ordering Unit
9.1	Individual Composite	A combined average rate for one hour of service performed by a single skilled worker from Safety & Mission Assurance, Launch Site Support Engineering, ***or*** Technical Integration Services outside of core hours at KSC or VAFB.	Worker Hour
9.2	Individual Composite	A combined average rate for one hour of service performed by a single skilled worker from VAFB Operations, Troubleshooting ***or*** Repair outside of core hours.	Worker Hour
9.3	Full Crew Composite	A combined crew rate for one hour of service performed by a **full** crew supporting Communications and Telemetry outside of core hours. There are separate rates depending upon location of service at KSC or at VAFB.	Crew Hour
9.4	Reduced Crew Composite	A combined crew rate for one hour of service performed by a **reduced** crew supporting Communications and Telemetry outside of core hours. There are separate rates depending upon location of service at KSC or VAFB.	Crew Hour
9.5	Individual Composite	A combined average rate for one hour of a single skilled worker performing On-Call Troubleshooting or Repair outside of core hours.	Worker Hour

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
3008	**Mission Direct Support Services** The Contractor shall accept task orders issued only by the contracting officer. The Contractor shall provide the services as ordered to accomplish the following.			
3008A	**Additional Support for Safety and Mission Assurance, Launch Site Support Engineering, and Technical Integration Services, in accordance with SOW 9.1**	**As Ordered**	**Hr**	**See Table B-3.1**
3008B	**Additional Support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2**			
3008BA	Scheduled support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2	As Ordered	Hr	See Table B-3.1
3008BB	Call-out support for VAFB Operations, Troubleshooting and Repair in accordance with SOW 9.2	As Ordered	Hr	See Table B-3.1
3008C	**Full Support for Communications and Telemetry Outside of Core Work Shift in accordance with SOW 9.3**			
3008CA	KSC Hourly Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-3.1
3008CB	VAFB Hourly Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-3.1
3008D	**Reduced Support for Communications and Telemetry Outside of Core Work Shift in accordance with SOW 9.4.**			
3008DA	KSC Reduced Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-3.1
3008DB	VAFB Reduced Support for Communications and Telemetry Outside of Core Work Shift	As Ordered	Hr	See Table B-3.1

3008E	**On-Call Troubleshooting and Repair Support in accordance with SOW 9.5.**			
3008EA	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 – Communication Technician at KSC.	As Ordered	Hr	Set Table B-3.1
3008EB	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Communication Technician at VAFB.	As Ordered	Hr	See Table B-3.1
3008EC	On-Call Troubleshooting and Repair Support in accordance with SOW 9.5 –Manager at VAFB.	As Ordered	Hr	See Table B-3.1
3008F	**Guard Services at VAFB in accordance with SOW 9.6**	**As Ordered**	**24 hrs**	**See Table B-3.2**
3008G	**Access Control Monitors (ACM) at VAFB in accordance with SOW 9.7**	**As Ordered**	**24 hrs**	**See Table B-3.3**

Upon identification of a task(s) by the Contracting Officer, a request to the Contractor for estimated number of hours/units required to complete the identified task(s), and subsequent negotiation of agreed to hours/units, the Government may issue task orders utilizing the Contractor's fully burdened, fixed-price rates shown in Table B-3.1 to B-3.3. The price in each year includes all direct costs (including shift differentials as applicable), applicable indirect costs and anticipated profit.

Table B-3.1 HOURLY LABOR RATES

HOURLY LABOR RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED		
	2009	2010	2011
CLIN 3008A (SOW 9.1)			
CLIN 3008BA (SOW 9.2)			
CLIN 3008BB (SOW 9.2)			
CLIN 3008CA (SOW 9.3)			
CLIN 3008CB (SOW 9.3)			
CLIN 3008DA (SOW 9.4)			
CLIN 3008DB (SOW 9.4)			
CLIN 3008EA (SOW 9.5)			
CLIN 3008EB (SOW 9.5)			
CLIN 3008EC (SOW 9.5)			

Table B-3.2 24-HOUR SHIFT/ACCESS POINT RATES

24-HOUR SHIFT/ACCESS POINT RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED		
	2009	2010	2011
CLIN 3008F (SOW 9.6)			

Table B-3.3 24 HOUR RATES

24 HOUR RATES (Composite Skills Mix and Burdened)	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED		
	2009	2010	2011
CLIN 3008G (SOW 9.7)			

Public Affairs Support (IDIQ)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
3008H	Satellite Uplink Services for NASA Public Affairs Support in accordance with SOW 9.8	As Ordered	24 Hrs	See Table B-3.4
3008I	Public Affairs Support in accordance with SOW 9.9	As Ordered	50 guests	See Table B-3.5
3008J	Public Affairs Support in accordance with SOW 9.9	As Ordered	25 guests	See Table B-3.5

The Contracting Officer may issue task orders utilizing the Contractor's fixed-prices as shown in Table B-3.4 and 3.5. The price in each year includes all direct costs (including shift differentials as applicable), applicable indirect costs and anticipated profit.

Table B-3.4 Satellite Uplink Services for NASA Public Affairs Support (SOW 9.8)

FIRM FIXED PRICE 24-HOUR SUPPORT	FIRM FIXED-PRICE PER UNIT($) IN FISCAL YEAR ORDERED		
	2009	2010	2011
Uplink Services			

Table B-3.5 Public Affairs Suppo in accordance with SOW 9.9

FIRM FIXED PRICE SUPPORT SERVICES	FIRM FIXED-PRICE ($) IN FISCAL YEAR ORDERED		
	2009	2010	2011
50 Guests			
Per Additional 25 Guests			

Voice & Data Satellite Support (IDIQ)

The Government reserves the right to order fixed price, Indefinite-Delivery/Indefinite-Quantity (IDIQ) mission direct satellite support services, independent of core requirements, under CLIN 3008K in accordance with SOW 9.10. The Contracting Officer may order the services by written notice to the contractor in accordance with the ordering procedures set forth in Section H of this contract. Task orders will be individually negotiated for each mission.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL AMOUNT ($)
3008K	Mission Communications: Voice and Data Support via Satellite in accordance with SOW 9.10	As Ordered	As Ordered	To Be Negotiated At Task Order Level

Task Order Number	Description	Firm-Fixed Price
	TOTAL	$ -

3.3 Cost Basis (Non-Fee Bearing) for CLINs 3002-3008

The dynamic nature of the ELV integrated support items makes it impossible to accurately predict Contractor acquired property (CAP), and travel/per-diem. The Government will account for these requirements as separate CLINs and has baselined these costs as indicated in the CLINs below. Materials, supplies and travel, shall be paid at cost, non-fee bearing, in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The Contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billings. These items will be excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
3009/3010	***Cost Basis*** (Non-fee bearing) The Contractor shall provide the Contractor Acquired Property that must be authorized, and is subject to a determination by the contracting officer that it is allocable to the contract and reasonable necessary, for effort related to fixed price core requirements and travel as required to support performance of fixed price CLINs 3002-3008 in accordance with the SOW.			

3009	**Contractor Acquired Property (CAP)** The Contractor shall provide CAP, defined in NFS 1845.502-70, in accordance with the requirements of the SOW.			*See Note 1*
3009A	CAP (FY09)	**12**	**MO**	**$**
3009B	CAP (FY10)	**12**	**MO**	**$**
3009C	CAP (FY11)	**12**	**MO**	**$**
3010	**Travel and Per Diem** The Contractor shall perform travel as required in accordance with the requirements set forth in the SOW.			
3010A	Travel (FY09)	**12**	**MO**	**$**
3010B	Travel (FY10)	**12**	**MO**	**$**
3010C	Travel (FY11)	**12**	**MO**	**$**

NOTE 1: Cost Basis (Non-Fee-Bearing) Contractor Acquired Property (CAP).

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Contractor Acquired Property will be reimbursed for incurred costs on a non-fee bearing basis. All Contractor - acquired property must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

During contract performance the Contractor is required to procure items for which the nature and quantity would not be expected to include in fixed price requirements (SOW 3.0 – 8.0). Only specific categories of items will be allowable to be acquired under this CLIN. These types of items include NASA customer transient office supplies, all expendable, consumable supplies and materials, (e.g., magnetic tapes, strip charts, clean room garments, components and piece parts, etc.); all mobile and lift equipment, shop and calibration equipment, communications equipment, and maintenance equipment.

NOTE 2: Travel and Per Diem

Pursuant to Title 11, Section 21 of the Federal Civilian Employee and Contractor Travel Expense Act of 1985 (PL 99-234), reimbursement for travel associated with fixed price effort shall be in accordance with the provisions of FAR 31.205-46.

3.4 Vehicle Engineering and Analysis (CPAF)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	TOTAL ESTIMATED COST	AWARD FEE
3011	**Vehicle Engineering and Analysis in accordance with SOW 10.0** (Cost-Plus-Award-Fee)		**(See Provision B-3)**

For purposed of award fee evaluation, the total estimated cost by award fee period is as follows:

Table 3.4 Total Estimated Cost by FY and Award Fee Period

Award Fee Period	Start	End	Total Estimated Cost	Maximum Award Fee	Total Amount
14th Period	10/01/08	03/31/09			
15th Period	01/01/09	09/30/09			
	FY 09 Total				
16th Period	10/01/09	03/31/10			
17th Period	04/01/10	09/30/10			
	FY 10 Total				
18th Period	10/01/10	03/31/11			
19th Period	04/01/11	04/30/11			
	FY 11 Total				
	Total Option 2 Period				

Facility Upgrade/Modification/Repair, Design and Construction. (Fixed-price, Indefinite-delivery, Indefinite-quantity)

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	Total Estimated Amount
3012	Facility Upgrade/Modification/Repair, Design and Construction in accordance with SOW 11.	As Ordered	JOB	STBD*

The Government reserves the right to order Facility Upgrade/Modification/Repair, Design and Construction projects under this CLIN. The Contracting Officer may order the items/services any time by written notice to the Contractor from 10/01/2008 through 09/30/2011. The Contractor shall provide the items/services necessary in accordance with SOW 11.0.

Task/delivery orders for facilities modifications, design, and/or construction may be issued to the Contractor at the sole discretion of the contracting officer. It is agreed that work requests for Facility Upgrade/Modification/Repair, Design and Construction items may be issued as fixed price task orders during the term of the contract, and that the Government has no obligation to issue any such work request. In the event any such task/delivery orders are issued, they will in accordance with task ordering procedures in Section H.

3.6 Maintenance and Repair of ELVIS Operated Communication & Telemetry Equipment Exceeding $500

The contractor is responsible for Maintenance and Repair (MAR) of all Section J, Attachment J-4a, Installation Accountable Property (IAP), supporting Statement of Work, Section 7.1.3, Communications and Telemetry. MAR costs which exceed $500 shall be coordinated with the NASA technical monitor to accomplish a cost-effective and prompt repair. The contractor shall have written concurrence from the Government-assigned technical monitor prior to authorizing maintenance or repair costs, which exceed $500. The contractor will be reimbursed for MAR that exceeds $500 for incurred costs on a non-fee-bearing basis in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billing. MAR will be reimbursed on actual cost and is excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
3013	**Communication and Telemetry Maintenance and Repair that Exceed $500 (MAR)** in accordance with the requirements of SOW paragraph 7.1.3	-	-	***See Note 1***
3013A	MAR (FY 09)	**12**	**MO**	
3013B	MAR (FY 10)	**12**	**MO**	
3013C	MAR (FY 11)	**12**	**MO**	

NOTE 1: Cost Basis (Non-Fee-Bearing) Maintenance and Repair that Exceeds $500.

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Maintenance and Repair will be reimbursed for incurred costs on a non-fee bearing basis. All maintenance and repair that exceed $500 must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

3.7 Maintenance and Repair at VAFB Exceeding $1,000

The contractor is responsible for Maintenance and Repair (MAR) of equipment at VAFB as identified in Section J, Attachment J-4a, Installation Accountable Property (IAP), which supports Statement of Work (SOW) Section 8.1.1, as well as for urgent MAR requirements identified by the NASA technical monitor at VAFB for other areas of Statement of Work (SOW) Section 8.0 Vandenberg Air Force Base Unique Support. MAR costs which exceed $1,000 shall be coordinated with the NASA technical monitor to accomplish a cost-effective and prompt repair. The contractor shall have written concurrence from the Government- assigned technical monitor prior to authorizing maintenance or repair activities, which exceed $1,000. The contractor will be reimbursed for MAR that exceeds $1,000 for incurred costs on a non-fee-bearing basis in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the contracting officer upon request to substantiate billing. MAR will be reimbursed on actual cost and is excluded from input to the cost base upon which the award fee pool is calculated.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	TOTAL ESTIMATED AMOUNT
3014	**Maintenance and Repair that Exceeds $1,000 (MAR)** in accordance with the requirements of SOW paragraph 8.1.1	-	-	*See Note 1*
3014A	MAR VAFB (FY 09)	12	MO	
3014B	MAR VAFB (FY 10)	12	MO	
3014C	MAR VAFB (FY 11)	12	MO	

NOTE 1: Cost Basis (Non-Fee-Bearing) Maintenance and Repair that Exceeds $1,000.

The Not-To-Exceed (NTE) amount is the ceiling for the cost-reimbursable line items. Maintenance and Repair will be reimbursed for incurred costs on a non-fee bearing basis. All maintenance and repair that exceed $1,000 must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

3.8 Cost Basis (Non-Fee-Bearing) for Cost Reimbursable SOW 10.5 Information Technology (IT) Support

The Government will account for contractor-acquired property (CAP) requirements as a separate CLIN for the cost-reimbursable SOW 10.5, and has baselined these costs as indicated in the CLIN below. IT materials, supplies, and equipment shall be paid at cost, non-fee bearing, in accordance with the clause in Section I, FAR 52.216-11, Cost Contract – No Fee (APR 1984). The contractor shall retain original vendor receipts and furnish them to the Contracting Officer upon request to substantiate billings.

CONTRACT LINE ITEM (CLIN)	DESCRIPTION	QTY	UNIT	Total Estimated Amount
3015	*Cost Basis (Non-fee bearing)* The contractor shall provide the Contractor-Acquired Property that must be authorized, and is subject to a determination by the Contracting Officer that it is allocable to the contract and reasonably necessary, for effort related to cost reimbursable IT requirements to support performance of CLIN 3011.			
3015	**IT Contractor-Acquired Property (IT CAP)** The Contractor shall provide CAP, defined in NFS 1845.502-70, in accordance with the requirements of the SOW, for FY09, FY10, and F&11.	-	-	*See Note 1*
3015A	IT CAP (FY09)	12	MO	
3015B	IT CAP (FY10)	12	MO	
3015C	IT CAP (FY11)	12	MO	
3016	**IT Contractor-Acquired Property (IT CAP) for the Mission Analysis Lab (MAL)** The Contractor shall provide CAP, defined in NFS 1845.502-70, for the Mission Analysis Lab in accordance with the requirements of the SOW, for FY09, FY10, and FY11.	12	MO	
3016A	IT CAP-MAL (FY09)	12	MO	
3016B	IT CAP-MAL (FY10)	12	MO	
3016C	IT CAP-MAL (FY11)	12	MO	

Note 1: Cost Basis (Non-Fee-Bearing) Contractor- Acquired Property (CAP).

The Not-To-Exceed (NTE) amount is the ceiling for these cost-reimbursable line items. Contractor-Acquired Property will be reimbursed for incurred costs on a non-fee bearing basis. All Contractor-Acquired Property must be authorized by the contract and is subject to a determination by the contracting officer that it is allocable to the contract and reasonably necessary.

Only specific categories of items will be allowable to be acquired under this CLIN. These types of items include Information Technology (IT) hardware and software, as well as IT maintenance/support agreements.

Table B-3.5 Summary Option Period 2 (FY 2009 thru FY 2011)

FIXED-PRICE: OVERALL	CLINS 3002, 3004, 3005, 3006 & 3007	$
MAXIMUM AVAILABLE AWARD FEE: OVERALL	CLINS 3002, 3004, 3005, 3006 & 3007	$
FIXED-PRICE: S&MA	CLIN 3003	$
MAXIMUM AVAILABLE AWARD FEE: S&MA	CLIN 3003	$
MISSION DIRECT/FLEET SUPPORT (IDIQ)	CLIN 3008	
CAP AND TRAVEL	CLINS 3009 & 3010	$
ESTIMATED COST – SOW 10.0	CLIN 3011	$
MAXIMUM AVAILABLE AWARD FEE: SOW 10.0	CLIN 3011	$
FACILITY UPGRADE/MODIFICATION/ REPAIR, DESIGN AND CONSTRUCTION (IDIQ)	CLIN 3012	
MAINTENANCE AND REPAIR C&T	CLIN 3013	$
MAINTENANCE AND REPAIR AT VAFB	CLIN 3014	$
IT CAP	CLIN 3015	$
IT CAP-MAL	CLIN 3016	$
TOTAL ESTIMATED CONTRACT VALUE	CLINS 3002 – 3016	$

B-2 FIRM FIXED PRICE (NFS 1852.216-78) (DEC 1988) (CLIN 0001)

The total firm fixed price for CLIN 0001 of this contract is $ 00.00 .

(End of Clause)

B-3 AWARD FEE

(a) In addition to the profit/fee set forth elsewhere in the contract, the Contractor may earn a total award fee amount on the basis of performance during the evaluation periods

(b) The amount of award fee earned by the contractor under fixed price CLINs 1002-1007, 2002-2007, 3002-3007 and cost-plus CLINs 1011, 2011 and 3011 shall be determined in accordance with the Performance Evaluation Plan, Section J, Attachment J-6.

(c) The maximum available award fee, excluding base fee, if any, is reflected in Tables B-3 and B-3a below. A portion of the total available award fee (both fixed price and cost-plus) in the schedule is allocated to each evaluation period. This allocation is in equal distributions of fee among the periods.

MAXIMUM AVAILABLE AWARD FEE ADJUSTMENTS: Tables B-3 and B-3a are adjusted for any Fixed Price, SMA Fixed Price or Cost CLIN increases or decreases in scope. Once the period has ended and the Award Fee Score has been determined by the Award Fee Board Members, unearned award fee is adjusted on the summary option pages 10.2 (Basic), 18.3 (Option 1), or 26.3 (Option 2) as well as the tables below.

Table B-3 Available and Earned Fee (through Period 6)

Period	Evaluation Period	Maximum Available Fee	Earned Fee	Score	Rating	Mod No.
1	07/01/02 – 09/30/02				Very Good	08
2	10/01/02 – 03/31/03				Very Good	16
3	04/01/03 – 09/30/03				Excellent	31
4	10/01/03 – 03/31/04				Excellent	50
5	04/01/04 – 09/30/04				Excellent	61
6	10/01/04 – 03/31/05				Excellent	86

Table B-3a Available and Earned Fee (from Period 7 and thereafter)

Period	Evaluation Period	Overall Max Available Award Fee	S&MA Max Available Award Fee	Overall Rating	Overall Score	Overall Earned Fee	S&MA Rating	S&MA Score	S&MA Earned Fee	Mod No.
7	04/01/05-09/30/05			Excellent			Very Good			103
				OPT						
8	10/01/05-03/31/06			Excellent			Excellent			124
9	04/01/06-09/30/06			Excellent			Very Good			137
10	10/01/06-03/31/07			Excellent			Very Good			152
11	04/01/07-09/30/07			Excellent			Excellent			166
12	10/01/07-03/31/08			Excellent			Excellent			182
13	04/01/8-09/30/08			TBD	TBD	TBD	TBD	TBD	TBD	
				OPTION 2						
14	10/01/08-03/31/09			TBD	TBD	TBD	TBD	TBD	TBD	
15	04/01/09-09/30/09			TBD	TBD	TBD	TBD	TBD	TBD	
16	10/01/09-03/31/10			TBD	TBD	TBD	TBD	TBD	TBD	
17	04/01/10-09/30/10			TBD	TBD	TBD	TBD	TBD	TBD	
18	10/01/10-03/31/11			TBD	TBD	TBD	TBD	TBD	TBD	
19	04/01/11-09/30/11			TBD	TBD	TBD	TBD	TBD	TBD	

MAXIMUM AVAILABLE AWARD FEE ADJUSTMENTS: Tables B-3 and B-3a are adjusted for any Fixed Price, SMA Fixed Price or Cost CLIN increases or decreases in scope. Once the period has ended and the Award Fee Score has been determined by the Award Fee Board Members, unearned award fee is adjusted on the summary option pages 10.2 (Basic), 18.3 (Option 1) , or 26.3 (Option 2) as well as the tables below.

Table B-3 Available and Earned Fee *(through Period 6)*

Period	Evaluation Period	Maximum Available Fee	Earned Fee	Score	Rating	Mod No.
1	07/01/02 – 09/30/02				Very Good	08
2	10/01/02 – 03/31/03				Very Good	16
3	04/01/03 – 09/30/03				Excellent	31
4	10/01/03 – 03/31/04				Excellent	50
5	04/01/04 – 09/30/04				Excellent	61
6	10/01/04 – 03/31/05				Excellent	86

Table B-3a Available and Earned Fee *(from Period 7 and thereafter)*

Period	Evaluation Period	Overall Max Available Award Fee	S&MA Max Available Award Fee	Overall Rating	Overall Score	Overall Earned Fee	S&MA Rating	S&MA Score	S&MA Earned Fee	Mod No.
7	04/01/05-09/30/05			Excellent			Very Good			103
				OPT						
8	10/01/05-03/31/06			Excellent			Excellent			124
9	04/01/06-09/30/06			Excellent			Very Good			137
10	10/01/06-03/31/07			Excellent			Very Good			152
11	04/01/07-09/30/07			Excellent			Excellent			166
12	10/01/07-03/31/08			Excellent			Excellent			182
13	04/01/8-09/30/08			Excellent			Very Good			194
				OPTION 2						
14	10/01/08-03/31/09			TBD	TBD	TBD	TBD	TBD	TBD	
15	04/01/09-09/30/09			TBD	TBD	TBD	TBD	TBD	TBD	
16	10/01/09-03/31/10			TBD	TBD	TBD	TBD	TBD	TBD	
17	04/01/10-09/30/10			TBD	TBD	TBD	TBD	TBD	TBD	
18	10/01/10-03/31/11			TBD	TBD	TBD	TBD	TBD	TBD	
19	04/01/11-09/30/11			TBD	TBD	TBD	TBD	TBD	TBD	

B-4 SPECIAL COST PROVISIONS (Applicable to CLIN's 1011, 2011, 3011)

Without otherwise affecting the applicability of the cost principles set forth in FAR Part 31 and pursuant to the terms of the contract clause entitled "Allowable Cost and Payment," the contractor shall be reimbursed for such actual and allowable expenditures incurred in the performance of work required by this contract as may be approved by the contracting officer subject to the following limitations and provisions:

A. Provisional Billing Rates and Reimbursement Ceiling Rates

1. Provisional billing rates for overhead and G&A costs will be specified in writing under separate cover, and may be revised either retroactively or prospectively by the Contracting Officer. In accordance with FAR Clause 52.216-15, the Contractor shall submit within 90 days after its fiscal year end, and on an annual basis, a copy of its final indirect cost rates proposal to the Contracting Officer concurrent with the submission to the Corporate Administrative Contracting Officer (CACO) responsible for settlement of the indirect rates.

2. Notwithstanding the terms of the contract clause entitled "Allowable Cost and Payment." the Contractor shall not be reimbursed for G&A costs in excess of the established ceiling rate of

3. Costs attributable to a rate increase in excess of the established G&A ceiling rates shall be unallowable unless caused by compliance with new mandatory state or Federal requirements. If the Contractor incurs costs in excess of the ceiling rates, and wishes to obtain reimbursement, it shall submit a proposal to the Contracting Officer setting forth fully and completely the facts and circumstances believed to be responsible for the incurrence of costs above the ceiling(s). The Contracting Officer may make an equitable adjustment to the contract ceiling(s) if and to the extent the Contractor's proposal demonstrates that costs incurred in excess of the ceiling(s) were attributable to the circumstances described above and were not reasonably susceptible to being offset by reasonable and prudent reductions in indirect costs in other areas within the Contractor 's control.

4. The Contractor shall not make changes to its methods of allocating G&A costs subject to ceilings in order to charge these costs to indirect expense pools not subject to ceilings without the approval of the contracting officer. The Contractor shall be responsible for applying this same methodology to its subcontractors whose contracts are cost reimbursable.

B. Fringe Benefits

The Contractor shall inform the Contracting Officer of all proposed changes in fringe benefits which may result in an increased cost to the contract as soon as practicable but, in any event, prior to such changes being implemented. Fringe benefits include, but are not limited to, such items as health insurance, life insurance, pension plans, retiree health care, savings plans, bonus plans, education assistance, and leave policies. Failure to comply with the terms of this clause may result in the disallowance of costs.

C. Transfer of Accrued Benefits

The successful offeror will accept transfer of accrued sick leave hours of personnel hired from the incumbent Contractor without a break in service from the predecessor contract in excess of 60 days. However, the costs of these carry-over hours will not be paid under the successor contract unless used. Additionally, the successor Contractor will recognize the vacation accrual rates, earned through seniority, of personnel hired from the incumbent Contractor without a break in service from the predecessor contract in excess of 60 days.

(End of provision)

B-5 MINIMUM/MAXIMUM IDIQ CONTRACT VALUE

For the IDIQ portion of this contract, the guaranteed minimum quantity of work is covered by the fixed price core work.

There will be no further obligation on the part of the Government to issue any orders. The total maximum quantity ordered under this contract shall not exceed $40 Million. All orders placed under this contract will be applied to the guaranteed minimum and maximum.

(End of text)

[END OF SECTION]

SECTION C
DESCRIPTION/SPECIFICATION/WORK STATEMENT

C-1 SCOPE OF WORK (KSC 52.210-90) (FEB 1990) (MODIFIED)

The Contractor shall, in accordance with the terms and conditions set forth herein, manage and provide the non-personal services, products and data for NASA as described in Statement of Work for Expendable Launch Vehicles Integrated Support, attached hereto and made part of Section J, Attachment J-1.

The Contractor's obligation under the cost reimbursement contract line item includes resolution of unusual or emergency situations or increased work volume, which may occur from time to time. Such requirements shall be considered to be within the scope of the contract, entirely within the Contractor's original contractual obligation, and will not constitute nor be construed as a change within the meaning of the "Changes" clause of this contract. However, if assigned work is considered by the Contractor to be outside the scope of this contract. However, if assigned work is considered by the Contractor to be outside the scope of his contractual obligation, the Contractor (before performing any effort pursuant to such Government direction) shall refer such question to the Contracting Officer for resolution.

C-2 DATA REQUIREMENT LIST

The Contractor shall furnish all data identified and described in Attachment J-2, Appendix 1 (Data Requirements List – KSC Form 16-245, hereinafter called DRL) and in supplemental DRLs to be subsequently furnished to the Contractor for additional data, which the Government is authorized to request in accordance with the terms of this contract. Such data shall be prepared in accordance with the Data Requirement Description – KSC Form 16-246 (hereinafter called DRD) attached to the DRL and referenced in the DRL for each line item of data specified in the DRL.

The Government reserves the right to reasonably defer the dates of delivery or any or all line items of data specified in the DRL. Such right may be exercised at no increase in the contract amount. The Government also reserves the right to terminate the requirement for any or all line items of data specified in the DRL. In the event the Government exercises this right, the contract amount shall be subject to equitable adjustment in accordance with the changes clause.

To the extent that data required to be furnished by other provisions of this contract are also identified and described in the DRL, or supplemental DRLs, and in the DRDs referenced in such DRS(s), compliance with the DRL shall be accepted as compliance with such other provisions. In the event of conflict between identity and description of data called for by specific provisions of this contract and the DRL or DRDs, the DRL and DRDs shall control the data to be furnished.

Nothing contained in this Data Requirements List provision shall relieve the Contractor from furnishing data called for by, or under the authority of, other provisions of this contract, which are not identified and described in the DRL attached to this contract. Whenever such data are identified, either by the Contractor or the Government, they will be listed on a DRL and described on DRDs.

Except as otherwise provided in this contract, the cost of data to be furnished in response to the DRL attached to this contract is included in the total contract value.

SECTION D
PACKAGING AND MARKING

D-1 PACKAGING, HANDLING, AND TRANSPORTATION (NFS 1852.211-70) (JUN 2000)

(a) The Contractor shall comply with NPG 6000.1E, "Requirements for Packaging, Handling, and Transportation for Aeronautical and Space Systems, Equipment, and Associated Components", dated April 26, 1999, as may be supplemented by the statement of work of specifications of this contract, for all items designated as Class I, II, or III.

(b) The Contractor's packaging, handling, and transportation procedures may be used, in whole or in part, subject to the written approval of the Contracting Officer, provided (1) the Contractor's procedures are not in conflict with any requirements of this contract, and (2) the requirements of this contract shall take precedence in the event of any conflict with the Contractor's procedures.

(c) The Contractor must place the requirements of this clause in all subcontracts for items that will become components of deliverable class I, II or III items.

(End of Clause)

D-2 MATERIAL INSPECTION AND RECEIVING REPORT (NFS 1852.246-72) (JUN 1995)

(a) At the time of each delivery to the Government under this contract, The Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in [Insert number of copies, including original] copies, and copies [Insert number of copies].

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.672-1. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, The Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of clause)

D-3 MARKING INSTRUCTIONS (KSC 52.247-92) (NOV 2000)

Transportation Officer, NASA
J-BOSC Warehouse, Building M6-744
Kennedy Space Center, Florida 32899

In addition, special marks or ultimate consignee will show as:

Marked For: Ultimate Consignee
Mail Code _____
Building # _____
Contract # _____

(End of Clause)

[END OF SECTION]

SECTION E
INSPECTION AND ACCEPTANCE

E-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this Section are hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-3	APR 1984	INSPECTION OF SUPPLIES — COST REIMBURSEMENT
52.246-4	AUG 1996	INSPECTION OF SERVICES — FIXED-PRICE
52.246-5	APR 1984	INSPECTION OF SERVICES — COST REIMBURSEMENT
52.246-10	FEB 1999	INSPECTION OF FACILITIES
52.246-12	AUG 1996	INSPECTION OF CONSTRUCTION
52.246-13	AUG 1996	INSPECTION — DISMANTLING, DEMOLITION, OR REMOVAL OF IMPROVEMENTS
52.246-16	APR 1984	RESPONSIBILITY FOR SUPPLIES

E-2 INSPECTIONS AND ACCEPTANCE

Inspection and acceptance shall be in accordance with FAR clauses contained herein and shall be performed at Vandenberg Air Force Base, CA and Kennedy Space Center, Cape Canaveral Air Station, FL and such other places of performance or delivery of work required under this contract.

E-3 QUALITY ASSURANCE REQUIREMENTS

The Contractor shall establish and maintain a quality control system that satisfies the requirements of ANSI/ ISO/ASQC Q9001-1994 or Q9001-2000, "Quality Systems-Model for Quality Assurance Production Installation and Servicing" and amendments thereto.

Deleted:

A detailed quality manual, in accordance with the Statement of Work, is

(End of Clause)

[END OF SECTION]

SECTION F
DELIVERIES OR PERFORMANCE

F-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this Section are hereby incorporated by reference:

1. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.242-15	AUG 1989	STOP-WORK ORDER (ALTERNATE I)
52.252-16	AUG 1989	STOP-WORK ORDER – FACILITIES
52.247-29	JUN 1988	F.O.B. ORIGIN

F-2 PLACE OF PERFORMANCE (KSC 52.212-92) (FEB 1990)

The place of performance shall be at Vandenberg Air Force Base, CA; Kennedy Space Center, Cape Canaveral Air Force Station, FL; Launch Service Provider facilities; and, other launch sites as approved by the Contracting Officer.

(End of Clause)

F-3 PERIOD OF PERFORMANCE AND EFFECTIVE ORDERING PERIOD

The basic period of performance and effective ordering period of this contract shall be for a period of three years, four months from the effective date of the contract. Task Orders may be issued under this contract during the basic performance period and option periods.

	Period of Performance	Government Fiscal Year	CLINs
Phase-In	KSC: June 1, 2002 – July 7, 2002 VAFB: June 1-30, 2002	FY02	
Basic Period	KSC: July 8, 2002 – September 30, 2005 VAFB: July 1, 2002 – September 30, 2005	FY02-05	
Option Period 1	October 1, 2005 – September 30, 2008	FY06-08	
Option Period 2	October 1, 2008 – September 30, 2011	FY09-11	

(End of Text)

[END OF SECTION]

SECTION G
CONTRACT ADMINISTRATION DATA

G-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this Section are hereby incorporated by reference:

CLAUSE NUMBER	DATE	TITLE
52.227-11	JUN 1997	PATENT RIGHTS-RETENTION BY THE CONTRACTOR (SHORT FORM) -as modified by NASA FAR Supplement 1852.227-11
1852.227-70	NOV 1998	NEW TECHNOLOGY
1852.242-73	JUL 1997	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING
1852.245-70	JUL 1997	CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

(End of Clause)

G-2 AUTONOMOUS CONTRACTOR OPERATION

The Contractor shall appoint a duly authorized representative at the work site with full authority to receive and execute, on behalf of the Contractor, such contract modifications, notices, policy directives, etc., as may be issued pursuant to the terms of this contract.

G-3 INVOICING AND PAYMENT FOR FIXED-PRICE CONTRACT LINE ITEMS (CLINS)

(a) The Contractor shall submit a single invoice for CLIN 0001 after completion of 30-day phase-in services. The CLIN number and dates of services performed must be included in the invoice.

(b) The Contractor shall submit a single monthly invoice for fixed-price services delivered under the Schedule B contract line items. The applicable CLIN numbers and the dates of services performed must be included in the invoice.

(c) The Contractor shall submit invoices for each IDIQ Task Order containing a period of performance less than 30 days, after delivery of the services ordered. The CLIN number, Task Order Number and dates of the services performed must be included in the invoice.

(d) IDIQ Task Orders containing a period of performance greater than 30 days are eligible for performance-based payments, or customary progress payments, depending on the nature of the services provided. In these cases, specific payment terms will be included within the task order. The CLIN number, Task Order Number and dates of the services performed must be included in the invoice.

(e) IDIQ Task Orders for Construction and Facilities Modifications shall be invoiced and paid in accordance with FAR 52.232-5, entitled Payments under Fixed-Price Construction Contracts. The CLIN number, Task Order Number and dates of the services performed must be included in the invoice.

All invoice payments for Construction are subject to acceptance by the Government, as described in FAR 52.232-27, entitled Prompt Payment for Construction Contracts. All other invoice payments are subject to acceptance by the Government, as described in FAR 52.232-25, entitled Prompt Payment.

Invoices for items (a) through (e) shall be submitted to the address below with copies to the Contracting Officer and the Contracting Officer's Technical Representative (COTR).

NASA Shared Services Center (NSSC)
Financial Management Division (FMD) – Accounts Payable
Bldg 1111, C. Road
Stennis Space Center, MS 39529
Email:
Fax: 866-209-5415

Instructions for Invoicing and Payment for Cost-Reimbursable Contract Line Items and Award Fee are described below in G-5.

G-4 AWARD FEE FOR SERVICE CONTRACTS (NFS 1852.216-76) (JUN 2000)

(a) The Contractor can earn award fee from a minimum of zero dollars to the maximum stated in B-3, "Estimated Cost and Award Fee", NASA FAR Supplement clause 1852.216-85, in this contract.

(b) Beginning 4 months after the effective date of this contract, the Government shall evaluate the Contractor's performance every 6 months to determine the amount of award fee earned by the Contractor during the period, including option periods if exercised. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations will be considered by the Government in its evaluation. The Government's Fee Determination Official (FDO) will determine the award fee amounts based on the Contractor's performance in accordance with Section J, Attachment J-6, "Performance Evaluation Plan". The plan may be revised unilaterally by the Government prior to the beginning of any rating period to redirect emphasis.

(c) The Government will advise the Contractor in writing of the evaluation results. The Government will make payment based on issuance of unilateral modification to the contract by Contracting Officer.

(d) After 85 percent of the potential award fee has been paid, the Contracting Officer may direct the withholding of further payment of award fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the total potential award fee.

(e) The amount of award fee that can be awarded in each evaluation period is limited to the amounts for each contract year set forth at B-3. Award fee that is not earned in an evaluation period cannot be reallocated to future evaluation periods.

(f) (1) Provisional award fee payments will be made under this contract pending the determination of the amount of fee earned for an evaluation period. If applicable, provisional award fee payments will be made to the Contractor on a monthly basis. The total amount of award fee available in an evaluation period that will be provisionally paid is 75 percent of 1/6 of the current period's maximum potential award fee or the prior period's evaluation score.

(2) Provisional award fee payments will be superseded by the final award fee evaluation for that period. If provisional payments exceed the final evaluation score, the Contractor will either credit the next payment voucher for the amount of such overpayment or refund the difference to the Government, as directed by the Contracting Officer.

(3) If the Contracting Officer determines that the Contractor will not achieve a level of performance commensurate with the provisional rate, payment of provisional award fee will be discontinued or

reduced in such amounts as the Contracting Officer deems appropriate. The Contracting Officer will notify the Contractor in writing if it is determined that such discontinuance or reduction is appropriate.

(4) Provisional award fee payments will be made prior to the first award fee determination by the Government.

(g) Award fee determinations are unilateral decisions made solely at the discretion of the Government.

(End of Clause)

G-5 SUBMISSION OF VOUCHERS FOR PAYMENT (NFS 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purpose of the Prompt Payment clause of this contract is indicated below. Public vouchers for payment of costs shall include a reference to the number of this contract.

(b)(1) If the Contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

(i) For approval: Cost Vouchers, forward not more often than once every two weeks;
John F. Kennedy Space Center, NASA
Procurement Office/OP-LS
Kennedy Space Center, FL 32899

(ii) For payment:
NASA Shared Services Center (NSSC)
Financial Management Division (FMD) – Accounts Payable
Bldg 1111, C. Road
Stennis Space Center, MS 39529
Email:
Fax: 866-209-5415

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as directed by the Contracting Officer.

(c) If the Contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), The Contractor shall prepare and submit vouchers as follows:

(1) One original and two copies of Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to:

Cognizant DCAA Audit Office

(2) Two copies of SF 1034, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addresses:

(i) NASA Contracting Officer (1 copy)
(ii) Project Management Office/COTR (1 copy)

(3) The Contracting Officer may designate other recipients as required.

(d) Award Fee: Pursuant to the clause 1852.216-76, Award Fee for Service Contracts, the amount of award fee earned, when determined, shall be reflected in a unilateral contract modification issued by the Contracting Officer. The payment office will make payment based on unilateral modification.

Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and forwarded to:

(i) For approval: Award Fee Vouchers, forward not more often than once a month:
John F. Kennedy Space Center, NASA
Procurement Office/OP-OS-ELV
Kennedy Space Center, CL 32899

(ii) For payment:
NASA Shared Services Center (NSSC)
Financial Management Division (FMD) – Accounts Payable
Bldg 1111, C. Road
Stennis Space Center, MS 39529
Email:
Fax: 866-209-5415

This is the designated billing office for fee vouchers for purposes for the Prompt Payment clause of this contract.

(c) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

(End of Clause)

G-6 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NFS 1852.227-72) (JULY 1997)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights—Retention by the Contractor (Short Form)" whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

Title	Office Code	Address (including zip code)
New Technology Representative	KT-F	John F. Kennedy Space Center Attn: David Makufka Technology Transfer Officer NASA/KT-F Kennedy Space Center, FL 32899
Patent Representative	CC-A	John F. Kennedy Space Center Attn: Randy Heald Patent Counsel NASA/CC-A Kennedy Space Center, FL 32899

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights--Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement. (End of Clause)

G-7 TRAVEL OUTSIDE OF THE UNITED STATES

(a) The Contracting Officer must authorize in advance and in writing travel to locations outside of the United States by Contractor employees that is to be charged as a cost to this contract. This approval may be granted when travel is necessary to the efforts required under the contract and it is otherwise in the best interest of NASA.

(b) The Contractor shall submit requests to the Contracting Officer at least 30 days in advance of the start of the travel. The Contracting Officer may waive the 30 days advance notice for emergency travel or for other unforeseen travel requirements outside the United States.

(c) The Contractor shall submit a travel report at the conclusion of the travel. The Contracting Officer's approval of the travel will specify the required contents and distribution of the travel report.

(End of Clause)

G-8 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (NFS 1852.245-71) (JUN 1998)

(a) The Government property described in the clause at 1852.245-77, List of Installation-Accountable Property and Services, shall be made available to the Contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property. Under this clause, the Government retains accountability for, and title to, the property, and the Contractor assumes the following user responsibilities:

Property Custodian and User Responsibilities defined in NPD 4200.1 and NPR 4200.1.

The Contractor shall establish and adhere to a system of written procedures for compliance with these user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(b) (1) The official accountable record-keeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished by the Installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the Contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The Contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area;

(ii) The Contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area:

(iii) The Contractor shall establish a record of the property as required by FAR 45.5 and NFS 1845.5 and furnish to the Industrial Property Officer a DD Form 1149 Requisition and Invoice/Shipping Document (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the Contractor . The Contractor is accountable for all Contractor -acquired property until the property is transferred to the Government's accountability.

(iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the contracting officer and notification of the SEMO. The Contractor shall assume accountability and financial reporting responsibility for such property. The Contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(2) After transfer of accountability to the Government, The Contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the Contracting Officer.

(End of Clause)

G-8a FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (NFS 1852.245-73) (AUG 2001) (DEVIATION)

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractor s, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.

(b) (1) Subcontractor use of NF 1018 is not required by this clause; however, The Contractor shall include data on property in the possession of subcontractor s in the annual NF 1018.

(2) The Contractor shall mail the original signed NF 1018 directly to the cognizant NASA Center Deputy Chief Financial Officer, Finance, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address: TA-E-1, Kennedy Space Center, FL 32899, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c) (1) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 15. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 15. Some activity may be estimated for the month of September, if necessary, to ensure the NF 1018 is received when due. However, Contractor s procedures must document the process for developing these estimates bases on planned activity such as planned purchases or NASA Form 533 (NF 533 Contractor Financial Management Report) cost estimates. It should be supported and documented by historical experience or other corroborating evidence, and be retained in accordance with FAR Subpart 4.7, Contractor Records Retention. Contractor s shall validate the reasonableness of the estimates and associated methodology by comparing them to the actual activity once that data is available, and adjust them accordingly. In addition, difference between the estimated cost and actual cost must be adjusted during the next reporting period. Contractor s shall have formal policies and procedures, which address the validation of NF 1018 data, including data from subcontractor s, and the identification and timely reporting of errors. The objective of this validation is to ensure that information reported is accurate and in compliance with the NASA FAR Supplement. If errors are discovered on NF 1018 after submission, The Contractor shall immediately contact the cognizant NASA Center Industrial Property Officer (IPO) to discuss corrective action.

(2) The Contracting Officer may, in NASA's interest, withhold payment until a reserve not exceeding $25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports in accordance with 1845.505-14 and any supplemental instructions for the current reporting period issued by NASA. Such reserve shall be withheld until the Contracting Officer has determined that NASA has received the required reports. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) through (3) of this clause.

(End of Clause)

G-8b LIST OF GOVERNMENT-FURNISHED PROPERTY (NFS 1852.245-76) (OCT 1998)
For performance of work under this contract, the Government will make available Government property identified in Attachment 4b of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at the NASA LSP Offices and at other location(s) as may be approved by the Contracting Officer. Under the FAR 52.245 Government property clause of this contract, the Contractor is accountable for the identified property.

(End of Clause)

G-9 LIST OF INSTALLATION-ACCOUNTABLE PROPERTY AND SERVICES (NFS 1852.245-77) (JUL 1997)
In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space, work area space, and utilities. Government telephones are available for official purposes only; pay telephones are available for Contractor employees for unofficial calls.

(b) General-and special-purpose equipment, including office furniture.

(1) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(2) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(3) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

(c) Supplies from stores stock.

(d) Publications and blank forms stocked by the installation.

(e) Safety and fire protection for Contractor personnel and facilities.

(f) Installation service facilities: ["None"].

(g) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

(h) Cafeteria privileges for Contractor employees during normal operating hours.

(i) Building maintenance for facilities occupied by Contractor personnel.

(j) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services shall be provided on-site, as approved by the Contracting Officer.

(k) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

(End of Clause)

G-10 CERTIFICATION FOR SERVICES AND/OR RECEIPT OF SUPPLIES (KSC 52.212-94) (SEP 1998)

Certification of services performed hereunder and/or receipt of supplies furnished shall be accomplished by the Contracting Officer Technical Representative, COTR, Mail Code VA-B. The original and a copy of the certificate shall be forwarded by the certifying official without delay to the General Accounting, A/P, KSC, Attention: Code GG-B-C2. An information copy shall be furnished to the Contracting Officer, KSC, Attention: Code OP-LS.

(End of Clause)

G-11 LIMITATION OF FUNDS (FIXED-PRICE CONTRACT) (NFS 1852.232-77)(MAR 1989) (MODIFIED)

(a) Of the total price of all fixed-price contract line items (CLINs) the sum of $76,908,582.21 is presently available for payment and allotted to this contract. It is anticipated that from time to time additional funds will be allocated to the contract in accordance with the following schedule, until the total price of said items is allotted:

SCHEDULE FOR ALLOTMENT OF FUNDS

Table G-1 CONTRACT FUNDING FOR FIXED-PRICE

Task Order / Mod No	Increase to FP Contract Value	Contract Funding Inc	Adequate Thru Date
At Award	$	$	8/31/02
TO9400	$	$	9/30/02
TO9700	$	$	9/30/02
TO1001	$		
TO1002	$		
TO9800	$	$	
TO1003	$		
TO 1004	$		
Subtotal			

Task Order / Mod No	Increase to FP Contract Value	Contract Funding Increase	Adequate Thru Date
Subtotal to TO1004	$	$	
TO9300	$	$	
Mod 01		$	12/31/02
TO 1005	$		12/31/02
TO 1006	$		12/31/02
TO 9401	$	$	12/31/02
Mod 04	$		12/31/02
Mod 05		$	2/28/03
TO 9900	$		2/28/03
Mod 07	$		2/28/03
Mod 09	$		2/28/03
Mod 11		$	3/8/03
Mod 12		$	3/15/03
Mod 14		$	11/2/03
Mod 15		$	11/2/03
Mod 19		$	11/2/03
Mod 20		$	11/2/03
Mod 22		$	11/2/03
Mod 23		$	11/2/03
Mod 26	$		12/17/03
Mod 30		$	1/2/04
Mod 34		$	3/6/04
Mod 36		$	3/26/04
Mod 37	$		3/26/04
Mod 39		$	4/6/04
Mod 43		$	8/3/04
Mod 46	$	$	8/3/04
Mod 49		$	9/5/04
Mod 51		$	9/28/04
Mod 52		$	10/15/04
Mod 53		$	12/31/04
Mod 54		$	1/10/05
Mod 60		$	2/26/05
Mod 63		$	3/6/05
Mod 65	$		2/26/05
Mod 70	$		2/26/05
Mod 71		$	7/30/05
Mod 72	$		
Mod 73		$	8/16/05
Mod 74	$		
Mod 76	$		
Mod 078		$	8/16/05
Mod 082		$	9/1/05
Mod 084		$	9/13/05
Mod 085		$	10/19/05
Mod 087		$	10/21/05
Mod 089	$		
Subtotal	$	$	

Task Order / Mod No	Increase to FP Contract Value	Contract Funding Increase	Adequate Thru Date
Subtotal to Mod 89	$	$	
Mod 090		$	1/27/06
Mod 092		$	4/3/06
Mod 095		$	5/6/06
Mod 097	$		
Mod 098		$	7/18/06
Mod 101		$	8/9/06
Mod 107	$		
Mod 108	$		
Mod 109		$	7/12/06
Mod 112		$	8/9/06
Mod 116		$	8/9/06
Mod 117		$	8/19/06
Mod 121		$	9/3/06
Mod 123		$	9/13/06
Mod 125		$	9/28/06
Mod 126		$	10/5/06
Mod 127		$	10/8/06
Mod 128		$	10/26/06
Mod 130	$		
Mod 131		$	2/6/07
Mod 134	$		
Mod 135		$	2/24/07
Mod 136		$	4/11/07
Mod 138		$	4/29/07
Mod 139		$	5/27/07
Mod 142	$		
Mod 143	$		
Mod 144		$	5/23/07
Mod 148		$	8/2/07
Mod 150		$	10/3/07
Mod 151		$	12/17/07
Mod 154		$	2/19/08
Mod 156		$	4/1/08
Mod 159		$	4/10/08
Mod 161		$	4/27/08
Mod 162		$	
Mod 164		$	
Mod 165		$	
Mod 167		$	5/17/08
Mod 168	$		
SUBTOTAL	$	$	

Task Order / Mod No	Increase to FP Contract Value	Contract Funding Increase	Adequate Thru Date
Subtotal to Mod 168	$	$	5/17/08
Mod 169		$	4/16/08
Mod 170	$		
Mod 171		$	5/11/08
Mod 173	$		
Mod 175		$	6/6/08
Mod 177	$		
Mod 178		$	9/29/08
Mod 179		$	9/26/08
Mod 180	$		
Mod 181	$	$	9/29/08
Mod 184	$	$	12/8/08
Mod 185		$	12/30/08
Mod 186		$	1/23/09
Mod 187	$		
Mod 188		$	1/27/09
Mod 189		$	2/14/09
Mod 190		$	2/19/09
Mod 191		$	2/22/09
Mod 193		$	3/12/09
Cumulative Total	$	$	

(b) The Contractor agrees to perform or have performed work on the items specified in paragraph (a) of this clause up to the point at which, if this contract is terminated pursuant to the Termination for Convenience of the Government clause of this contract, the total amount payable by the Government (including amounts payable for subcontracts and settlement costs) pursuant to paragraphs (f) and (g) of that clause would, in the exercise of reasonable judgment by the Contractor , approximate the total amount at the time allotted to the contract. The Contractor is not obligated to continue performance of the work

beyond that point. The Government is not obligated in any event to pay or reimburse the Contractor more than the amount from time to time allotted to the contract, anything to the contrary in the Termination for Convenience of the Government clause notwithstanding.

(c) (1) It is contemplated that funds presently allotted to this contract will cover the work to be performed until (see table G-1).

(2) If funds allotted are considered by the Contractor to be inadequate to cover the work to be performed until that date, or an agreed date substituted for it, The Contractor shall notify the Contracting Officer in writing when within the next 60 days the work will reach a point at which, if the contract is terminated pursuant to the Termination for Convenience of the Government clause of this contract, the total amount payable by the Government (including amounts payable for subcontracts and settlement costs) pursuant to paragraphs (f) and (g) of that clause will approximate 75 percent of the total amount then allotted to the contract.

(3) (i) The notice shall state the estimate when the point referred to in paragraph (c)(2) of this clause will be reached and the estimated amount of additional funds required to continue performance to the date specified in paragraph (c)(1) of this clause, or an agreed date substituted for it.

(ii) The Contractor shall, 60 days in advance of the date specified in paragraph (c)(1) of this clause, or an agreed date substituted for it, advise the Contracting Officer in writing as to the estimated amount of additional funds required for the timely performance of the contract for a further period as may be specified in the contract or otherwise agreed to by the parties.

(4) If, after the notification referred to in paragraph (c)(3)(ii) of this clause, additional funds are not allotted by the date specified in paragraph (c)(1) of this clause, or an agreed date substituted for it, the Contracting Officer shall, upon the Contractor 's written request, terminate this contract on that date or on the date set forth in the request, whichever is later, pursuant to the Termination for Convenience of the Government clause.

(d) When additional funds are allotted from time to time for continued performance of the work under this contract, the parties shall agree on the applicable period of contract performance to be covered by these funds. The provisions of paragraphs (b) and (c) of this clause shall apply to these additional allotted funds and the substituted date pertaining to them, and the contract shall be modified accordingly.

(e) If, solely by reason of the Government's failure to allot additional funds in amounts sufficient for the timely performance of this contract, the Contractor incurs additional costs or is delayed in the performance of the work under this contract, and if additional funds are allotted, an equitable adjustment shall be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the items to be delivered, or in the time of delivery, or both.

(f) The Government may at any time before termination, and, with the consent of the Contractor, after notice of termination, allot additional funds for this contract.

(g) The provisions of this clause with respect to termination shall in now way be deemed to limit the rights of the Government under the default clause of this contract. The provisions of this Limitation of Funds clause are limited to the work on and allotment of funds for the items set forth in paragraph (a) of this clause. This clause shall become inoperative upon the allotment of funds for the total price of said work except for rights and obligations then existing under this clause.

h) Nothing in this clause shall affect the right of the Government to terminate this contract pursuant to the Termination for Convenience of the Government clause of this contract.

G-12 CONTRACT FUNDING (NFS 1852.232-81) (JUN 1990) (MODIFIED)

For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds Clause, the total amount allotted by the Government for the Cost-Reimbursable portion of this contract is shown in the table below. These allotments are applicable to the ELVIS services provided in all Cost-Reimbursable Services and are considered adequate to reimburse the Contractor's performance through the dates shown in the table.

Table G-2 CONTRACT FUNDING FOR COST-REIMBURSABLE

Mod Number	Increase to Cost Reimbursable Contract Value	Contract Funding Increase	Adequate Thru Date
Contract Award	$	$	8/31/02
Mod 01		$	9/30/02
Mod 05		$	2/28/03
Mod 11		$	1/30/03
Mod 12		$	3/15/03
Mod 14		$	11/2/03
Mod 15		$	11/2/03
Mod 19		$	11/2/03
Mod 20		$	11/2/03
Mod 22		$	11/2/03
Mod 23		$	11/2/03
Mod 25		$	11/2/03
Mod 26	$	$	11/3/03
Mod 27		$	11/3/03
Mod 28		$	11/3/03
Mod 29		$	12/4/03
Mod 30		$	12/31/03
Mod 32		$	12/31/03
Mod 34		$	3/6/04
Mod 36		$	3/26/04
Mod 37	$		3/26/04
Mod 39		$	4/6/04
Mod 43		$	8/3/04
Mod 46	$		8/3/04
Mod 47		$	8/12/04
Mod 49		$	9/5/04
Mod 51		$	9/28/04
Mod 52		$	10/15/04
Mod 53		$	12/31/04
Mod 54		$	1/10/05
Mod 55		$	1/10/05
Mod 56		$	1/10/05
Mod 57	$		1/10/05
Mod 60		$	2/26/05
SUBTOTAL	$	$	

Mod No.	Increase to Cost Reimbursable Contract Value	Contract Funding Increase	Adequate Thru Date
Subtotal thru Mod 60	$	$	
Mod 63		$	3/6/05
Mod 65	$		2/26/05
Mod 66	$		2/26/05
Mod 70	$		2/26/05
Mod 71		$	7/30/05
Mod 73		$	8/16/05
Mod 74	$		
Mod 76	$		
Mod 078		$	8/16/05
Mod 082		$	9/1/05
Mod 084		$	9/13/05
Mod 085		$	10/19/05
Mod 087		$	10/21/05
Mod 089	$		
Mod 090		$	1/27/06
Mod 092		$	4/3/06
Mod 093		$	4/3/06
Mod 095		$	5/6/06
Mod 098		$	7/18/06
Mod 101		$	8/9/06
Mod 108	$		
Mod 109		$	1/0/00
Mod 112		$	9/5/04
Mod 113	$		
Mod 115	$		
Mod 117		$	12/31/04
Mod 119	$		
Mod 121		$	9/28/04
Mod 123		$	10/15/04
Mod 125		$	12/31/04
Mod 126		$	1/10/05
Mod 127		$	2/26/05
Mod 128		$	3/6/05
Mod 131		$	2/6/07
Mod 132		$	2/6/07
Mod 133		$	2/6/07
Mod 135		$	2/24/07
Mod 136		$	
SUBTOTAL	$	$	

Mod No.	Increase to Cost Reimbursable Contract Value	Contract Funding Increase	Adequate Thru Date
Subtotal thru Mod 136	$	$	
Mod 138		$	4/29/07
Mod 139		$	5/27/07
Mod 140	$	)	
Mod 141	$	)	
Mod 144		$	12/31/02
Mod 146	$	)	
Mod 148		$	8/2/07
Mod 149	$	)	
Mod 150		$	10/3/07
Mod 151		$	12/17/07
Mod 154		$	2/19/08
Mod 156		$	4/1/08
Mod 158	$	)	
Mod 159		$	2/28/03
Mod 160		$	
Mod 161		$	4/27/07
Mod 162		$	
Mod 163	$	)	
Mod 164		$	
Mod 165		$	
Mod 167		$	5/17/08
Mod 168	$	)	
Mod 170	$	)	
Mod 171		$	5/11/08
Mod 175		$	6/6/08
Mod 177	$	)	
Mod 178	$	) $	9/29/08
Mod 180	$	)	
Mod 184		$	12/8/08
Mod 185	$	) $	12/30/08
Mod 186	$	) $	1/23/09
Mod 189		$	2/14/09
Mod 190		$	2/19/09
Mod 191		$	2/22/09
Mod 192		)	
Mod 193		$	3/12/09
Cumulative Totals	**$**	$	

(End of Clause)

Mod No	MAX Avail AF	Contract Funding Increase	Adequate Thru Date
Subtotal thru Mod 082	$	$	9/1/05
Mod 084		$	9/13/05
Mod 085		$	10/19/05
Mod 086	$		
Mod 087		$	10/21/05
Mod 089	$		
Mod 090		$	1/27/06
Mod 092		$	4/3/06
Mod 095		$	5/6/06
Mod 097	$		
Mod 098		$	7/18/06
Mod 101		$	8/9/06
Mod 103	$		
Mod 108	$		
Mod 109		$	7/12/06
Mod 112		$	8/9/06
Mod 113	$		
Mod 115	$		
Mod 117		$	8/19/06
Mod 119	$		
Mod 121		$	9/3/06
Mod 123		$	9/13/06
Mod 124	$		
Mod 125		$	9/28/06
Mod 126		$	10/5/06
Mod 127		$	10/8/06
Mod 128		$	10/26/06
Mod 130	$		
Mod 131		$	2/6/07
Mod 134	$		
Mod 135		$	2/24/07
Mod 136		$	4/11/07
Mod 137	$		
Mod 138		$	4/29/07
Mod 139		$	5/27/07
Mod 140	$		
Mod 144		$	5/23/07
Mod 146	$		
SUBTOTAL	$	$	

Mod No	MAX Avail AF	Contract Funding Increase	Adequate Thru Date
Subtotal thru Mod 146	$	$	
Mod 148		$	8/2/07
Mod 149	$		
Mod 150		$	10/3/07
Mod 151		$	12/17/07
Mod 152	$		
Mod 154		$	2/19/08
Mod 156		$	4/1/08
Mod 158	$		
Mod 161		$	4/27/08
Mod 162		$	
Mod 163	$		
Mod 164		$	
Mod 165		$	
Mod 166	$		
Mod 170	$		
Mod 171		$	5/11/08
Mod 175		$	6/6/08
Mod 178	$	$	9/29/08
Mod 179		$	9/26/08
Mod 180	$		
Mod 181		$	9/29/08
Mod 182	$		
Mod 184		$	12/8/08
Mod 185		$	12/30/08
Mod 186		$	1/23/09
Mod 187	$		
Mod 188		$	1/27/09
Mod 189		$	2/14/09
Mod 190		$	2/19/09
Mod 191		$	2/22/09
Mod 192	$		
Mod 193		$	3/12/09
Mod 194	$		
Cumulative Totals	$	$	

(End of Clause)

SECTION H – SPECIAL CONTRACT REQUIREMENTS

H-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this Section are hereby incorporated by reference:

CLAUSE NUMBER	DATE	TITLE
52.223-5	APR 1998	POLLUTION PREVENTION AND RIGHT- TO- KNOW INFORMATION
1852.204-74	AUG 2000	CENTRAL CONTRACTOR REGISTRATION
1852.208-81	AUG 1993	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-74	MAR 1996	DRUG- AND ALCOHOL-FREE WORKFORCE
1852.225-70	FEB 2000	EXPORT LICENCES (ALTERNATE I) Insert in Paragraph (b): NASA/KSC and NASA/VAFB
1852.228-72	SEP 1993	CROSS-WAIVER OF LIABILITY FOR SPACE SHUTTLE SERVICES
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.228-78	SEP 1993	CROSS-WAIVER OF LIABILITY FOR NASA EXPENDABLE LAUNCH VEHICLE (ELV) LAUNCHES

H-2 ORGANIZATIONAL CONFLICT OF INTEREST

(a) It has been determined that the services to be provided under this contract create significant potential Organizational Conflicts of Interest with current and future launch service providers.

(b) The contractor will assist in analyzing products and activities of various KSC contractors involved in processing flight and payload hardware and software; support NASA's internal risk assessment and management process; review mission compatibility drawings provided by the launch service providers; verify overall launch service provider compliance with test procedures and acceptance test results; maintain cognizance of hardware productions, design changes and non-conformances at prime launch service provider facilities; and, provide ELV telemetry and communications at various locations. The nature of the potential conflicts arises from the contractor's participation as the primary source of launch vehicle engineering and analysis and its related and necessary access to various types and levels of data and processes that are proprietary to the various launch and payload services contractors. Based on these significant potential organizational conflicts of interest, launch service providers are ineligible to respond to the solicitation and be considered for award as either a prime or a subcontractor. A launch service provider, for the purposes of this provision, is defined as a prime contractor or subcontractor that designs, assembles, launches and/or manufactures a launch vehicle.

(c) The prime contractor and its major subcontractors shall not compete directly or as a competitive team member in any solicitation for NASA Launch Services and shall be ineligible for award of a prime contract for Launch Services for NASA, or any level subcontract there under, during their incumbency on this contract and for a period of five years after expiration or other termination of this contract.

(d) For purposes of this clause, "major subcontractor " means a subcontractor responsible for services under this contract equal to or greater than 15% or more of direct labor cost during the life of the contract, or a subcontractor which as a result of performance under this contract is provided or obtains access to materials, data, processes or other matters of a non-public nature

which are proprietary to a third party serving as a launch services contractor /subcontractor , launch processing contractor /subcontractor , or payload manufacturing and/or processing contractor /subcontractor .

(e) The contractor and its subcontractor (s), if any, shall flow down the requirements of this clause to all subcontracts, at any tier, unless the cognizant Contracting Officer has agreed in advance in writing that, based on the nature of the services to be acquired and the access associated therewith, the potential for an organizational conflict of interest under the proposed subcontract arrangement is too remote to require application of the clause to that specific subcontract.

(End of Text)

H-3 HANDLING OF DATA

(a) In the performance of this contract, it is anticipated that the contractor may have access to, be furnished, or use the following categories of data (which may be technical data, computer software, administrative, management information, or financial, including cost or pricing):

(1) Data of third parties which NASA has agreed to handle under protective arrangements; and

(2) NASA-generated data not releasable under the Freedom of Information Act (FOIA), the use and dissemination of which, the NASA intends to control.

(b) In order to protect the interests of NASA and the owners, licensors and licensees of such data, the contractor agrees, with respect to any such third party or NASA-generated data that is either marked with a restrictive legend, specifically identified in this contract, or otherwise identified in writing by the Contracting Officer as being subject to this clause, to:

(1) Use, disclose, and reproduce such data only to the extent necessary to perform the work required under this contract;

(2) Allow access to such data only to those of its employees that require access for their performance under this contract;

(3) Preclude access and disclosure of such data outside the contractor's organization;

(4) Return or dispose of such data, as the Contracting Officer may direct, when the data is no longer needed for contract performance; and

(5) Provide the Government with all modifications or enhancements made or proposed during the release period.

(c) The contractor agrees to inform and instruct its employees of its and their obligations under this clause and to appropriately bind its employees contractually to comply with the access, use, disclosure, and reproduction provisions of this clause. The contractor agrees to enter into non-disclosure agreements with Launch Service Providers (LSP) and any other launch vehicle manufacturers to the extent that the performance of employee duties requires access to information/data properly marked as proprietary by the LSP or launch vehicle manufacturers.

(d) In the event the data is provided by another federal agency, there is no express or implied warranty given by the provider.

(e) In the event that data includes a legend that the contractor deems to be ambiguous or unauthorized, the contractor may inform the Contracting Officer of such condition. Notwithstanding such a legend, as

long as such legend provides an indication that a restriction on use or disclosure was intended, the contractor shall treat such data pursuant to the requirements of this clause unless otherwise directed, in writing, by the Contracting Officer.

(f) Notwithstanding the above, the contractor shall not be restricted in use, disclosure, and reproduction of any data that:

(1) Is, or becomes, generally available or public knowledge without breach of this clause by the contractor;

(2) Is known to, in the possession of, or is developed by the contractor independently of any disclosure of, or without reference to, proprietary, restricted, confidential, or otherwise protectable data under this clause;

(3) Is rightfully received by the contractor from a third party without restriction;

(4) Or is required to be produced by the contractor pursuant to a court order or other Government action.

If the contractor believes that any of these events or conditions that remove restrictions on the use, disclosure, and reproduction of the data apply, the contractor shall promptly notify the Contracting Officer of such belief prior to acting on such belief, and, in any event, shall give notice to the Contracting Officer prior to any unrestricted use, disclosure, or reproduction of such data.

(End of Clause)

H-4 CONVERSION TO FIXED PRICE (CPAF CLIN ONLY)

NASA expects to shift risk to the contractor as it collects performance and cost data under the contract. If other than a cost plus award fee contract type becomes more appropriate for the subject CLIN, NASA would, in lieu of exercising the next option, consider re-procuring the requirement using the different contract type. If, after analysis, NASA decides to exercise the option, the parties must first negotiate, in good faith, to revise the contract type.

(End of Clause)

H-5 GOVERNMENT FURNISHED SERVICES

The Government will furnish the following services to the contractor at KSC and VAFB (as noted) on a no-charge-for-use basis to the extent reasonably necessary for the contractor to fulfill its contractual obligations:

Calibration and Standards Services (KSC & VAFB)

Central receiving (KSC Only)

Conference Room (Mission Briefing Room in the Operations & Checkout Bldg, Training Auditorium) audio/video set up support (KSC Only)

Administrative Desktop Computers (existing Section J Attachment 4 desktop computers will be provided "As Is," maintenance and replacement are the responsibility of the contractor). (KSC & VAFB)

Emergency Medical Services (KSC & VAFB)

Fire Protection Service (KSC & VAFB)

Food Services (cafeteria, snack bars, vending machines) (KSC & VAFB)

Hazardous Waste Disposal (KSC & VAFB)

Heating, Ventilating, and Air Conditioning (HVAC) (KSC Only)

Janitorial Services (KSC Only)

Library Services (KSC Only)

Mail Services (to one designated location) (KSC & VAFB)

Maintenance of Facilities on CCAFS (KSC Only)

NASA Malfunction Laboratory (KSC Only)

Occupational Health Services (KSC Only)

On-site Film Laboratory and Processing Service (KSC & VAFB)

On-site Passenger Bus Service (KSC Only)

On-site Work Space (KSC, VAFB & LSP On-Site Resident Offices)

On-site Storage Space at Hangar AE (KSC)

Operational Voice, Video and Data Communications (except systems/services required to be provided by the contractor per SOW) (KSC & VAFB)

Administrative Voice, Video and Data Communications (except mobile phones, fax machines and p[illegible] (KSC & VAFB)

[illegible]ol (KSC Only)

Printing/Micro-imaging at Central KSC Print Shop (KSC Only)

Roads [illegible] Grounds Maintenance (KSC & VAFB)

Security for KSC and VAFB (issuing base access credentials, law enforcement, payload escort). Security for KSC only (O&M of electronic surveillance systems)

Water and Sewage (KSC & VAFB)

(End of Clause)

H-6 PLACING ORDERS FOR OUTSOURCING DESKTOP INITIATIVE FOR NASA (ODIN) SUPPORT

As a contractor performing services for NASA, the Outsourcing Desktop Initiative for NASA (ODIN) contract may be used in performance of this contract. For an overview of ODIN and the services available, information is available on the Web at http://odin.oao.net/contract-summary.htm. The contractor is authorized to place orders for ODIN services directly with the ODIN contractor for the relevant site, provided that an ODIN Government Contracting Officer has specifically authorized such order in writing. Submit requests for authorization to:

John F. Kennedy Space Center, NASA
OSF ODIN Delivery Order Contracting Officer
M/C: OP-ES-ODIN
Kennedy Space Center, FL 32899

The contractor shall include with its order a letter from the Contracting Officer stating such authorization. The ODIN contractor is required to honor all orders placed.

Such orders shall be considered to create separate contracts between each such contractor and the ODIN contractor receiving the order. The Government shall not be liable under the ODIN contract for any order placed by such contractor. However, the ODIN contractor shall provide ODIN services so ordered under the same terms and conditions, and at the same prices, as if the Government had placed such order under the ODIN contract, except for those provisions peculiar to Government procurement, such as, but not limited to, disputes resolution and allocation of Government funding provisions.

(End of Clause)

H-7 NON-PERSONAL SERVICES

(a) No personal services, as defined in FAR 37.101, shall be performed under this contract. No contractor employee will be directly supervised by the Government. All individual employee assignments, and daily work direction, shall be given by the applicable employee supervisor. If the contractor believes any Government action or communication has been given that would create a personal services relationship between the Government and any contractor employee, the contractor shall promptly notify the Contracting Officer of this communication or action.

(b) The contractor shall not perform any inherently Governmental actions, as defined in FAR 7.501, under this contract. No contractor employee shall state orally or in writing at any time that he or she is acting on behalf of the Government. In all communications in connection with this contract, contractor employees shall identify themselves as contractor employees and specify the name of the company for which they work. Proper identification should also include email addresses. The contractor shall require proper identification of contractor personnel who attend meetings, answer Government telephones, or work in situations where their actions could be construed as acts of Government officials. In all communications with other Government contractors in connection with this contract, the contractor employee shall state that they have no authority to in any way change the contract and that if the other contractor believes this communication to be a direction to change their contract, they should notify the Contracting Officer for that contract and not carry out the direction until a clarification has been issued by the Contracting Officer.

(c) The contractor shall ensure that all of its employees working on this contract are informed of the substance of this clause. Nothing in this clause shall limit the Government's rights in any way under any other provision of the contract, including those related to the Government's right to inspect and accept the services to be performed under this contract. The substance of this clause shall be included in all subcontracts at any tier.

(End of Text)

H-8 TASK ORDERING PROCEDURE

NOTE: THE FOLLOWING TASK ORDERING PROCEDURE APPLIES ONLY TO STATEMENT OF WORK, SECTION 9.0 "MISSION DIRECT SUPPORT", AND SECTION 11 "CONSTRUCTION AND FACILITIES MODIFICATION"

(a) Only the Contracting Officer may issue task orders to the contractor, providing specific authorization or direction to perform work within the scope of the contract and as specified in the schedule. The contractor may incur costs under this contract in performance of task orders and task order modifications issued in accordance with this clause. No other costs are authorized unless otherwise specified in the contract or expressly authorized by the Contracting Officer.

(b) Prior to issuing a task order, the Contracting Officer shall provide the contractor with the following data:

(1) A functional description of the work identifying the objectives or results desired from the contemplated task order.

(2) Proposed performance standards to be used as criteria for determining whether the work requirements have been met.

(3) A request for a task plan and proposal from the contractor to include the technical approach, period of performance, appropriate cost or price information, and any other information required to determine the reasonableness of the contractor's proposal.

(i) For Mission Direct Support Services

For each mission the Contracting Officer will request a task plan and proposed hours for Mission Direct Services to support Vehicle Production Operations for that mission approximately three weeks prior to Authority to Proceed (ATP).

For each mission the Contracting Officer will request a task plan and proposed hours for Mission Direct Services to support the Launch Campaign Operations for that mission approximately one month prior to Spacecraft arrival at the designated launch site.

For commercial satellite support services, the Contracting Officer will request a task plan and a detailed proposal for the mission unique voice and data requirements identified in the mission specific SOW. The request for proposal will indicate the required date for submission of the proposal based upon the complexity of the support needed.

(ii) For Facilities Modifications, Design and Construction

For each project the Contracting Officer will request a task plan and a detailed proposal. The request for proposal will indicate the required date for submission of the proposal based upon the complexity of the project.

(c) For Mission Direct Support Services, the contractor shall submit a task plan and proposal conforming to the request within 10 working days after receipt of the Contracting Officer's request. For Facilities Modifications, Design and Construction and contractor shall submit a task plan and proposal conforming to the request within the period of time designated in the Contracting Officer's request for proposal.

(d) After review and any necessary discussions, the Contracting Officer may issue a task order to the contractor containing, as a minimum, the following:

(1) Date of the order.

(2) Contract number and order number.

(3) Functional description of the work identifying the objectives or results desired from the task order, including special instructions or other information necessary for performance of the task.

(4) Performance standards, and where appropriate, quality assurance standards.

(5) Maximum dollar amount authorized (price).

(6) Any other resources (travel, materials, equipment, facilities, etc.) authorized.

(7) Delivery/performance schedule including start and end dates.

(8) If contract funding is by individual task order, accounting and appropriation data will be included.

(e) The contractor shall provide acknowledgement of receipt to the Contracting Officer within 5 calendar days after receipt of the task order.

(f) If time constraints do not permit issuance of a fully defined task order in accordance with the procedures described in paragraphs (a) through (d), a task order that includes a ceiling price may be issued.

(g) The Contracting Officer may amend tasks in the same manner in which they were issued.

(h) In the event of a conflict between the requirements of the task order and the contractor's approved task plan, the task order shall prevail.

(End of Clause)

H-9 ORDERING (FAR 52.216-18) (OCT 1995) (Applies to IDIQ CLINS)
NOTE: THE FOLLOWING APPLIES ONLY TO STATEMENT OF WORK, SECTION 9.0 "MISSION DIRECT SUPPORT", AND SECTION 11 "CONSTRUCTION AND FACILITIES MODIFICATION"

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the award date of this contract through the end of the effective ordering period specified in Clause F-3.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronics commerce methods only if authorized in the Schedule.

(End of Clause)

H-10 ORDER LIMITATIONS (FAR 52.216-19) (OCT 1995) (Applies to IDIQ CLINS)
NOTE: THE FOLLOWING APPLIES ONLY TO STATEMENT OF WORK, SECTION 9.0 "MISSION DIRECT SUPPORT", AND SECTION 11 "CONSTRUCTION AND FACILITIES MODIFICATION"

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less that $250, the Government is not obligated to purchase, nor is the contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The contractor is not obligated to honor--
(1) Any order for a single item in excess of $1,500,000;
(2) Any order for a combination of items in excess of $2,200,000; or

(3) A series of orders from the same ordering office within 3 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.

(c) If this is a requirements contract (i.e., includes the requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR), the Government is not required to order a party of any one requirement from the contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 3 days after issuance, with written notice stating the contractor 's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

H-11 INDEFINITE QUANTITY (FAR 52.216-22) (OCT 1995) (Applies to IDIQ CLINS)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum. The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the contractor within the time specified in the order. The contract shall govern the contractor 's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that The contractor shall not be required to make any deliveries under this contract after the period of performance specified in any issued Task Order.

(End of Clause)

H-12 SAFETY AND HEALTH (NFS 1852.233-70) (MAY 2001)

(a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.

(b) The contractor shall take all reasonable safety and occupational health measures in performing this contract. The contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.

(c) The contractor shall take, or cause to be taken, any other safety, and occupational health measures the Contracting Officer may reasonably direct. To the extent that the contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable

adjustment shall be determined pursuant to the procedures of the changes clause of this contract; provided, that no adjustment shall be made under this Safety and Health clause for any change for which an equitable adjustment is expressly provided under any other clause of the contract.

(d) The contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the contract Schedule; or property loss of $25,000 or more, or Close Call (a situation or occurrence with no injury, no damage or only minor damage (less than $1,000) but possesses the potential to cause any type mishap, or any injury, damage, or negative mission impact) that may be of immediate interest to NASA, arising out of work performed under this contract. The contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. In addition, service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the contract schedule.

(e) The contractor shall investigate all work-related incidents, accidents, and Close Calls, to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(f) (1) The Contracting Officer may notify the contractor in writing of a noncompliance with this clause and specify corrective actions to be taken. The contractor shall promptly take and report any necessary corrective action.

(2) If the contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (f)(1) of this clause, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.

(g) The contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (g) and any applicable Schedule provisions, with appropriate changes of designations of the parties, in subcontracts of every tier that --

(1) Amount of $1,000,000 or more (unless the Contracting Officer makes a written determination, after consultation with installation safety and health representatives, that this is not required);

(2) Require construction, repair, or alteration in excess of $25,000; or

(3) Regardless of dollar amount, involve the use of hazardous materials or operations.

(h) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the contractor's safety and occupational health measures under this clause.

(i) The contractor shall continually update the safety and health plan when necessary. In particular, the contractor shall furnish a list of all hazardous operations to be performed, and a list of other major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the contractor. NASA and The contractor shall jointly decide which operations are to be considered

hazardous, with NASA as the final authority. Before hazardous operations commence, the contractor shall submit for NASA concurrence.

(1) Written hazardous operating procedures for all hazardous operations; and/or

(2) Qualification standards for personnel involved in hazardous operations.

(End of Clause)

H-13 KEY PERSONNEL AND FACILITIES (NFS 1852.235-71) (MAR 1989)

(a) The personnel and/or facilities listed below (or specified in the contract Schedule) are considered essential to the work being performed under this contract. Before removing, replacing, or diverting any of the listed or specified personnel or facilities, the contractor shall (1) notify the Contracting Officer reasonably in advance and (2) submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this contract.

(b) The contractor shall make no diversion without the Contracting Officer's written consent; provided, that the Contracting Officer may ratify in writing the proposed change, and that ratification shall constitute the Contracting Officer's consent required by this clause.

(c) The of personnel and/or facilities (shown below or as specified in the contract Schedule) may, with the consent of the contracting parties, be amended from time to time during the course of the contract to add or delete personnel and/or facilities.

–	_____
–	_____
–	_____
–	_____
–	_____

(End of Clause)

H-14 OBSERVANCE OF LEGAL HOLIDAYS (NFS 1852.242-72) (AUGUST 1992)

(a) The on-site Government personnel observe the following holidays:

New Year's Day
Labor Day
Martin Luther King, Jr.'s Birthday
Columbus Day
President's Day
Veterans Day
Memorial Day
Thanksgiving Day
Independence Day
Christmas Day

Any other day designated by Federal statute, Executive order, or the President's proclamation.

(b) When any holiday falls on a Saturday, the preceding Friday is observed. When any holiday falls on a Sunday, the following Monday is observed. Observance of such days by Government personnel shall

not by itself be cause for an additional period of performance or entitlement of compensation except as set forth within the contract.

(End of Clause)

H-15 MISSION CRITICAL SPACE SYSTEM PERSONNEL RELIABILITY PROGRAM (NFS 1852.246-70) (MARCH 1997)

In implementation of the Mission Critical Space System Personnel Reliability Program, described in 14CFR1214.5, the Government shall identify personnel positions that are mission critical. Some of the positions as identified may now or in the future be held by employees of the contractor. Upon notification of the Contracting Officer that a mission-critical position is being or will be filled by one or more of the contractor's employees, the contractor shall (1) provide the affected employees with a clear understanding of the investigative and medical requirements and, (2), to the extent permitted by applicable law, assist the Government by furnishing personal data and medical records.

The standard that will be used in certifying individuals for a mission-critical position is that they must be determined to be suitable, competent, and reliable in the performance of their assigned duties in accordance with the screening requirements 14CFR 1214.5. If the Government determines that a contractor employee occupying or nominated to occupy a mission-critical position will not be certified for such duty, the Contracting Officer shall (1) furnish to the employee the specific reasons for its action; (2) advise the employee that he/she may avail himself/herself of the review procedures that are a part of the certification system; and (3) furnish him/her a copy of those procedures upon request.

If a contractor employee who has been nominated for (but has not yet filled) a mission-critical position is not certified, the contractor agrees to defer the appointment to the position until the employee has had an opportunity to pursue the referenced procedures. If the employee is an incumbent to the position, the contractor agrees, upon the request of the Government, to remove him/her from the position temporarily pending an appeal of the action under the review procedures. If any employee not certified elects not to take action under the procedures, or, if having taken action, is no successful in obtaining a reversal of the determination, the contractor agrees not to appoint the employee to the position, or if already appointed, to promptly remove the employee.

(End of Clause)

H-16 SECURITY CONTROLS AT KSC/VAFB (KSC 52.204-90) (NOV 2000) (MODIFIED)

A. Identification of Employees

1. The contractor shall require each employee engaged on the work site to display NASA-furnished identification badges and special access badges at all times. The contractor shall obtain and submit badging request forms for each person employed or to be employed by the contractor under this contract. The contractor shall designate its own security and badging officials to act as points-of-contact for the KSC Security Office. Prior to proceeding with onsite performance, the contractor shall submit the following information to the Protective Services Office, Code TA-G, Kennedy Space Center:

a. Contract number and location of work site(s)
b. Contract commencement and completion dates
c. Status as prime or subcontractor
d. Names of designated security and badging officials.

2. Identification and badging of employees shall be accomplished as soon as practicable after award of the contract. During performance of the contract, the contractor shall, upon termination of an employee, immediately deliver badges and/or passes issued to the employee to the NASA Security Office. It is

agreed and understood that all NASA identification badges/passes remain the property of NASA, and the Government reserves the right to invalidate such badges/passes at any time.

B. Access to Controlled Areas within KSC/VAFB

1. Certain areas within KSC/VAFB have been designated as Controlled Areas. These are normally surrounded by fencing and have an entrance gate monitored by a guard or monitoring device. Access into such areas is classified into "escorted" or "unescorted" access. For each employee for which the contractor desires to have unescorted access, the prescribed forms must be submitted to the NASA Security Office. Due to the time required to process requests for unescorted access, the contractor is advised to complete and submit the required forms as soon as practicable after contract award. Within 14 working days after the receipt of the forms, the NASA Security Office will determine whether the person is eligible for unescorted access.

2. The prime contractor is responsible for providing escort services for any of his employees and/or any subcontractor employees who are not eligible for unescorted access.

3. All requests for unescorted access by subcontractors will be submitted through the prime contractor for forwarding to the NASA Security Office.

(End of Clause)

H-17 OCCUPATIONAL HEALTH (KSC 52.223-93) (NOV 2000) (MODIFIED)

1. Occupational Health Services at KSC

The medical services set forth in KNPD 1810.1 entitled KSC Occupational Medicine Program, will be provided to the contractor by the Government to the extent that there will not be any restriction of the employees' rights under applicable Workers' Compensation statutory provisions.

Information from records generated as a result of rendition of these medical services may be obtained from the Chief, Occupational Health Branch, Code TA-C2, upon written request.

2. Health Examinations and Physical Requirements Standards

The contractor shall provide the following data to the Chief, Occupational Health Branch, Code TA-C2:

a. A breakdown of the various health examinations required in support for this contract; providing type, frequency, and a roster of personnel affected.

b. The applicable physical requirements standards for personnel certification, if the contractor has physical requirements standards, which are stricter than the applicable KSC (Federal) standards; otherwise the KSC (Federal) physical requirements standards are applicable to this contract.

3. Occupational Health Services at VAFB

Emergency ambulance service shall be provided to the contractor by the Government at Vandenberg Air Force Base, CA. The contractor shall be responsible for all other contractor health services.

(End of Clause)

H-18 KSC INFORMATION TECHNOLOGY (IT) SECURITY PROGRAM (KSC 52.239-90) (AUG 1999)

KSC contractors that process NASA data shall comply with NASA's Information Technology (IT) Security Program. Contractors shall ensure, as computers are reassigned or excessed, that computers' hard disks are erased so that sensitive data and Government-licensed software cannot be recovered.

The contractor shall comply with the following:

a) NPD 2810.1, Security of Information Technology, available for review at http://nodis.hq.nasa.gov/Library/Directives/NASA-WIDE_Policies/Legal_Policies/NPD_2810.1.html

b) NPG 2810, Security of Information Technology, available for review at http://www.ksc.nasa.gov/nasa-only/cio/nasadocs/npg2810_21may99.pdf

c) KDP-KSC-P-1836, Removing Data and Licensed Software from Information Technology Storage Devices, available for review under Kennedy Documented Procedures, (AA) at http://wit.ksc.nasa.gov/BusinessWorld/html/ksc_procedures.html

(End of Clause)

H-19 CONTROLS APPLICABLE TO CONTRACTOR 'S ACTIVITIES (KSC 52.242-90) (APR 2007 [DEVIATION]) (MODIFIED)

The publications below, and subsequent revisions thereof, are incorporated herein by reference. These publications prescribe regulatory and procedural criteria which are applicable to this contract. The contractor shall promptly take corrective action upon notice of noncompliance from the Contracting Officer or his/her authorized representative(s) with any provision of the publications listed below.

Definitions:

Kennedy Policy Directives (KNPDs)
NASA Headquarters Policy Directives (NPDs).
Kennedy NASA Procedural Requirements (KNPRs)
NASA Headquarters Procedural Requirements (NPRs).
Quality Assurance Guide (QA-UG)
Joint Documented Handbook (JHB)

QA-UG-0001	KSC Employee Safety & Health Pocket Guide **(See Note 1)**
JHB 2000	Consolidated Comprehensive Emergency Management Plan
KNPD 1800.2	KSC Hazard Communication Program
KNPD 1810.1	KSC Occupational Medicine Program
KNPD 8500.1	KSC Environmental Management
KNPD 8700.1	KSC Safety and Mission Assurance Policy
KNPR 1600.1	KSC Security Procedural Requirements
KNPR 1820.3	KSC Hearing Loss Prevention Program
KNPR 1820.4	KSC Respiratory Protection Program
KNPR 1870.1	KSC Sanitation Program
KNPR 4000.1	Supply and Equipment System Manual
KNPR 6000.1	Transportation Support System
KNPR 8500.1	KSC Environmental Requirements
KNPR 8715.3	KSC Safety Practices Procedural Requirements
KNPR 8830.1	Facilities and Real Property Procedural Requirements

KNPD 1860.1	KSC Radiation Protection Program (Applicable for services performed at KSC and CCAFS involving procurement, use, or handling of ionizing or non-ionizing radiation producing equipment, devices, materials or operations such as: ultraviolet lamps, infrared devices, lasers, RF/microwave transmitters, x-ray) In addition to compliance with KNPD 1860.1 and 45SWI40-201 (if applicable), the Contractor shall submit, for the Contracting Officer's approval within 30 days after contract award, the names and addresses of laboratories used to perform activities.
45SWI40-201	45th Space Wing Instruction 40-201 Radiation Protection Program (In addition to KNPD 1860.1, applicable to contracts for services performed at CCAFS)
KNPR 2570.1	KSC Radio Frequency Spectrum Management Procedural Requirements (Applicable to all construction or construction-related projects) During periods of special testing on Kennedy Space Center and at the Cape Canaveral Air Force Station, the Contractor may be required to cease radiating on any radio equipment that may be utilized at the time. Any construction equipment utilized by the Contractor which may be causing radio frequency interference will be required to shut down during special tests. NASA will utilize its frequency analysis equipment to determine the interference.
KNPD 1600.3	Use of Alcoholic Beverages on Kennedy Space Center (KSC) Property

Note 1: The contractor shall immediately call for assistance with personnel injury or illness for any incident requiring emergency medical treatment for contractor or subcontractor personnel, or invitees on KSC, or if any person on the job site is rendered unconscious. The contractor shall require the victim to sign an appropriate "refusal of treatment" form, if medical evaluation or treatment is offered and refused.

Emergency Response onsite at KSC or CCAFS
911 from a landline phone service
321-867-7911 from a cell phone.

(End of Clause)

H-20 CENTERWIDE WORKFORCE REPORTS (KSC 52.242-93) (NOV 2000)

The contractor shall submit, on a quarterly basis (DRD-12 Quarterly Headcount Report), a workforce report delineating information about its workforce. The report shall include: the contract number, the contractor's total on-site workforce, total on-site union represented employees by bargaining unit, total on-site non-union represented employees, and total off-site workforce performing on the contract. The contractor shall provide this information no later than 10 days after the close of each reporting period, which end March 31st, June 30th, September 30th, and December 31st. The report shall be submitted to the Contracting Officer with copies to KSC Workforce Planning and Analysis office (Code BA-D).

(End of Clause)

H-21 AUTHORIZED CHANGES (KSC 52.243-90) (FEB 1990)

The Contracting Officer or his duly appointed representative are the only individuals authorized to issue instructions to the contractor in matters relating to this contract. The identification, scope of authority and duties of representatives of the Contracting Officer shall be set forth in letters issued by the Contracting Officer and copies of such designations shall be furnished to the contractor.

(End of Clause)

H-22 CONDUCT OF FACILITY PROJECTS (KSC 52.236-130) (APR 2000)

A. Approval

The contractor shall not award or otherwise proceed with implementation of any facility project without a NASA approved Facility Project - Brief Project Document (NASA Form 1509). The contractor shall prepare or otherwise support the preparation of NASA Form 1509's in accordance with the current edition of NPR 8820.2, Facility Project Implementation Guide, and the current version of the KSC procedure for Facility Project Approval and Implementation. For purposes of this requirement a Facility Project is defined as any new construction, repair, and /or modification affecting Government real property located on KSC regardless of the source of funding, or located elsewhere and funded by KSC, and costing more than $50,000.

Planning and design activities leading to the implementation of the actual construction, repair or modification work normally can be accomplished prior to 1509 approval. When in doubt, guidance as to whether or not a particular activity is a Facility Project, is "implementation" versus "planning and design," and/or the applicability of this requirement in relation to specific projects should be obtained from the KSC Spaceport Services Management Integration Office.

B. File Documentation

Construction subcontract file documentation shall include a copy of the approved NASA Form 1509 authorizing the project. For construction subcontracts requiring Contracting Officer consent, the consent file shall include a copy of the approved NASA Form 1509 authorizing the project.

(End of Clause)

H-23 CONSTRUCTION AND LABOR PROVISIONS

In the event any portion of work to be performed under the contract are deemed by the contractor to fall within the "construction" category as defined in FAR 22.400, the contractor may place a subcontract for that work.

The Construction Contract clauses as set forth in the General Provisions shall be applicable to the extent of any "construction" work performed under the contract. To the extent that there is an inconsistency between other clauses referenced above, the latter shall govern.

The contractor will utilize the current U.S. Department of Labor General Wage Determination, available from the Contracting Officer, as the minimum wages to be paid the classes of employees described therein in the performance of work under the contract.

(End of Clause)

H-24 AMERICANS WITH DISABILITIES ACT, SECTION 508 POLICY

The contractor shall comply with accessibility requirements for electronic and information technology access as defined in Section 508 of the Rehabilitation Act (29 U.S.C. 794d). Detailed requirements for accessibility have been established by the Architectural and Transportation Barriers Compliance Board (Access Board) at 36 CFR Part 1194.

(End of Clause)

H-25 HAZARD COMMUNICATION (KSC 52.223-94) (NOV 2000)

A. In order to comply with Federal, OSHA, and State Regulations, the contractor shall participate in the KSC Chemical Hazard Communication Program as implemented by KNPD 1800.2, KSC Hazard Communication Program.

B. The contractor shall coordinate submission of hazardous material safety data, to the NASA/KSC Materials Safety Data Sheet Archive, with the Joint Base Operations Support Contract MSDS Program Administrator.

(End of Clause)

H-26 EMERGENCY MEDICAL TREATMENT (KSC 52.223-105) (JUL 2000)

The contractor shall immediately call (see below for applicable telephone numbers) for assistance with personnel injury or illness for any incident requiring emergency medical treatment for contractor or subcontractor personnel, or invitees on KSC, or if any person on the job site is rendered unconscious. The contractor shall require the victim to sign an appropriate "refusal of treatment" form, if medical evaluation/treatment is offered and refused.

From KSC or CCAFS property: 911
From a KSC issued cellular telephone: 867-7911
From other than a KSC issued cellular telephone: 867-7911
Commercial telephone users on KSC or CCAFS property: 911

(End of Clause)

H-27 NOTICE OF COMPLETION OF TASK ORDER

The contractor shall notify the Contracting Officer's Technical Representative, or authorized representative in writing upon completion of each individual task order.

(End of Text)

H-28 ASBESTOS-CONTAINING BUILDING MATERIALS (KSC52.223-19) (JAN 2002)

Asbestos-Containing Building Materials (ACBM) are known to be present in facilities assigned under the scope of this contract. The Government will provide information regarding the location and quantity of know ACBM in NASA/KSC facilities to the facility tenant organizations through the JBOSC Environmental Health office.

Special requirements, coordination, and precautions will apply to any work taking place under contracts that involve disturbance of ACBM. Contractors whose contracts require work involving ACBM are required to provide a written program for such work as part of its health and safety plan which is consistent with the requirements of 29 CFR 1926.1101. The contractor shall coordinate any such work involving ACBM with JBOSC Environmental Health, SGS Fire Services, and any other resident Government or contractor organization whose employees may have access to the work location.

(End of Clause)

H-29 RELEASE OF TOTAL AND UNIT PRICING INFORMATION

Offerors are hereby notified that NASA will comply with FAR 15.503(b)(1)(iv) and 15.506(d)(2) in making publicly available the items, quantities, and unit prices of each contract award.

(End of Text)

H-30 KSC 52.223-121 REPORTING OF INCIDENTS INVOLVING WORKPLACE VIOLENCE (JUL 2008)

The contractor shall conduct training on and develop procedures for recognizing, managing and responding to incidents and threats of workplace violence as defined in NASA Policy Directive (NPD) 1600.3. Contractors shall also promptly report all incidents involving workplace violence to the Protective Services Office. If the NASA Workplace Violence Prevention and Response (WVPR) Team Chair and Co Chair determine it is appropriate for the contractor to participate in a WVPR Team meeting, the contractor shall comply with the WVPR Team request. The contractor is also responsible for reporting disposition of the incident reported to the NASA WVPR Team.

This requirement shall flow down to the subcontractors, however the subcontractors shall report up through the prime contractor.

(End of Clause)

[End of Section]

PART II – CONTRACT CLAUSES

SECTION I – CONTRACT CLAUSES

I-1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this Section are hereby incorporated by reference:

I. FEDERAL ACQUISITIOIN REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	OCT 1995	DEFINITIONS
52.202-1	OCT 1995	DEFINITIONS (ALTERNATE I) (APR 1984)
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT

52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RECISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 1997	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-2	AUG 1996	SECURITY REQUIREMENTS
52.204-4	AUG 2000	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER
52.204-9	JAN 2006	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL [As Implemented By the Enclosure to NASA Procurement Circular 06-01, dated 01/18/06]
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.215-2	JUN 1999	AUDIT AND RECORDS – NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE – UNIFORM CONTRACT FORMAT
52.215-15	DEC 1998	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA – MODIFICATIONS
52.216-7	FEB 2002	ALLOWABLE COST AND PAYMENT Insert (30th) in Paragraph (a)(3)
52.216-11	APR 1984	COST CONTRACT – NO FEE (APPLIES TO CLINS 1009, 2009, 3009, 1010, 2010, 3010, 1013, 2013, 3013, 1014, 2014, 3014, 2015, 3015, 2016, and 3016)
52.216-22	OCT 1995	INDEFINITE QUANTITY (APPLIES TO CLINS 1008A thru 1008J, 2008A thru 2008J, 3008A thru 3008J, and 1012, 2012, and 3012)
52.217-8	NOV 1999	OPTION TO EXTEND SERVICES
52.217-9	MAR 2000	OPTION TO EXTEND THE TERM OF THE CONTRACT Insert "within the last 6 months of performance" and "at least 60 days," respectively, in paragraph (a). Insert "(9 years, 6 months)" in paragraph (c).
52.219-6	JUL 1996	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE
52.219-8	OCT 2000	UTILIZATION OF SMALL BUSINESS CONCERNS

52.219-14	DEC 1996	LIMITATION ON SUBCONTRACTING
52.219-28	JUN 2007	POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-2	JUL 1990	PAYMENT FOR OVERTIME PREMIUMS Insert "$0" in paragraph (a).
52.222-3	AUG 1996	CONVICT LABOR
52.222-4	SEP 2000	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT – OVERTIME COMPENSATION
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	MAR 2007	EQUAL OPPORTUNITY
52.222-35	APR 1998	AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITES
52.222-37	JAN 1999	EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA
52.222-41	MAY 1989	SERVICE CONTRACT ACT OF 1965, AS AMENDED
52.222-42	MAY 1989	STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES
52.222-43	MAY 1989	FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT – PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS) (Applicable to fixed-price line items only)
52.223-3	JAN 1997	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (ALTERNATE I) (JUL 1995) Insert "None" in paragraph (b).
52.223-5	APR 1998	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION
52.223-6	JAN 1997	DRUG-FREE WORKPLACE
52.223-10	AUG 2000	WASTE REDUCTION PROGRAM
52.223-12	OCT 2000	REFRIGERATION EQUIPMENT AND AIR CONDITIONERS
52.223-14	OCT 2000	TOXIC CHEMICAL RELEASE REPORTING
52.225-13	JUL 2000	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES

52.227-1	JUL 1995	AUTHORIZATION AND CONSENT
52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-3	APR 1984	PATENT INDEMNITY
52.227-14	JUN 1987	RIGHTS IN DATA—GENERAL (ALTERNATE II & III) As modified by NASA FAR Supplement 1852.227-14
52.227-17	JUN 1987	RIGHTS IN DATA—SPECIAL WORKS As modified by NASA FAR Supplement 1852.227-17
52.227-19	JUN 1987	COMMERCIAL COMPUTER SOFTWARE—RESTRICTED RIGHTS as modified by NFS 1852.227-19
52.228-5	JAN 1997	INSURANCE—WORK ON A GOVERNMENT INSTALLATION
52.228-7	MAR 1996	INSURANCE—LIABILITY TO THIRD PERSONS
52.229-3	JAN 1991	FEDERAL, STATE, AND LOCAL TAXES
52.232-1	APR 1984	PAYMENTS
52.232-16	FEB 2002	PROGRESS PAYMENTS (and Alternate I-MAR 2000) Insert 30th in Paragraph (k) (1)
52.232-17	JUN 1996	INTEREST
52.232-18	APR 1984	AVAILABILITY OF FUNDS
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	FEB 2002	PROMPT PAYMENT (and Alternate I –FEB 2002)
52.232-34	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER—OTHER THAN CENTRAL CONTRACTOR REGISTRATION Insert "no later than 15 days prior to submission of the first request for payment" in Paragraph (b)(1).
52.233-1	DEC 1998	DISPUTES (ALTERNATE I) (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION

52.237-3	JAN 1991	CONTINUITY OF SERVICES
52.237-10	OCT 1997	UNCOMPENSATED OVERTIME
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-3	OCT 1995	PENALTIES FOR UNALLOWABLE COSTS
52.242-4	JAN 1997	CERTIFICATION OF FINAL INDIRECT COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.243-1	AUG 1987	CHANGES – FIXED PRICE (ALTERNATE II) (APR 1984)
52.243-1	AUG 1987	CHANGES – FIXED PRICE (ALTERNATE III) (APR 1984)
52.243-2	AUG 1987	CHANGES—COST-REIMBURSEMENT (ALTERNATE II) (APR 1984)
52.243-7	APR 1984	NOTIFICATION OF CHANGES (Insert in paragraphs (b) and (d) "60" calendar days.)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	MAR 2001	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-18	FEB 1993	SPECIAL TEST EQUIPMENT
52.246-25	FEB 1997	LIMITATION OF LIABILITY-- SERVICES
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.249-2	SEP 1996	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE)
52.249-6	SEP 1996	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 1984	GOVERNMENT SUPPLY SOURCES
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

II. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) - CONSTRUCTION CLAUSES

CLAUSE NUMBER	DATE	TITLE
52.204-2	AUG 1996	SECURITY REQUIREMENTS (ALTERNATE II)
52.211-10	APR 1984	COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (DEFINED SEPARATELY IN TASK ORDERS)

52.222-6	FEB 1995	DAVIS-BACON ACT
52.222-7	FEB 1988	WITHHOLDING OF FUNDS
52.222-8	FEB 1988	PAYROLLS AND BASIC RECORDS
52.222-9	FEB 1988	APPRENTICES AND TRAINEES
52.222-10	FEB 1988	COMPLIANCE WITH COPELAND ACT REQUIREMENTS
52.222-11	FEB 1988	SUBCONTRACTS (LABOR STANDARDS)
52.222-12	FEB 1988	CONTRACT TERMINATION-DEBARMENT
52.222-13	FEB 1988	COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS
52.222-14	FEB 1988	DISPUTES CONCERNING LABOR STANDARDS
52.222-15	FEB 1988	CERTIFICATION OF ELIGIBILITY
52.222-23	FEB 1999	NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION
52.222-27	FEB 1999	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION
52.227-4	APR 1984	PATENT IDEMNITY-CONSTRUCTION CONTRACTS
52.232-5	MAY 1997	PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS
52.232-27	MAR 2001	PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS
52.236-2	APR 1984	DIFFERING SITE CONDITIONS
52.232-3	APR 1984	SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK
52.236-5	APR 1984	MATERIAL AND WORKMANSHIP
52.236-7	NOV 1991	PERMITS AND RESPONSIBILITIES
52.236-8	APR 1984	OTHER CONTRACTS
52.236-9	APR 1984	PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS

52.236-10	APR 1984	OPERATIONS AND STORAGE AREAS
52.236-11	APR 1984	USE AND POSSESSION PRIOR TO COMPLETION
52.236-12	APR 1984	CLEANING UP
52.236-13	NOV 1991	ACCIDENT PREVENTION
52.236-13	NOV 1991	ACCIDENT PREVENTION (ALTERNATE I)
52.236-14	APR 1984	AVAILABILITY AND USE OF UTILITY SERVICES
52.236-15	Apr 1984	SCHEDULES FOR CONSTRUCTION CONTRACTS
52.236-21	FEB 1997	SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (ALTERNATE II)
52.236-22	APR 1984	DESIGN WITH FUNDING LIMITATIONS (Insert in paragraph (c) will be included in applicable task orders)
52.236-23	APR 1984	RESPONSIBILITY OF THE ARCHTECT-ENGINEER CONTRACTOR
52.236-25	APR 1984	REQUIREMENTS FOR REGISTRATION OF DESIGNERS
52.236-27	FEB 1995	SITE VISIT (CONSTRUCTION) (Insert in paragraph (b) will be included in applicable task orders)
52.242-14	APR 1984	SUSPENSION OF WORK
52.243-4	AUG 1987	CHANGES
52.243-6	APR 1984	CHANGE ORDER ACCOUNTING
52.249-2	SEP 1996	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (ALTERNATE I) (SEP 1996)
52.249-3	SEP 1996	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (DISMANTLING, DEMOLITION, OR REMOVAL OF IMPROVEMENTS)
52.249-10	APR 1984	DEFAULT (FIXED-PRICE CONSTRUCTION)

III. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.203-70	JUN 2001	DISPLAY OF INSPECTOR GENERAL POSTERS

1852.209-72	DEC 1988	COMPOSITION OF THE CONTRACTOR
1852.215-84	OCT 2003	OMBUDSMAN Insert: Installation Ombudsman is James E. Hattaway, Jr., John F. Kennedy Space Center, Code AA-B, telephone number 321-867-7246, fax 321-867-8807, email James.E.Hattaway@nasa.gov
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.223-75	NOV 2000	MAJOR BREACH OF SAFETY OR SECURITY
1852.227-17	OCT 1995	RIGHTS IN DATA -- SPECIAL WORKS
1852.228-75	OCT 1988	MINIMUM INSURANCE COVERAGE
1852.237-70	DEC 1988	EMERGENCY EVACUATION PROCEDURES
1852.237-71	JAN 1997	PENSION PORTABILITY
1852.243-71	MAR 1997	SHARED SAVINGS

IV. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES- CONSTRUCTION

1852.209-72	DEC 1988	COMPOSITION OF THE CONTRACTOR
1852.236-73	DEC 1988	HURRICANE PLAN
1852.236-75	AUG 1998	PARTNERING FOR CONSTRUCTION CONTRACTS
1852.243-72	APR 1998	EQUITABLE ADJUSTMENTS

I-2 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

http://www.arnet.gov/far/

http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm

(End of clause)

I-3 SCA MINIMUM WAGES AND FRINGE BENEFITS APPLICABLE TO SUCCESSOR CONTRACT PURSUANT TO PREDECESSOR CONTRACTOR COLLECTIVE BARGAINING AGREEMENTS (CBA) (FAR 52.222-47) (MAY 1989)

An SCA wage determination applicable to this work has been requested from the U.S. Department of Labor. If an SCA wage determination is not incorporated herein, the bidders/offerors shall consider the economic terms of the collective bargaining agreement (CBA) between the two incumbent Contractors, The Boeing Company – Kennedy Space Center, and the International Brotherhood of Electrical Workers, Local 2088; and SMI International and Teamsters and Warehousemen, Union Local No. 381. If the economic terms of the collective bargaining agreement or the collective bargaining agreement itself is not

attached to the solicitation, copies can be obtained from the Contracting Officer. Pursuant to Department of Labor Regulation, 29 CFR 4.1 b and paragraph (g) of the clause at 52.222-41, Service Contract Act of 1965, as amended, the economic terms of that agreement will apply to the contract resulting from this solicitation, notwithstanding the absence of a wage determination reflecting such terms, unless it is determined that the agreement was not the result of arm's length negotiations or that after a hearing pursuant to Section 4(c) of the Act, the economic terms of the agreement are substantially at variance with the wages prevailing in the area.

I-4 SUBCONTRACTS (ALTERNATE I) (FAR 52.244-2) (AUG 1998)

(a) Definitions. As used in this clause –

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR). Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that –

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds—

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

All subcontracts for Facilities Modifications, Design or Construction and any other Subcontracts over $100,000

(f) (1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor

(iv) The proposed subcontract price

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting—

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor 's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor 's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor ; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), (d), or (e) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any

(i) cost-plus-fixed-fee subcontract, or

(ii) fixed-price subcontract that exceeds the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (f)(1)(i) through (f)(1)(iv) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in the litigation related in any way to this contract, with respect to which the Contractor may e entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: NONE.

(End of Clause)

I-5 SECURITY CLASSIFICATION REQUIREMENTS (NFS 1852.204-75) (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information; work in a security area, or both, up to the level of SECRET. See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254, Contract Security Classification Specification, Attachment J-7.

(End of Clause)

I-6 EMERGENCY MEDICAL SERVICES AND EVACUATION (NFS 1852.242-78) (APR 2001

The Contractor shall, at its own expense, be responsible for making all arrangements for emergency medical services and evacuation, if required, for its employees while performing work under this contract outside the United States or in remote locations of the United States. If necessary to deal with certain

emergencies, the Contractor may request the Government to provide medical services or evacuation. If the Government performs such services, The Contractor shall reimburse the Government for the costs incurred.

(End of Clause)

I-7 ENGINEERING CHANGE PROPOSALS (NFS 1852.243-70) (FEB 1998)

(a) Definitions.

"ECP" means an Engineering Change Proposal (ECP) which is a proposed engineering change and the documentation by which the change is described, justified, and submitted to the procuring activity for approval or disapproval.

"MIL-STD-973" means a DOD publication entitled, Military Standard Configuration Control - Engineering Changes, Deviations and Waivers, 15 July 1988.

(b) Either party to the contract may originate ECPs. The originator shall forward proposed ECPs to the Contracting Officer. Unless another process has been approved by the Government or specified by the Contracting Officer, the ECP formats, forms and controls specified in MIL-STD-973 shall be used. Implementation of an approved ECP may occur by either a supplemental agreement or, if appropriate, as a written change order to the contract.

(c) Any ECP submitted to the Contracting Officer shall include a "not-to-exceed" [price or estimated cost] increase or decrease adjustment amount, if any, and the required [time of delivery or period of performance] adjustment, if any, acceptable to the originator of the ECP. If the change is originated within the Government, the Contracting Officer shall obtain a written agreement with the Contractor regarding the "not-to-exceed"[price or estimated cost] and [delivery or period of performance] adjustments, if any, prior to issuing an order for implementation of the change.

(d) After submission of a Contractor initiated ECP, the Contracting Officer may require the Contractor to submit the following information:

(1) Cost pricing data in accordance with FAR 15.403-5 if the proposed change meets the criteria for its submission under FAR 15.403-4; or

(2) Information other than cost or pricing data adequate for contracting officer determination of price reasonableness or cost realism. The contracting officer reserves the right to request additional information if that provided by the Contractor is considered inadequate for that purpose. If the Contractor claims applicability of one of the exceptions to submission of cost or pricing data, it shall cite the exception and provide rationale for its applicability.

(e) If the ECP is initiated by NASA, the Contracting Officer shall specify the cost information requirements, if any.

(End of Clause)

I-8 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (FAR 52.223-9) (AUG 2000)

(a) Definitions. As used in this clause—

"Post-consumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Post-consumer material is a part of the broader category of "recovered material".

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—
(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of post-consumer material content; and
(2) Submit this estimate to the Contracting Officer within 10 working days of contract completion.

(End of Clause)

I-9 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (NFS 1852.204-76) (MAY 2007) (MODIFIED)

(a) The contractor shall be responsible for information and information technology (IT) security when –

(1) The contractor or its subcontractors must obtain physical or electronic (i.e., authentication level 2 and above as defined in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-63, Electronic Authentication Guideline) access to NASA's computer systems, networks, or IT infrastructure; or

(2) Information categorized as low, moderate, or high by the Federal Information Processing Standards (FIPS) 199, Standards for Security Categorization of Federal Information and Information Systems is stored, generated, processed, or exchanged by NASA or on behalf of NASA by a contractor or subcontractor, regardless of whether the information resides on a NASA or a contractor/subcontractor's information system.

(b) Reserved.

(c) Physical and Logical Access Requirements.

(1) Contractor personnel requiring access to IT systems operated by the contractor for NASA or interconnected to a NASA network shall be screened at an appropriate level in accordance with NPR 2810 and Chapter 4, NPR 1600.1, NASA Security Program Procedural Requirements. NASA shall provide screening, appropriate to the highest risk level, of the IT systems and information accessed, using, as a minimum, National Agency Check with Inquiries (NACI). The contractor shall submit the required forms to the NASA Center Chief of Security (CCS) within fourteen (14) days after contract award or assignment of an individual to a position requiring screening. The forms may be obtained from the CCS. At the option of NASA, interim access may be granted pending completion of the required investigation and final access determination. For contractors who will reside on a NASA Center or installation, the security screening required for all required access (e.g., installation, facility, IT, information, etc.) is consolidated to ensure only one investigation is conducted based on the highest risk level. Contractors not residing on a NASA installation will be screened based on their IT access risk level determination only. See NPR 1600.1, Chapter 4.

(2) Guidance for selecting the appropriate level of screening is based on the risk of adverse impact to NASA missions. NASA defines three levels of risk for which screening is required (IT-1 has the highest level of risk).

(i) IT-1 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause very serious adverse impact to NASA missions. These systems include, for example, those that can transmit commands directly modifying the behavior of spacecraft, satellites or aircraft.

(ii) IT-2 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause serious adverse impact to NASA missions. These systems include, for example, those

that can transmit commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; and those that contain the primary copy of "level 1" information whose cost to replace exceeds one million dollars.

(iii) IT-3 -- Individuals having privileged access or limited privileged access to systems whose misuse can cause significant adverse impact to NASA missions. These systems include, for example, those that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; and systems operated by the contractor for NASA whose function or information has substantial cost to replace, even if these systems are not interconnected with a NASA network.

(3) Screening for individuals shall employ forms appropriate for the level of risk as established in Chapter 4, NPR 1600.1.

(4) The contractor may conduct its own screening of individuals requiring privileged access or limited privileged access provided the contractor can demonstrate to the Contracting Officer that the procedures used by the contractor are equivalent to NASA's personnel screening procedures for the risk level assigned for the IT position.

(5) Subject to approval of the Contracting Officer, the contractor may forgo screening of contractor personnel for those individuals who have proof of a --

(i) Current or recent national security clearances (within last three years);

(ii) Screening conducted by NASA within the last three years that meets or exceeds the screening requirements of the IT position; or

(iii) Screening conducted by the contractor, within the last three years, that is equivalent to the NASA personnel screening procedures as approved by the Contracting Officer and concurred on by the CCS.

(d) The Contracting Officer may waive the requirements of paragraphs (b) and (c)(1) through (c)(3) upon request of the contractor. The contractor shall provide all relevant information requested by the Contracting Officer to support the waiver request.

(e) The contractor shall contact the Contracting Officer for any documents, information, or forms necessary to comply with the requirements of this clause.

(f) At the completion of the contract, the contractor shall return all NASA information and IT resources provided to the contractor during the performance of the contract and certify that all NASA information has been purged from contractor-owned systems used in the performance of the contract.

(g) The contractor shall insert this clause, including this paragraph (g), in all subcontracts that

(1) Have physical or electronic access to NASA's computer systems, networks, or IT infrastructure; or

(2) Use information systems to generate, store, process, or exchange data with NASA or on behalf of NASA, regardless of whether the data resides on a NASA or a contractor's information system..

(End of clause)

I-10 IT SECURITY REQUIREMENTS

(a) The contractor shall provide information and assistance to NASA in the preparation and maintenance of an IT Security Plan, Risk Assessment, and FIPS 199, Standards for Security Categorization of Federal Information and Information Systems, Assessment. These plans and assessments, including annual updates shall be incorporated into the contract as compliance documents.

(1) The IT system security plan shall be prepared consistent, in form and content, with NIST SP 800-18, Guide for Developing Security Plans for Federal Information Systems, and any additions/augmentations described in NASA Procedural Requirements (NPR) 2810, Security of Information Technology. The security plan shall identify and document appropriate IT security controls consistent with the sensitivity of the information and the requirements of Federal Information Processing Standards (FIPS) 200, Recommended Security Controls for Federal Information Systems. The plan shall be reviewed and updated in accordance with NIST SP 800-26, Security Self-Assessment Guide for Information Technology Systems, and FIPS 200, on a yearly basis.

(2) The risk assessment shall be prepared consistent, in form and content, with NIST SP 800-30, Risk Management Guide for Information Technology Systems, and any additions/augmentations described in NPR 2810. The risk assessment shall be updated on a yearly basis.

(3) The FIPS 199 assessment shall identify all information types as well as the "high water mark," as defined in FIPS 199, of the processed, stored, or transmitted information necessary to fulfill the contractual requirements.

(b) The contractor shall provide information and assistance to NASA in the preparation and exercising of contingency plans consistent, in form and content, with NIST SP 800-34, Contingency Planning Guide for Information Technology Systems, and any additions/augmentations described in NPR 2810. The contractor shall participate in yearly "Classroom Exercises." "Functional Exercises" shall be coordinated with the Center CIOs and be conducted once every three years, with the first conducted within the first two years of contract modification. These exercises are defined and described in NIST SP 800-34.

(c) The contractor shall ensure coordination of its incident response team with the NASA Incident Response Center (NASIRC) and the NASA Security Operations Center, ensuring that incidents are reported consistent with NIST SP 800-61, Computer Security Incident Reporting Guide, and the United States Computer Emergency Readiness Team's (US-CERT) Concept of Operations for reporting security incidents. Specifically, any confirmed incident of a system containing NASA data or controlling NASA assets shall be reported to NASIRC within one hour that results in unauthorized access, loss or modification of NASA data, or denial of service affecting the availability of NASA data.

(d) The contractor shall ensure that its employees, in performance of the contract, receive annual IT security training in NASA IT Security policies, procedures, computer ethics, and best practices in accordance with NPR 2810 requirements. The contractor may use web-based training available from NASA to meet this requirement.

(e) The contractor shall provide NASA, including the NASA Office of Inspector General, access to the contractor's and subcontractors' facilities, installations, operations, documentation, databases, and personnel used in performance of the contract. Access shall be provided to the extent required to carry out IT security inspection, investigation, and/or audits to safeguard against threats and hazards to the integrity, availability, and confidentiality of NASA information or to the function of computer systems operated on behalf of NASA, and to preserve evidence of computer crime. To facilitate mandatory reviews, the contractor shall ensure appropriate compartmentalization of NASA information, stored and/or processed, either by information systems in direct support of the contract or that are incidental to the contract.

(f) The contractor shall ensure that lead system administrators who lead tasks that have a material impact on IT security and operations demonstrate knowledge appropriate to those tasks. Knowledge is demonstrated through the NASA System Administrator Security Certification Program. A system administrator is one who provides IT services (including network services, file storage, and/or web services) to someone other than themselves and takes or assumes the responsibility for the security and administrative controls of that service. Within 30 days after contract modification, the contractor shall provide to the Contracting Officer and to the Launch Services Program Organizational Computer Security

Official (LSP OCSO) a list of all system administrator positions and personnel filling those positions, with corresponding IT applications/subsystems, along with a schedule that ensures certification of all personnel within 90 days after contract modification. The contractor shall assign one lead system administrator to each IT application/subsystem for which the contractor is primarily responsible for the security and administrative controls of that IT application/subsystem. Additionally, the contractor should report all personnel changes which impact system administrator positions within 5 days of the personnel change and ensure these individuals obtain System Administrator certification within 90 days after the change.

(g) The contractor shall ensure that NASA's Sensitive But Unclassified (SBU) information as defined in NPR 1600.1, NASA Security Program Procedural Requirements, which includes privacy information, is encrypted when transmitted or stored on a system that has a lower system category than the impact level of that information.

(h) When the contractor is located at a NASA Center or installation or is using NASA IP address space, the contractor shall --

(1) Submit requests for non-NASA provided external Internet connections to the LSP OCSO for approval by the Network Security Configuration Control Board (NSCCB);

(2) Comply with the NASA CIO metrics including patch management, operating systems and application configuration guidelines, vulnerability scanning, incident reporting, system administrator certification, and security training; and

(3) Utilize the NASA Public Key Infrastructure (PKI) for all encrypted communication or non-repudiation requirements within NASA when secure email capability is required.

(End of clause)

[END OF SECTION]

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

The following documents are attached at the end of this contract and made a part hereof:

Attachment	Title	No. Pages
J-1	Statement of Work (December 13, 2002)	74 pages
J-2	Data Requirements List/Data Requirements Description (DRL/DRD's)	46 pages
J-3	NASA Facilities and Facility Systems at Vandenberg AFB	4 pages
J-4a	Installation-Accountable Property	55 pages
J-4b	Government -Furnished Property	3 pages
J-5	Department of Labor Wage Determination	15 pages
J-6a	Award Fee Performance Evaluation Plan for Overall Services	18 pages
J-6b	Award Fee Performance Evaluation Plan for Safety and Mission Assurance Support	16 pages
J-7	DD Form 254, Contract Security Classification Specification	7 pages
J-8	Contractor Safety and Health Plan, March 02, 2004	90 pages
J-9	(Reserved)	
J-10	Statement of Equivalent Rates for Federal Hires	2 pages
J-11	Acronyms	3 pages
J-12	Information Technology (IT) Support Functions	6 pages
J-13	IT Security Plans Incorporated by Reference	3 pages

Attachment J-1

Statement of Work

EXPENDABLE LAUNCH VEHICLES INTEGRATED SUPPORT

STATEMENT OF WORK

(December 13, 2002)

1.0 Introduction

This Statement of Work (SOW) and all documents attached or referenced herein define the Government's requirements for the Contractor to provide integrated services in support of the NASA Expendable Launch Vehicle (ELV) Program Office at the Kennedy Space Center. The contractor shall provide services at the Kennedy Space Center (KSC), Cape Canaveral Air Force Station (CCAFS), Vandenberg Air Force Base (VAFB), and other launch sites as well as maintain a presence at Launch Service Provider (LSP) facilities in accomplishment of these activities.

1.1 Objective

The NASA ELV Program mission is to provide launch service excellence, expertise, and leadership to assure mission success for every customer. In order to support this mission, the Expendable Launch Vehicle Integrated Support (ELVIS) contract shall provide the Agency with launch support services that are safe, reliable, and affordable. The contractor shall implement a safety, health, and mission assurance program that provides a safe and healthy work environment, minimizes program risk, and maximizes mission success. This is a performance-based Statement of Work (SOW) and describes the tasks to be performed by the contractor in terms of Government required outcomes and/or results. The contractor is responsible and accountable for achieving the required results based upon their approach and internal processes.

1.2 General Requirements

The contractor shall provide integrated support services for the ELV Program in the areas of business, administration, safety and mission assurance, engineering, technical, and facility/launch operations. The contractor shall provide the management, integration, technical, business and administrative functions required for accomplishing the contract requirements set forth herein. The contractor shall perform these responsibilities in the most cost-effective and efficient manner possible while supporting NASA's top priorities of safety and health, mission success, and payload developer/customer satisfaction.

The contractor is responsible for performing and integrating the overall Programmatic ELV business and administrative functions including Program/Project planning, Risk Management, Evaluation and Information Technology. The contractor shall also perform specific program management support internal to this contract by providing management representation across all aspects of the contract, including business and technical operations, schedule, performance and risk management.

The contractor shall implement a comprehensive Safety and Mission Assurance program that complies with Federal, State, and local laws and that emphasizes safety and health in accordance with the NASA Safety hierarchy as defined in NFS 1852.223-70.

The contractor shall provide engineering services/studies and technical services for various ground/flight ELV systems and payloads as well as assistance in the definition of ELV requirements and the development/implementation of associated systems management and integration activities.

The contractor shall be responsible for the management, operation, maintenance and sustaining engineering of the assigned NASA KSC facilities, systems, and equipment at VAFB in California. In addition, the contractor shall provide base operations, security, mission direct, and environmental engineering services for the NASA resident/transient personnel, the payload customer/provider personnel, and the NASA contractor personnel at VAFB.

The contractor shall be responsible for the management, operation, maintenance, and sustaining engineering of the NASA ELV Telemetry Stations located at the CCAFS and at VAFB. The contractor shall provide required telemetry and communications services as well as engineering and technical services for the data centers for all NASA and NASA-reimbursable missions.

1.3 Contract Program Management

The contractor shall provide a single point of contact for administrative and technical supervision of contractor employees. This contact shall be the primary representative and have the contractor's full authority to act on matters pertaining to the performance of the services under this contract. The contractor shall also provide continual management representation across all aspects of the contract, including the business, safety and health, technical operations, schedule, and requirements by providing designated interfaces for all functional areas including launch sites and resident offices. The contractor shall respond to inquiries on contract performance and status and provide input to ELV programmatic actions and exercises. The contractor shall ensure management interactions with NASA, Launch Service Providers, spacecraft, and other customers to ensure they are effective. The contractor shall integrate the overall planning activities identified in all sections of the SOW. The contractor shall provide expertise in how knowledge is effectively communicated throughout organizations similar to the ELV Program and continuous assistance in identifying changes that would enhance productivity in the ELV organization.

1.3.1 International Organization for Standardization (ISO) 9001 Compliance

The contractor shall comply with the requirements of American National Standards Institute (ANSI)/ISO/American Society for Quality (ASQ)

Q9001-1994/2000, American National Standard, Quality Management Systems.

1.3.2 Contract Risk Management

The contractor shall develop the criteria, methods, and procedures used for identifying critical items associated with the implementation of this Contract. The contractor shall implement risk management techniques that efficiently identify, analyze, mitigate, and track potential impacts to mission success. The techniques shall be consistent with the NPG 7120.5 section 4.2 Risk Management and the Program/Project Risk Management Plan. The processes and procedures defined in the Program Operating Structure (K-ELV-02.13) shall be used as a guideline.

1.3.3 Contractor Performance Measurement And Reporting

The contractor shall produce a written report to NASA on the contractor's performance activities related to assigned mission/project activity as contained in DRD-10, Monthly Performance Activity Report. The report shall address key technical, operational and business highlights, accomplishments, issues and concerns to management for all assigned areas.

The contractor shall promote equal opportunity in accordance with the guidelines set forth by FAR 52.222-26, Equal Opportunity, and also consider the recommendations made by the KSC Equal Employment Opportunity Officer. The contractor shall provide a written report in accordance with DRD-13, Equal Employment Opportunity Report.

In accordance with DRD-12, Quarterly Headcount Report, the contractor shall provide to the Contracting Officer a quarterly report for use in workforce reporting requirements.

The contractor shall provide access to data to support ELV internal measurements and performance indicators in accordance with DRD-9, Measurements and Performance Indicators.

The contractor shall participate in and respond to the customer survey feedback collected through NASA's customer survey process described in KDP-KSC-P-2579, KSC Customer Satisfaction Determination and Improvement. The contractor shall submit written responses to customer surveys and/or complaints including resolutions.

1.3.4 Contract Business Services

The contractor shall establish a control process for receiving work instructions from NASA, validating requirements, scheduling, controlling, and tracking such work. The process shall prevent the contractor from acting upon the direction of unauthorized agents. The Government shall

have access to this data under DRD-1, Access to Contract Data—Insight into Work Status.

The contractor shall provide analysis of fixed price work activity and schedules broken out by specific missions or projects solely to facilitate the government's requirement of charging to specific KSC external customers in accordance with DRD-14, Fixed Price Mission/Project Allocation Report.

1.3.5 Financial Reporting And Budget Forecasting

The contractor shall establish a contract/resource management system that provides NASA visibility of cost, schedule, and technical performance for the total cost reimbursable contract work activity traceable to discrete missions or projects as appropriate. The contractor shall submit monthly and quarterly Financial Management Reports in accordance with DRD-3, Contractor Financial Management Reports, for Cost Reimbursement type contract activity.

The contractor shall provide a logistics and travel activity report that itemizes by description (i.e., mission/project) and disbursement amount, the travel expenses, supplies, materials, equipment and minor services purchased each month in order to allow NASA to track and charge to external customers. The contractor shall provide this report to NASA in accordance with DRD-2, Logistics & Travel Activity Report.

The contractor shall develop and input current year cost phasing semi-annually, and multiyear budgets annually detailing specific mission or project level requirements for the cost reimbursable content and Rough Order of Magnitude (ROM) estimates for anticipated mission direct services based on NASA provided budget assumptions and manifest. The contractor shall provide a written budget input as noted in DRD-1, Access to Contract Data – POP and Cost Phasing Budget Input

1.3.6 Logistics Services

The contractor shall procure supplies, equipment, materials and services as required for mission integration, communications and telemetry and various facilities, offices and systems. The contractor shall integrate all logistics requirements for assigned KSC/CCAFS and VAFB operations and activities and other activities for NASA-sponsored payload launch site support as described in the SOW.

The contractor shall provide supply functions including acquisition, accountability, and storage and the receipt and issuance of supplies, materials, and equipment. The contractor shall identify, procure, and store critical spares for facility systems and equipment. All supplies, equipment, and materials shall be adequately stored and tracked.

1.3.7 Voluntary Protection Program (VPP)

The contractor shall have a robust safety and health program that complies with the most recent OSHA Voluntary Protection Program (VPP) requirements for Star Certification within 24 months after contract start. The Contractor shall document its progress towards compliance with this requirement in DRD-16, Contract Performance Assessment quarterly submittals. Twenty-four months after start, The contractor shall submit to the Government a report that documents compliance with OSHA Star certification requirements in the same format required for the OSHA Star certification application. Thereafter, the contractor shall document its continued compliance with VPP Star certification requirements in the DRD quarterly submittals. If the contractor voluntarily obtains OSHA VPP Star Certification, the contractor shall provide NASA with a copy of all reports submitted to OSHA for the purpose of maintaining Start certification. The contractor shall be compliance with the most recent OSHA Voluntary Protection Program (VPP) requirements for Star certification within 24 months after contract start.

1.3.8 Export Control

The contractor shall create and implement an Export Control Plan as specified in DRD-29, Export Control (EC) Plan, in accordance with NPD 2190.1, NASA Export Control Program.

In addition, the contractor shall:

- Ensure export control is addressed for all manifested ELV launches
- Identify all required agreements and export control licenses, their status, and any potential impacts to the relevant mission
- Track export control issues, actions, and closures in electronic form
- Coordinate issues with the Government point of contact for each mission, the Mission Integration Manager (MIM)
- Provide Export Control mission briefings to customer personnel and NASA Mission Integration Team (MIT) members and management
- Review ELV websites to ensure compliance with export control regulations.

1.3.9 Personnel Reliability Program (PRP)

In order to have unescorted access to Mission Critical Space System (MCSS) areas, the contractor shall be screened through the PRP as defined in KNPR 1620.1, KSC Security Procedural Requirements, Chapter 27.

1.3.10 Contractor Office Workstations

The contractor shall maintain desktop computer hardware and software to support the requirements of this contract and the work of individual staff assigned to this contract according to the applicable requirements of SOW section 10.5. Any desktop software tools used by the contractor must seamlessly integrate with similar desktop software tools

used by the NASA LSP organization. NASA LSP personnel shall be able to open, modify, save, and print any document created by contractor personnel using contractor desktop software tools. The contractor shall ensure that the KSC Global Address List and X.500 directory are kept up to date for all contractor staff located at KSC and remote sites. The contractor shall provide, install, and maintain encryption software for contractor staff that are required to exchange encrypted email messages and other files with Launch Service Providers.

The contractor shall provide sufficient Client Access Licenses (CAL's) to allow ELVIS contractor personnel to connect to server applications from administrative workstations within the Launch Services Program Information System as required to maintain compliance with software licensing requirements.

1.4 Standards of Performance

The contractor shall meet the performance standards described below in performing the work described in Sections 3.0 through 12.0. The performance standards identify the point of demarcation between satisfactory and unsatisfactory performance. The Government shall monitor the contractor's performance in accordance with procedures set forth in the Government's Project Surveillance Plan (PSP).

2.0 Phase-In Provisions

The projected phase-in will be for a period not to exceed 30 calendar days prior to the contract start date. The contractor shall provide a work force that is fully qualified and capable of performing all work required under this contract upon completion of this phase-in period.

The contractor shall implement a plan addressing actions and procedures to ensure a smooth transition from contract award to full operational status. At a minimum, the contractor's plan shall address the following areas:

- Approach for interfacing with the incumbent contractors and labor unions
- Proposed management controls and processes
- Schedule showing each major step and critical tasks
- Personnel training, badging, and certification requirements
- Information Technology (IT) computer systems, support services and security
- Approach for assuming responsibility for all Installation-Provided Property (IPP)

3.0 LSP Program Management

The contractor is responsible for performing and integrating the Programmatic LSP business and administrative functions. The contractor shall perform these functions as outlined in Sections 3.1 through 3.7 on-site at KSC.

3.1 Program Planning Support

The contractor shall implement, maintain, and disseminate a Scheduling System Hierarchy for ELV (SSHELV) in accordance with K-ELV-02.16 using contractor-provided licenses for Milestones Professional software or equivalent. The

SSHELV shall utilize multiple "linked" schedules for managing specific areas of official business for the ELV Program and Project as described in the SOW.

The contractor shall maintain an integrated master schedule of key meetings, reviews, schedules, projects and processes described in the SOW in accordance with DRD-30, ELV Program Schedule. The contractor shall identify and present any conflicts on the schedule to ELV Program and Project Management each week.

Performance Standards:

The integrated master schedule shall be current, complete, accurate, and presented each week.

3.2 ELV Project Monthly Review

The contractor shall collect inputs for the KSC Monthly Project Review from the various NASA, LSP and ELVIS contractors, integrate the data, reproduce and distribute the presentation electronically to the NASA ELV Project Manager in accordance with DRD-26, Monthly Project Review Presentation.

Performance Standards:

Presentation is reproduced and distributed on time for Monthly Project Review

3.3 Program Evaluation, Measurement, and Performance Data

The contractor shall provide data to support ELV internal measurements to evaluate the overall progress and work content of the ELV Program pertinent to KDP-B-1028, NASA ELV BOA Section 6.0 - Performance Indicators. The data shall be submitted in accordance with DRD-9, Measurements and Performance Indicators.

Performance Standards:

All data to be provided shall be accurate within established deadlines in accordance with DRD-9, Measurements and Performance Indicators.

3.4 Program Financial Management Support

The contractor shall develop, implement, and maintain financial tracking systems capable of discretely tracking accounts and funding by mission and project. The contractor shall be required to track sensitive proprietary financial data detailing mission profile elements, project costs, NASA travel and labor compared to established plans (DRD-1, Access to Contract Data –Mission/Project Financial Performance Profiles). The contractor shall provide input to the ELV Mission Content Database.

Performance Standards:

Mission/Project profiles are up to date and delivered to support monthly reviews with the ELV program.

The contractor shall provide input to the existing Budgetary Database for budget activity that allows controlled access to end customers for input of sensitive proprietary annual operating and long-range budget plans of individual missions and projects. The contractor shall sort and summarize data by all fields and produce ad hoc reports/presentations on available data (DRD-1, Access to Contract Data—Budgetary Database Management System). The Budgetary Database shall be formatted with current titles, formats, reports and features to support the exercises.

The contractor shall perform analysis and develop presentation material in support of the monthly financial reviews, monthly project reviews, weekly PRCB meetings and periodic spacecraft financial exercises. The contractor shall generate reports, charts, documentation and presentation material summarizing research findings and data in response to specific business inquiries, and support of exercises, cost/benefit and decision analysis initiated by the ELV Program Office.

The contractor shall organize and maintain comprehensive ELV Program office contract logs including data collection, tracking, and reporting on a per mission basis (DRD-1, Access to Contract Data—Contract Logs). The contractor shall control access to sensitive proprietary financial data.

Performance Standards:

Contract logs are maintained up to date.

3.5 Secretariat Functions for PRCB, PDM, and Risk Management

The contractor shall perform secretariat functions such as; scheduling intergovernmental meetings, arranging facilities, providing status reports and documenting official decisions and actions assigned, and maintaining charter documents and records and databases (Risk Management Database and Configuration Change Request Database) for the following activities (listed under Secretariat Functions Table 3-2) and in accordance with DRD-1, Access to Contract Data--Secretariat Functions Table 3-2:

- Program Requirements Control Board (PRCB), (K-ELV-02.14)
- Project Decision Meetings (PDM), (K-ELV-02.15)
- ELV Program/Project Risk Management (K-ELV-12-2)

Performance Standards:

All actions are captured accurately according to established schedules, and tracked to completion. Accommodations are appropriate for the size and type of meeting and all arrangements are met within established

deadlines. Appropriate measures are taken to secure and protect sensitive proprietary information. Processes and procedures defined in the Program Operating Structure are followed: K-ELV-02.14, K-ELV-02.15, and K-ELV-12-2

Secretariat Functions Table 3-1

	A. Conference Rooms and Telecon Services	B. Agenda and schedule	C. Action Items Disposition Report	D. Meeting minutes	E. Other	F. Frequency
1. Project Decision Meeting (PDM)	S, T, N	De, Di	A		NT, DB	Weekly
2. Program Requirement Control Board (PRCB)	S, T, N	De, Di	A	De, Di	NT (2 x), DB, DR, Q, PA	Weekly
3. Monthly Risk Review Meeting	S, T, N	De, Di	A		Q, NT (2x)	Weekly
4. Quarterly Risk Review Meeting	S, T, N	De, Di	A		Q, NT (2x)	Quarterly

A = Action Item Tracking through Closure
De = Development
Di = Distribute (including required Reproduction services)
PA = Process Initiating Paperwork for approval
R = Reproduction Services
Rc = Recorder Support to formal reviews
S = Schedule
T = Teleconference/Videoconference
N = Distribute Meeting Notice
NT = Notebook
DB = Database (Use, Operate, and Maintain)
DR = Disposition Report
Q = Quality Record Filing System

3.6 Documentation Maintenance

Using inputs from the ELV program, the contractor shall maintain the documentation records, partnerships/agreements, and policy requirements for the ELV Program as outlined in K-ELV-02.13, ELV Program Operating Structure

per DRD-1, Access to Contract Data – Documentation Maintenance Requirements Table 3-3.

The Contractor shall organize documentation for KSC's partnership with other agencies, centers, private industry and intra-center organizations for the exchange of services or resources through letters and Memorandums of Agreement/Understanding (MOA/MOU), service level agreements, Host/Tenant agreements, sub-agreements and annexes in a ELV Partnerships/Agreements Filing System Database. The filing system shall be compatible with the KSC Customer Agreements database.

Using inputs from Launch Services Program Data Managers, the contractor shall develop, support implementation, and maintain a comprehensive Program Data and Documentation Plan outlined in KDP-D-1028, Launch Services Program Process Map in accordance with the procedures and instructions in the KNPR 1470.1. The Directorate Tech Doc Librarian is responsible for:

- Managing system documentation (KDPs, KCAs and plans) numbering within their directorate. This is coordinated with the Kennedy Management System Documentation Manager. In the Tech Doc System, the Tech Doc Librarian is referred to as the Owner of the document, but is not considered the subject matter expert. The subject matter expert is the Document Point of Contact.
- Loading electronic copies of management system documentation (KDPs, KCAs, KTIs, JDPs, Records and plans) into the Tech Doc System for their directorate.
- Assisting Document Points of Contact in the creation of management system documentation.
- Coordinating with the KSC Business Management System Documentation Manager on issues involving management system documentation.
- Review and perform the release of KCAs into the Tech Doc System

<u>Performance Standards:</u>

The Contractor shall maintain the filing system current and accurate, accessible to NASA. LSP documentation shall be updated and maintained to accurately reflect program roles, responsibilities and processes.

3.7 Library/Records Management System

The Contractor shall provide input to the existing ELV Documentation Library System and the dissemination of project and configuration management documentation as needed. This task shall include:

- Develop data input, nomenclature and filing processes that are consistent with NASA documentation guidelines for archiving.
- Mark and log of library contributions in accordance with the above processes.
- Scan and/or store of the library contributions into ELV Library, KSC archives, or Federal archives. Scanned items and records of all items shall be entered into the NASA technical documentation system (TechDoc).
- Prepare a weekly report documenting all inputs received within the previous week.
- Distribute of CDRL documents to parties identified on distribution lists for each contract.
- Provide hard copies of library items upon request.

3.8 Program Outreach Services

The contractor shall provide Outreach services to assist in identifying, scheduling, conducting, and evaluating Outreach events. Outreach services shall be provided for up to 20 launches during any continuous 24-month period.

The contractor shall provide the following Outreach services:

- Prepare, organize, maintain and report trending data, spreadsheets, and metrics for the Launch Services Program Outreach, including support to Schools, Public Affairs Events, and Employee Morale efforts.
- Create, maintain, organize and report metrics for the Launch Services Program outreach surveys to assist in evaluating the effectiveness of the outreach program.
- Develop and maintain spreadsheets of participating schools and identify target schools to maximize the impact of the outreach activities to encourage students to pursue Math, Science, and Technology degrees.
- Perform data management functions including maintaining spreadsheets, documents, records and databases.
- Prepare and deliver outreach packages containing mission patches, lapel pins and other mission related items for schools, conferences, and events. The supplies will be purchased by the government.
- Conduct market research and provide reports that identify new suppliers of innovative, quality products for inclusion in outreach packages
- Prepare unique folders for each Launch Campaign
- Schedule internal and external Outreach Office meetings, maintain meeting minutes and actions assigned.

The contractor shall provide data entry services for the Outreach activities. Data entry services shall include:

- Adjust, implement, and maintain financial tracking system capable of discretely tracking Outreach accounts and funding by mission
- Maintain input into the PPO financial tracking system.
- Develop budget forecasting support for long-range budget planning for the Program Planning Office Outreach projects and individual missions.
- Ensure that all NASA financial data is controlled and protected.

Performance Standards:

- PPO outreach funds are maintained, status, and mission accounts are closed upon completion.
- All actions are properly captured and completed without impacting support requirements or schedules.
- Outreach packages shall be delivered in a timely manner and not impact scheduled events and launch campaigns.
- All PPO Outreach items are maintained in continuous supply.

Maintain Documentations:
The PPO Outreach logs shall be accessible to PPO personnel. The contractor shall maintain PPO Outreach logs, and provide monthly status reports in the following categories:

- LSP School and Events Spreadsheet
- XA-LSP School and Events Spreadsheet
- Outreach Items Available Document
- Survey Data Base
- Government Printing Office Outreach Spreadsheet (tracking)
- Government Printing Office Employee Spreadsheet (tracking)
- Mission Unique Outreach Budget Spreadsheets
- Employee Morale Budget Spreadsheet
- LSP Generic Budget Spreadsheet

3.9 Conference Room Scheduling

The contractor shall be responsible for coordination and scheduling of Launch Service Program (LSP) conference rooms on the NASA and contractor partnered list, including the Mission Briefing Room (MBR). Scheduling of the MBR shall entail all activities required to reserve the room for any user, to be the focal point for and coordinate support from various Center support contractors, and to notify LSP Program Management if significant schedule conflicts arise.

4.0 Safety and Mission Assurance

The contractor shall implement a comprehensive Launch Services (LS) Safety and Mission Assurance (S&MA) program that emphasizes safety and health in accordance with the NASA Safety hierarchy — protecting (1) the public, (2) the astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property. The contractor's S&MA program shall be consistent with all Federal, State, local and NASA Agency policies and procedures.

The requirements of this Section shall be performed in support of LS S&MA for all missions for which NASA has Launch Services insight and oversight responsibility, up to 20 launches during any continuous 24-month period. This section shall also be performed to support the resource protection of NASA facilities, hardware and associated support equipment at the VAFB launch site. Support shall be provided during the core work hours. Safety and Mission Assurance support outside of the core hours shall occur in support of mission related activities and will be called up as approved by NASA issuance of task orders for Mission Direct Support Services defined under SOW 9.0.

The contractor shall independently perform activities outlined in this portion of the Statement of Work. Primary locations of performance shall be the Kennedy Space Center, the launch sites at Cape Canaveral Air Force Station (CCAFS) and Vandenberg Air Force Base (VAFB), and are extended to include Launch Services Contractors' and spacecraft providers' locations associated with manufacturing, design, processing, testing, as well as other launch site locations. During the course of performance, the contractor's S&MA supervisor will receive programmatic, mission, and/or policy guidance from NASA S&MA personnel, including task prioritization. From this general guidance, the contractor shall independently initiate and/or lead activities and new projects. The contractor is required to status the LS S&MA supervisor on the progress of planning, coordinating, implementing, and resolving conflicts in the conduct of work. The contractor is required to make technically sound decisions, make recommendations, and seek LS S&MA approval as appropriate. The contractor is allowed a high-degree of independence and expected to seek optimum technical solutions to problems and processes. The contractor shall comply with KNPR 8715.3, Kennedy Space Center Safety Practices/Procedural

Requirements; NPR 8621.1, NASA Procedural Requirements for Mishap Reporting, Investigating, and Record Keeping; the LS S&MA Operating Plan; the LS S&MA Quality Surveillance Plan; and other appropriate internal S&MA operating procedures and processes. The contractor shall document the products and performance standards for safety, quality and mission assurance (Watch Items, Risks, etc.) in accordance with DRD-20, S&MA Quality Reports.

Since frequency and timing of the flight hardware, facilities, support equipment, and/or processing anomalies/issues are unpredictable, the LS S&MA program will maintain the flexibility to prioritize higher-risk, unplanned tasks in lieu of lower-risk, planned tasks. Accordingly, the contractor will be allowed significant latitude in performance of S&MA tasks, such that the contractor can align contractor S&MA resources to accomplish NASA LS S&MA-established written mission priorities, which may directly result in the delay or non-performance of lower-risk, required tasks and/or deliverables. Compliance with the mutually-agreed prioritization of both non-mission and mission S&MA tasks will, at times, take precedence over contract-stated S&MA tasks and deliverables.

Quality Standards

All assessments, evaluations and analyses shall be documented. All reports shall be clear, concise and accurate, and submitted in a timely manner. All data required to support DRD-20, S&MA/Quality Reports shall be submitted in accordance with the specified deliverable requirement.

The contractor shall provide technical interchange with the NASA LSP Safety and Mission Assurance (S&MA) office and the LS S&MA supervisor to provide status and immediately communicate any significant issues that have the potential to increase the overall risk to the LSP.

4.1 Safety

The contractor shall perform systems safety assessments, procedure reviews, and operations surveillance of Launch Services Program (LSP) contractor and spacecraft contractor design, integration, test, operations, and launch/post launch activities to ensure the identification and assessment of risk, risk mitigations, and elimination or control of hazards. At the VAFB Launch Site, the contractor shall provide a quarterly overall assessment of the LSP Launch Service Contractor safety program compliance. The contractor shall also report and track data from these activities to identify trends, areas of improvement, and recommended hazard mitigating actions. The contractor shall support and participate in the LSP and S&MA systems safety related processes, such as Watch Items and Risk Assessment.

4.1.1 Mishap Investigating, Reporting, and Lessons Learned

The contractor shall support mishap investigation, reporting, and related lessons learned activities performed by LS S&MA. The contractor shall support LS S&MA with data gathering, analysis and report preparation for mishap, near miss, close call and lessons-learned. The contractor shall produce supporting products in accordance with DRD-21, Safety and Health Incidents, Mishaps, or Close Calls.

4.1.2 Mishap Preparedness and Contingency Planning

The contractor shall prepare, update, and coordinate the LSP Mishap Preparedness and Contingency Plan and associated specific exhibits for each mission per NPR 8621.1, NASA Procedural Requirements for Mishap Reporting, Investigating, and Record Keeping; and KNPR 8715.3, Kennedy Space Center Safety Practices/Procedural Requirements. The plan shall include all the appropriate notifications, response support, data and debris impoundment and collection, identification of all hazards associated with the particular mission, and consider all other planning response interfaces from the launch site host agency, spacecraft and Launch Service Contractors. The contractor shall produce supporting products in accordance with DRD-20, S&MA Quality Reports.

Performance Standards:

Reports and plans shall be clear, concise, and accurate and submitted in accordance with the requirements of NPR 8621.1 NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Record Keeping; KNPR 8715.3, Kennedy Space Center Safety Practices/Procedural Requirements; and timelines specified in DRD-21, Safety and Health Incidents, Mishaps, or Close Calls.

4.1.3 VAFB Launch Site Safety Support

The contractor shall perform operational safety surveillance, NASA facility safety inspections, procedural reviews and training in support of the VAFB launch site. This support is provided for resource protection of the NASA operated launch and associated processing support facilities and to support LSP missions launched from VAFB.

4.1.3.1 Reserved

4.1.3.2 Launch Site Procedure Reviews

For NASA missions, the contractor shall review all integrated procedures classified as hazardous to ensure hazardous operations are identified and appropriate safety precautions are implemented. For non-NASA missions, the contractor shall implement a risk-based structured sampling process for the review of hazardous procedures when processing takes place on NASA property or within NASA facilities. In both cases, the contractor shall assess non-hazardous procedures through a risk-based structured sampling process to ensure proper classification. The contractor's procedure review shall identify potential/actual hazards, risks, and provide alternatives to eliminate, control or reduce hazards to acceptable levels as defined by EWR-127-1, AFSPMAN 91-710, or KNPR 8715.3. The contractor shall use KDP-P-2234, VAFB Safety Procedure Processing; and the contractor shall input procedure review information into the Safety Procedure Tracking Database. The contractor shall provide the technical interchange with the LS S&MA office and the LS S&MA supervisor to communicate any significant issues. The contractor shall produce supporting products in accordance with DRD-20, S&MA/Quality Reports.

Performance Standards:

Procedure review reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports. Procedure reviews shall ensure compliance with EWR 127-1, Eastern/Western Range, Range Safety Requirements; KNPR 8715.3, Kennedy Space Center Safety Practices/Procedural Requirements; and KDP-P-2234, VAFB Safety Procedure Processing.

4.1.3.3 Launch Site Safety Surveillance and Support of Operations

The contractor shall establish and perform risk-based structured safety surveillance and assessments of Launch Service Contractor and spacecraft customer operations that are classified as hazardous for all NASA missions and for non-NASA missions when processing takes place on NASA property or within a NASA facility. Structured safety surveillance shall also be conducted on Launch Service Contractor activities related to NASA facility and GSE maintenance, modification, and constructions operations. The contractor shall use KDP-P-2223, VAFB Safety Assessment of Hazardous Operations, while performing assessments. The contractor shall provide an assessment of the Launch Service Contractors, and spacecraft customer safety program compliance with applicable requirements of EWR-127-1, AFSCMAN 91-710, and KNPR 8715.3. The contractor shall provide technical interchange with the LS S&MA office and the LS S&MA supervisor to communicate any significant issues and shall develop supporting products in accordance with DRD 20, S&MA/Quality Reports.

The contractor shall participate in and/or lead the VAFB Safety Launch Support Console function for NASA and non-NASA Mission launch countdown activities.

Performance Standards:

The contractor shall ensure compliance with EWR 127-1, Eastern/Western Range, Range Safety Requirements; KNPR 8715.3, Kennedy Space Center Safety Practices/Procedural Requirements; and KDP-P-2234. Surveillance reports shall be clear, concise, and accurate, and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.1.3.4 Launch Site Facility Safety Inspections

The contractor shall conduct facility safety inspections of contractor-assigned facilities in accordance with KDP-P-2232, VAFB Safety Surveillance and/or Inspections. The contractor shall support and participate in, when requested, Facility Safety Inspections of NASA facilities operated and maintained by the Launch Service Contractor (LSC). The contractor shall review Launch Service Contractor facilities inspection data for use in assessing the LSCs overall safety program compliance with applicable requirements contained in EWR 127-1, AFSPMAN 91-710, or KNPR 8715.3. The contractor shall provide the technical interchange with LS S&MA to communicate any significant issues. The contractor shall produce supporting products in accordance with DRD-20, S&MA/Quality Reports.

Performance Standards:

All contractor-assigned Facilities are in compliance with Federal, State, and local safety requirements. The annual safety surveillance/inspections are performed in accordance with KDP-P-2232, VAFB Safety Surveillance and/or Inspection. Surveillance reports shall be clear, concise, and accurate, and submitted in accordance with the requirements specified in DRD-20 S&MA/Quality Reports.

4.1.3.5 Launch Site Participation in Meetings, Reviews, and Working Groups

The contractor shall participate in NASA, LSP, Launch Services Contractor meetings/reviews, including status meetings for designated NASA and non-NASA missions and other processing and construction operations reviews associated with NASA facilities. The contractor shall provide, when requested, briefings and/or presentations in support of these meetings or other meetings as required to communicate general safety, Operational Safety and/or Contingency/Mishap information. The contractor shall provide the technical interchange with the LS S&MA office and the LS S&MA supervisor to communicate any significant issues. The contractor shall produce supporting products in accordance with DRD-20, S&MA/Quality Reports.

Performance Standards:

Surveillance reports shall be clear, concise, and accurate, and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.1.3.6 Launch Site Safety Training

The contractor shall develop and conduct safety training that includes all required facility access/safety training for all NASA customers, NASA transient/resident personnel, and NASA contractor personnel for each NASA mission and non-NASA missions when processing takes place on NASA property or within a NASA facility. The contractor shall establish and maintain a record of all personnel trained and a notification system to identify when personnel are due for training. The contractor shall produce supporting products in accordance with DRD-20, S&MA Quality Reports.

Performance Standards:

The training program shall emphasize the need to adhere to applicable Federal, State, and local laws. There shall be no schedule delays due to personnel not meeting training requirements.

4.1.4 Mission Systems Safety Engineering and Analysis Services

The contractor shall provide System Safety Engineering and Analysis support to LS S&MA to perform system safety reviews, analysis and assessments to assure compliance of existing, modified and new space launch vehicle configurations, associated support equipment and GSE/Government-Furnished Equipment (GFE), processing facilities, and processes, including spacecraft integration. This shall include the review, analysis and assessment of new designs and modification for VAFB NASA facilities, launch processing Ground Support Equipment, and changes or modifications to VAFB processing operations that are conducted in NASA facilities.

The contractor shall perform the role of the overall system safety engineer for specified missions and/or taskings that include performing analysis of the launch vehicle design and/or configuration, as well as processing activities to provide an assessment of the compliance with applicable standards and requirements (EWR 127-1, AFSPCMAN 91-710 and KNPR 8715.3). The contractor shall provide technical interchange with the LS S&MA to provide status and immediately communicate any significant issues that have the potential to increase the overall risk on LSP.

Mission Systems Safety Analyses shall include:

- Review of Launch Service Contractor (LSC) system safety activities, System Safety Program Plan (SSPP), preliminary hazard analysis, requirements 'tailoring' (including Missile System Pre-launch Safety Packages (MSPSPs) and any other related payload, vehicle or ground support hardware safety packages).
- Review of hazard reports to assure the identification and mitigation of hazards.
- Review of verification tracking logs and verification methods, verification and assessment of mission-specific requirements (associated with the payload or other hardware), and effect on the baseline design and operations.
- Review of variances/noncompliance and their impact on systems safety.
- Review of component and system-level Preliminary and Critical Design Reviews and Design Certification Reviews with respect to the system safety.

System safety analysis also includes the review and assessment of mission-related documentation to include but not limited to the technical review and analysis of mission related documentation (i.e., Interface Control Document (ICD), Launch Site Support Plan (LSSP), System Safety Program Plan (SSPP), and Missile System Pre-launch Safety Package (MSPSP) to ensure compliance with applicable safety requirements (i.e., EWR 127-1, AFSPCMAN 91-710 and KNPR 8715.3).

For assigned missions, the contractor shall perform system Hazards Analysis, Safety Risk Assessments, Probabilistic Risk Assessments, Fault Tree Analysis and/or Failure Modes, Effects, and Criticality Analysis (FMECA) on new launch vehicle hardware/systems, launch vehicle or spacecraft processing facilities, ground processing systems/equipment, or other safety related items of concern.

The contractor shall participate in and/or lead commercial spacecraft processing facility safety audits, surveillance and walk downs in support of the Certification of Facility Readiness (CoFR) for assigned missions. The contractor shall participate in and assess the mission-unique tailoring of the facility safety and health plan/manual, and identify and assess the critical spacecraft hardware data, tests, reports, and non-conformances to assess the impact to NASA personnel safety and NASA resources, upon arrival to NASA facilities.

The contractor shall participate in the NASA Launch Services Program Engineering Review Board (ERB) process, providing system safety engineering review and evaluation and performing risk assessments on ERB disposition effects on launch vehicle safety.

The contractor shall participate in NASA, LSP, Launch Services Contractor and spacecraft customer meetings/reviews, including status meetings, Technical Interchange Meetings, Design Reviews, Phase Safety Reviews, Payload Safety Working Groups, Ground Operation Working Groups for designated NASA and non-NASA missions and other processing and construction operations reviews associated with NASA facilities. The contractor shall provide, when requested, briefings and/or presentations in support of these meetings or other meetings as required to communicate Systems Safety Engineering requirements. The contractor shall provide the technical interchange with the LS S&MA office and the LS S&MA supervisor to communicate any significant issues

The contractor shall participate in mission and vehicle readiness and other LSP reviews (i.e., SARR, SMSR, LMCM, LRR, FRR, MRR, LVRR, PRCB). The contractor shall provide systems safety and mishap/contingency planning presentations/briefings in support of these meetings. The contractor shall produce supporting products in accordance with DRD-20, S&MA Quality Reports.

Performance Standards

The contractor shall provide the following products:

- Assessments documenting significant system safety reliability and quality assurance issues or concerns. (Entered into MANTIS, as required following identification of areas of concern)

- Engineering Review Board (ERB) risk assessment reports (Assessments entered into MANTIS based upon review of documented ERBs, one per ERB that has applicable safety impacts)

- Assessment reports for trips, design review meetings and technical interchange meetings documenting the purpose, activities, issues and actions, focusing specifically on any S&MA impacts. (Entered into MANTIS, one per event)
- Meeting agendas, minutes and action items.(As appropriate)
- Presentations to help guide inexperienced personnel in understanding the latest safety techniques and strategies.

4.2 Program Quality Assurance

4.2.1 ISO Audits

The contractor shall support NASA's performance of ISO second party audits as required. The audits will be performed in accordance with ISO 10011 requirements.

4.2.2 GIDEP Alert

The contractor shall participate in the Government Industry Data Exchange Program (GIDEP) and provide Alert System Documentation to NASA. The contractor shall develop Alert Reports that may impact LSP and ELV processing in accordance with DRD-28, GIDEP Report.

Performance Standards:

GIDEP reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-28, GIDEP Reports.

4.2.3 Quality Assurance Surveillance of Launch Service Providers

4.2.3.1 Review of LSP S&MA Plans

The contractor shall review the LSP's Safety and Mission Assurance Plans including Safety and Health Plans, Quality Management Plans, Reliability Program Plans, Risk Management Plans. The contractor shall determine if LSP's Safety and Mission Assurance Plans meet contractual requirements. The contractor shall provide technical interchange with LS S&MA to communicate

all significant issues. The contractor shall provide a written surveillance report and all other applicable reports in accordance with DRD-20, S&MA/Quality Reports.

Performance Standards:

Surveillance reports and applicable reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.2.3.2 Software Assurance

The contractor shall evaluate LSP software assurance program to ensure that the LSP complies with their internal software assurance program/plan. The contractor shall identify any adverse safety, health, and flight assurance impacts. The contractor shall provide a surveillance report and all other applicable reports specified in DRD-20, S&MA/Quality Reports.

Performance Standards:

Surveillance reports and all applicable reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.2.3.3 LS S&MA Website/Database

The contractor shall input surveillance data, LSP vehicle data, and mission data into the LS S&MA Website/Database. The contractor shall format reports displaying trends from the database. The contractor shall analyze data for adverse trends and communicate any significant issues to the LS S&MA. The contractor shall combine data into weekly, monthly or mission reports called out in DRD-20, S&MA/Quality Reports.

Performance Standards:

Reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.2.3.4 Quality Surveillance of LSP

The contractor shall provide surveillance at all manufacturing, processing, testing, and launch site locations. The primary LSP facilities requiring representation are: KSC/CCAFS, Florida; Huntington Beach, California; Denver, Colorado; VAFB,

California; Pueblo, Colorado; and Chandler, Arizona. The contractor shall participate in local reviews, meetings, pertinent tests and local site visits. The LS S&MA shall be notified of these events with sufficient lead to allow for travel arrangements. The contactor shall identify any LSP qualification test or test anomalies involving similar launch vehicle system, subassemblies, and components. The contractor shall document track all open items, anomalies, and issues that could adversely affect present or future NASA missions. The contractor shall maintain insight into fleet wide (including non-NASA missions) problems, MRB actions, deviations, and waivers to system, subsystem, materials, processes, and test equipment. The contractor shall provide the appropriate level of insight and surveillance to determine if NPD 8610.23A, Insight and Approval, NASA STD 8709.2, NASA Safety and Mission Assurance Roles and Responsibilities for Expendable Launch Vehicle Services and LSP contractual Safety and Mission Assurance requirements are met. The contractor shall provide immediate communication with LS S&MA for any significant issues. The contractor shall provide a surveillance report and all other applicable reports specified in DRD-20, S&MA/Quality Reports.

Performance Standards:

Surveillance reports and all applicable reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.2.4 Reviews

4.2.4.1 Design Reviews:

The contractor shall participate in Preliminary Design Reviews (PDR), Critical Design Reviews (CDR), and Design Certification Reviews (DCR), Mission Unique Requirements Reviews (MURR), Mission Unique Preliminary Design Reviews (MUPDR), and Mission Unique Critical Design Reviews (MUCDR). The contractor shall review and provide technical assessment of Design restrictions, limitations and known violations including system safety, hardware and software. The contractor shall provide immediate communication with LS S&MA for any significant issues. The contractor shall follow up with a surveillance report and all other applicable reports specified in DRD-20, S&MA/Quality Reports.

Performance Standards:

Surveillance reports and all applicable reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20,S&MA/Quality Reports.

4.2.4.2 Production Reviews

The contractor shall participate in Hardware Acceptance Reviews (HAR), Pedigree Reviews, Production Reviews, and Pre-Vehicle-On-Stand Reviews (Pre-VOS). The contractor shall review and provide technical assessments on any build paper, test results, non-conformance reports, discrepancy history, failure analysis, waivers, deviations, and MRB's presented at reviews. The contractor shall maintain a status of open problems and failed hardware. The contractor shall provide technical interchange with LS S&MA to communicate all significant issues. The contractor shall follow up with surveillance report and all other applicable reports specified in DRD-20, S&MA/Quality Reports.

Performance Standards:

Surveillance reports and all other applicable reports shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.2.4.3 NASA Internal Pre-Launch Reviews

The contractor shall develop and provide LS S&MA presentations and handout material for NASA internal reviews including, but not limited to CDLVRR, IMAR, and Mission Assurance Peer reviews.

Performance Standards:

The contractor shall submit an initial draft of presentations and handout materials 10 days prior to review. The contractor shall update the presentation and handout materials 2 days prior to the corresponding review.

The contractor shall provide support to the LS S&MA in the development of mission contingency plans.

The contractor shall attend Pre-Launch Readiness reviews (LRR and FRR) and launch activities. The contractor shall maintain a status of identified problems and provide immediate

communication to LS S&MA. The contractor shall provide status data in a Quality Assurance Report in accordance with DRD-20, S&MA/Quality Reports.

Performance Standards:

Quality Assurance report shall be clear, concise, and accurate and submitted in accordance with the requirements specified in DRD-20, S&MA/Quality Reports.

4.3 [Reserved]

4.4 Reliability Engineering Services

The contractor shall provide Reliability Engineering support to the NASA Launch Services Program Safety and Mission Assurance (S&MA) office. The primary responsibility will be to perform the reliability effort for the certification of modified and new space launch vehicle configurations and related processes to include spacecraft integration.

The contractor shall perform analysis of the overall predicted launch vehicle design reliability for each NASA mission and assess the compliance of the design reliability with Program requirements. These analysis shall include:

- Review of Launch Service Provider reliability analysis assumptions and completeness
- Review of design reliability methodology
- Analysis of the design, constraints, and implementation of mission-specific requirements and changes on the predicted design reliability
- Review of component and system-level Preliminary and Critical Design Reviews and Design Certification Reviews with respect to the predicted design reliability

The contractor shall perform reliability analysis on launch vehicle systems. The contractor shall perform reliability and maintainability analysis and life cycle costing (LCC) on NASA LSP-controlled systems and equipment. The contractor shall provide risk management support to NASA LSP, including risk management system assessments, trending and updates.

The contractor shall provide reliability engineering training to S&MA office personnel.

The contractor shall participate in the NASA Launch Services Program Engineering Review Board (ERB) process, providing reliability engineering support and performing risk assessments on ERB disposition affects on launch vehicle reliability.

The contractor shall provide technical interchange with the NASA Safety and Mission Assurance (S&MA) office to immediately communicate any reliability concerns or significant issues as they arise.

Performance Standards

The contractor shall provide the following products:

- Launch vehicle design reliability analysis reports. (Three per Vehicle CERT. and updated as appropriate)

- Assessment reports for trips, design review meetings and technical interchange meetings documenting the purpose, activities, issues and actions, focusing specifically on any overall reliability impacts. (Entered into MANTIS, one per event)

- Presentations to help guide inexperienced personnel in understanding the latest reliability tools, techniques and strategies.

4.5 Quality Engineering Services

The contractor shall provide Quality Engineering support to the NASA Launch Services Program Safety and Mission Assurance (S&MA) office. The primary responsibility will be to develop and implement an effective Quality Engineering process.

The contractor shall provide quality engineering analysis, metrics and trending of the Launch Service Provider overall quality systems used for the, design, manufacturing, assembly, integration, testing, checkout and launch of Expendable Launch Vehicle. The quality engineering assessment shall determine compliance with applicable contract and NASA requirements. The assessments shall include the following processes:

- Corrective and Preventative Action
- Non-conformance Reporting
- Material Review Board
- Hardware Acceptance
- Supplier Control
- Quality Audits and Assessments
- Software Assurance
- Quality Planning
- Continuous Improvement Tools
- Limited Life Items

The contractor shall develop data collection plans and monitoring tools to facilitate insight surveillance of Launch Service Provider's. Create measurement systems to support data trending and analysis including metrics related to such data.

The contractor shall implement appropriate statistical tools and analysis to identify areas where improvement may be necessary and advise management as to what course of action to take when improvements are necessary.

The contractor shall create the process for metric development and analyze trends to identify performance indicators that would be helpful in directing the use of limited organizational resources. The contractor shall ensure that data supporting any metric is validated as reliable, feasible and suitable for managerial decision-making.

The contractor shall provide analysis of the NASA S&MA database (MANTIS), Engineering Review Board database (ERBIS), Program Risk Management database and Launch Service Provider Quality System databases for items that require tracking, trending, corrective actions and other data mining for S&MA purposes. The contractor shall evaluate the NASA LSP Engineering Review Board Information System (ERBIS) database to identify any processing trends that require corrective action and recurrence control as well as provide recommendations including corrective action plan to the S&MA office.

The contractor shall create surveillance implementation plans for assessing internal and external contractor's operations and processes. The external assessment shall include subcontractors/vendor processes where applicable. The contractor shall develop monitoring tools that verify and validate the contractor data. Processes shall be evaluated to assure contract and NASA requirement are being met.

The contractor shall provide Quality Engineering services to assist in organizing information, scheduling and documenting Safety and Mission Assurance activities. The contractor shall assure that the proper controls of LSP proprietary data is maintained.

The contractor shall support design, qualification, pedigree, hardware acceptance, non-compliance and mission success reviews (e.g. IMAR, LRR, FRR). Additional support will be required for the following Launch Service Provider forums Technical Interchange Meetings and Corrective Action Boards and Payload Working Groups.

The contractor may be required to travel within United States and, on occasion, globally.

The contractor shall provide guidance and training in the latest quality techniques and strategies used for data collection, trending, surveillance, inspection and testing used to successfully evaluate the Launch Service Provider.

The contractor shall evaluate GIDEP and Aerospace Alerts systems for potential NASA mission impacts and provide recommendations to the S&MA office.

The contractor shall provide ISO 2nd-party audit, hardware acceptance review, new process verification and inspection audit schedules to support the S&MA office.

Performance Standards

The contractor shall provide the following products:

- Risk management system assessment and trending reports. (Assessments entered into MANTIS, Trending reports mined from MANTIS to visually capture information that will aid program management in understanding potential and current risks).
- ERB risk assessment reports. (Assessments entered into MANTIS based upon review of documented ERB's, one per ERB that has applicable S&MA impacts)
- Assessment reports for trips, design review meetings and technical interchange meetings documenting the purpose, activities, issues and actions, focusing specifically on any S&MA impacts. (Entered into MANTIS, one per event)
- Presentations to help guide inexperienced personnel in understanding the latest Quality Engineering techniques and strategies.
- Metrics and trending reports from the MANTIS database (This will require the transfer of related data from launch service providers or other NASA support agencies when applicable). Reports shall be delivered on a periodic basis to support LSP internal reviews (monthly), as well as LSP S&MA internal management decision making for where to focus support (as needed).

4.6 Safety and Mission Assurance Technical Integration Services

The contractor shall provide Technical Integration support to the NASA Launch Services Program Safety and Mission Assurance (S&MA) office. The primary responsibility will be to organize, schedule, coordinate, track and document Safety and Mission Assurance activities.

The contractor shall organize and schedule S&MA office meetings including technical interchange meetings, working groups, reviews and teleconferences. The contractor shall prepare agendas and minutes and track assigned actions.

The contractor shall organize, prepare and coordinate presentation material and schedules for the mission launch process including Launch Vehicle Readiness Reviews and Integrated Mission Assurance Reviews.

The contractor shall record, organize and track S&MA office actions and recommendations.

The contractor shall perform data management and system administrator functions for the S&MA office Mission Assurance and Nonconformance Tracking Information System (MANTIS) database. This includes monitoring data input, generating deliverable reports, controlling user access, updating dynamic form field information and assisting with data entry to assure information is captured, tracked and trended.

The contractor shall prepare, organize, coordinate and maintain S&MA office reports, documentation and contingency plans.

The contractor shall organize, track and report trending data and metrics for Launch Service Provider and vendor processes, products and services.

The contractor shall maintain S&MA office schedules that are integrated with the Launch Service Provider and mission schedules including milestones, working groups, meetings and reviews.

Performance Standards

The contractor shall provide the following products:

- Meeting agendas, minutes and action items.(as appropriate)
- Mission Packages - launch process presentations including S&MA activities.(DRD-20)
- SMA schedules.(As updated Meeting agendas, minutes and action items.(as appropriate)

5.0 Launch Site Support Engineering

The contractor shall work with the NASA Launch Site Integration Manager (LSIM) for all ground processing mission activities at the Eastern and Western Ranges and provide launch site support documentation, launch site operational services, launch operations management support, and launch site administrative services. The NASA LSIM is the primary interface for all payload support requirements for KSC and VAFB missions. The contractor is the secondary interface. The contractor shall represent the NASA LSIM position at meetings, teleconferences, design reviews, technical interchange and working group meetings when the NASA LSIM cannot attend.

The contractor shall be the point of contact (POC) between spacecraft projects and other organizations including the Eastern Range (ER) and the Western Range (WR), Government/Commercial PPFs, and LSPs. The contractor shall have a comprehensive knowledge and understanding of the objectives and responsibilities of all these organizations and of other NASA centers involved with the payload customers.

The requirements of this section shall be performed to support all missions for which NASA has Launch services insight and oversight responsibility, up to 20 launches during any continuous 24-month period. Support shall be provided during core work hours. Launch Site Support Engineering support outside of the core work hours shall occur in support of mission related activities and will be called up as approved by NASA issuance of task orders for Mission Direct Support Services defined under SOW 9.0.

5.1 Launch Site Documentation Services

The contractor shall provide launch site documentation services at VAFB, KSC, and other launch sites.

The contractor shall, in coordination with the LSIM, gather all documentation requirements from the payload customers by direct communication and through attendance to spacecraft and LSP meetings. The contractor shall travel to the meetings if not held locally possibly involving foreign travel. These meetings include, but are not limited to the following: Project Kick-Off Meeting, Preliminary Design Review, Critical Design Review, Mission Integration Working Group meetings and teleconferences, Ground Operations Working Group meetings and teleconferences, Technical Interchange meetings, Pre-Ship review meetings. Launch Site Readiness Review, Flight Readiness Review, Launch Readiness

Review. The contractor shall use the information gathered and provide documentation services as described in Sections 5.1.1 through 5.1.8.

The documentation services shall be subject to the following standards of performance:

Performance Standards:

All documents shall be clear, concise, accurate, and submitted in accordance with the requirements specified in the respective DRDs.

The contractor shall prepare payload requirements using the Universal Documentation System (UDS) format and interface with the Range for distribution of requirements and responses, as detailed in DRD-6, Requirements Coordination Output; DRD-11, Payload Support Requirements Implementation Plan; and DRD-18, Launch Site Support Plan.

The contractor shall input routine and expedited payload requirements in accordance with DRD-6, Requirements Coordination Output into the Automated Support Requirements System (ASRS) per KSC-HB-GP60-2.

5.1.1 Launch Site Support Plan (LSSP)

The contractor shall coordinate with payload customers in the identification, definition, and documentation of their requirements in the LSSP (DRD-18, Launch Site Support Plan). The contractor shall publish and distribute preliminary and baseline versions of the LSSP with revisions as necessary. The contractor shall catalog and incorporate changes to the LSSP and conduct detailed reviews with the payload customer in order to refine the document. The contractor shall maintain the LSSP Boilerplate contained in K-ELV-14.000, ELV Boilerplate LSSP.

5.1.2 Program Introduction (PI) document for the Range

The contractor shall write the Program Introduction (PI) document and submit to the Range as specified in the DRD-6, Requirements Coordination Output. The PI shall be submitted to the LSIM for review prior to submittal to the Range.

5.1.3 Program Requirements Document (PRD) for the Range

The contractor shall write the Program Requirements Document (PRD) for the Range as specified in the DRD-6, Requirements Coordination Output. The PRD shall be submitted to the LSIM for review prior to submittal to the Range.

5.1.4 Mission Operations Requirements (OR) document for the Range

The contractor shall provide input to the LSP in the writing of the Mission Operations Requirements (OR) document for submittal to the Range. For VAFB and KSC missions, the contractor shall use the LSSP and PRD as well as further input from the LSIM and the payload customer to define and develop specific spacecraft inputs for the LSP-developed mission OR. The contractor shall work closely with the LSP writer of the OR to input these requirements. The contractor shall review draft and published copies of the OR for correctness. The contractor shall modify OR input as required.

5.1.5 Spacecraft Operations Requirements (OR) Document

The contractor shall prepare the spacecraft Operations Requirements (OR) document for payloads processed in NASA and commercial PPFs at KSC and VAFB. The contractor shall use the LSSP and PRD as well as further input from the LSIM and the payload customer to develop a spacecraft-specific OR for spacecraft processing support in a PPF. The contractor shall modify the spacecraft-specific OR as required.

5.1.6 Base Civil Engineer Work Request/Request for Environmental Impact Analysis at VAFB

The contractor shall prepare the Base Civil Engineer Work Request, Request for Environmental Impact Analysis (AF-Form 35) for each assigned payload to be processed at VAFB. The contractor shall submit this request to the USAF after review and approval from the LSIM.

5.1.7 Safety Advisory Function

The contractor shall review customer requirements and advise the payload customer in safety planning including, but not limited to the following areas of facility requirements and modifications: mechanical, electrical, communications, contamination control, office space, telephones, base access and security.

The contractor shall provide safety advise to the payload customer for the preparation the Missile Systems Pre-Launch Safety Package (MSPSP) as defined in EWR 127-1.

5.1.8 Review of LSP/Range-Provided Documentation

The contractor shall review LSP and Range documentation related to assigned missions.

The contractor shall review the LSP spacecraft ICD and spacecraft questionnaire for completeness and accuracy of

spacecraft requirements. The contractor shall submit comments to the LSP after concurrence with the NASA LSIM.

For KSC and VAFB missions, the contractor shall review and provide comments to the NASA LSIM on Range-authored support documentation to ensure the Range properly addresses all customer requirements. This documentation shall include, but not be limited to the following:

- Statement of Capability (SC), which is the Range response to the Program Introduction (for VAFB missions only)
- Program Support Plan (PSP), which is the Range response to the Program Requirements Document
- Operations Directive (OD), which is the Range response to the Operations Requirements Document
- Network Implementation Plan (NIP), which is the Range launch day communications implementation plan

Performance Standard:

Comments are due within two weeks of receipt of applicable documents.

5.2 Launch Site Integration Operational Services for VAFB

The contractor shall perform the operational support tasks listed in Sections 5.2.1 through 5.2.5 at VAFB in coordination with the NASA LSIM and subject to the following standards of performance:

Performance Standards:

No mission schedule milestones are adversely impacted due to action or inaction of the contractor.

The contractor shall provide prompt abatement of non-compliant conditions where solutions are readily available to the contractor.

5.2.1 NASA/Commercial PPF Readiness and Range Support

The contractor shall conduct facility walkdowns, verify equipment, and verify facility cleanliness to insure all requirements as stated on the LSSP are satisfied prior to spacecraft customer arrival at the launch site.

The contractor shall coordinate all activities in support of the Range to include, but not be limited to security escorts, gate openings, sector

blanking, radio frequency clearance and radio frequency authorization, and communications.

5.2.2 Payload Transportation

Prior to payload arrival at the launch site, the contractor shall perform launch site transport route inspections, coordinate airfield support, coordinate security escorts, and coordinate support from US Customs, Immigration and Agriculture Department for foreign payloads.

Prior to payload transport to the launch complex, the contractor shall perform transport route inspections, schedule appropriate Range resources, obtain weather briefings, coordinate access, arrange security escort.

5.2.3 Payload Operations in the PPF

The contractor shall coordinate the review of payload customer test plans and technical operational procedures and track their approval status.

The contractor shall perform the following tasks for payload operations in the NASA PPFs:

- Distribute keys/combinations
- Coordinate facility and safety training
- Coordinate shipping and receiving services
- Coordinate access lists and guard orders
- Maintain a spacecraft activities log book
- Coordinate the procurement and use of consumables, supplies and materials
- Coordinate and schedule support for fueling operations
- Coordinate delivery radiation sources with the USAF
- Cocrdinate storage of pyros and radiation sources
- Coordinate photo support from the USAF
- Be cognizant of payload activities and reschedule support in response to anomalies and changes in plans

5.2.4 Payload Operations at the Launch Complex

Prior to payload arrival at the launch complex, the contractor shall coordinate movement of payload ground support equipment (GSE).

The contractor shall provide equipment, commodities, and garments to support payload operations at the launch complex.

The contractor shall coordinate all launch complex access requirements including, but not limited to training, badging, security escort services, and tours.

The contractor shall coordinate contractor support for off-shift operations, monitor payload activities, and reschedule support in response to anomalies and changes in plans.

The contractor shall operate GSE supporting the payload on the launch vehicle on a case-by-case basis, as requested by the Government.

5.2.5 Post Launch

The contractor shall coordinate GSE movement, monitor customer clean-up/close-out activities, and coordinate shipping services.

5.3 Launch Site Integration Operational Services for KSC

The contractor shall perform the operational support tasks listed in Section 5.3 and Sections 5.3.1 through 5.3.3 at KSC in coordination with the NASA LSIM and subject to the following Performance Standards:

Performance Standard:

No mission schedule milestones are adversely impacted due to action or inaction of the contractor.

The contractor shall provide prompt abatement of non-compliant conditions where solutions are readily available to the contractor.

5.3.1 Payload Transportation

Prior to payload transport to the launch complex, the contractor shall perform transportation route inspections, schedule appropriate Range resources, obtain weather briefings, coordinate access, arrange security escort.

5.3.2 Payload Operations at the Launch Complex

Prior to payload arrival at the launch complex, the contractor shall coordinate movement of payload ground support equipment (GSE).

The contractor shall provide equipment, commodities, and garments to support payload operations at the launch complex.

The contractor shall coordinate contractor support for off-shift operations, monitor payload activities, and reschedule support in response to anomalies and changes in plans.

5.3.3 Post Launch

The contractor shall coordinate GSE movement, monitor customer clean-up/close-out activities, and coordinate shipping services.

5.3.4 Access Training and Badging

The contractor shall coordinate all PPR payload processing facility (PPF) and launch complex access requirements including, but not limited to, training, badging, security escort services, and tours. The contractor shall not be responsible for providing this coordination in those cases where the JPL or MSFC Resident Office at KSC accepts responsibility for this coordination.

5.4 Launch Operations Management Services

The contractor shall provide launch operations management services in coordination with the LSIM.

The contractor shall coordinate between the LSP, NASA Launch Director, LSIM, and payload customer to produce the Launch Management Coordination Meeting (LMCM) presentation package. The LMCM package shall include, but not be limited to launch day management and reporting structure; launch day "GO/NO GO" charts; list of mandatory assets for launch; launch day seating charts; launch day voice communication charts; and range conflict calendar.

For missions aboard Boeing Delta launch vehicles, the contractor shall provide input to the LSP-provided Launch Operations Plan (LOP) and review the LOP for consistency with the LMCM presentation package.

The contractor shall coordinate and schedule launch countdown rehearsals for the payload customer in the weeks prior to launch.

The contractor shall coordinate with the Range and the LSP to ensure that downrange assets, as documented in the PRD/OD, are in place for launch.

The contractor shall coordinate facility requirements and room configuration for readiness reviews.

The contractor shall, in coordination with the external public affairs organization, create and implement a plan to provide voice communications, video, timing, satellite up-links and down-links, and Launch Site Support Trailer (LSST) for coverage of a launch. The contractor shall participate in planning meetings and teleconferences. The contractor shall coordinate the configuration of the conference room for press conferences.

5.5 Launch Site Administrative and Customer Services

5.5.1 Launch Site Administrative Services

The contractor shall maintain, publish, and distribute on a monthly basis the KSC and VAFB Facility Utilization Plans (FUPs) which consist of a nine-year FUP for KSC and a six-year FUP for VAFB. At VAFB, the contractor shall use the FUP in conjunction with documentation for payload requirements to establish long range planning and determination of potential impacts on NASA facilities, safety or resources. At KSC and VAFB, the contractor shall use the most current manifest data to write the FUP and submit the FUP to NASA for review and comment. After NASA approval, the contractor shall publish, distribute, and maintain the FUP as required.

The Advanced Planning Schedule shall be used to show the period of time the customers are expected to be at each launch site during their launch campaign phase.

Performance Standards:

Schedules are correct and current within two working days of new data being available. All potential conflicts identified in the schedules are presented to the MIT to ensure prompt resolution.

The contractor shall develop and maintain an assignment matrix to list the LSIMs and the launch site support contractor personnel for each mission in flow. The contractor shall identify in the assignment matrix the following positions: LSIM, Launch Site Support Engineering point of contact (primary and backup), and the point of contact responsible for providing input to the Universal Documentation System (UDS).

Performance Standards:

The assignment matrix shall be up to date and accessible to NASA in electronic format.

For VAFB missions, the contractor shall develop and conduct a Quarterly Launch Site Support Mission Review. The Contractor Team shall develop and update a presentation package for each assigned mission and at a minimum address for each assigned mission the following areas: general project information, documentation status, facility status, equipment status, communications status, procurement status, current schedule, relevant issues and concerns, and current point of contact list. For KSC missions, the contractor Team shall develop and update a presentation package template to be used by the LSIMs for the Quarterly Launch Site Support Mission Review.

Performance Standards:

The presentation package information shall be accurate, technically sound, professionally prepared, and delivered per NASA schedule.

The contractor shall provide secretariat function services for all launch site integration activities to include, but not be limited to the following: develop meeting minutes/actions and publish/distribute preliminary and final versions, prepare agendas and security access lists, coordinate meet-me numbers for teleconferences, arrange facility accommodations

and presentation equipment, reproduce meeting materials, and record attendance

Performance Standard:

The contractor shall distribute actions and minutes electronically within two working days of meeting. All actions are captured, and tracked to completion.

5.5.2 Launch Site Customer Services

The contractor shall develop and maintain customer information documentation as identified in DRD-5, Customer Information Documents with concurrence from the NASA LSIM group.

Performance Standards:
The customer information documents shall be developed and maintained accurate and current.

The contractor shall conduct the Launch Site Introduction/Familiarization Briefing for the payload customers. The contractor shall prepare the briefing material to include but not be limited to familiarization/introduction of the KSC and VAFB launch sites, list of points of contact, local community and center/base accommodations/capabilities, and any specific information related to facilities/equipment.

6.0 Technical Integration Services

The requirements of this section shall be performed to support all missions for which NASA has Launch services insight and oversight responsibility, up to 20 launches during any continuous 24-month period. Support shall be provided during the core work hours. Technical Integration Services outside of the core shall occur in support of mission related activities and will be called up as approved by NASA issuance of task orders for Mission Direct Support Services defined under SOW 9.0.

6.1 Mission Integration Coordination Services

The contractor shall provide mission integration coordination services as described under Sections 6.1.1 through 6.1.3. The contractor shall participate in each ELV mission through active participation of the Mission Integration Teams (MIT).

6.1.1 Integrated Mission Data, Documentation, and Schedules

The contractor shall collect and input mission information into Mission Web Pages for each ELV mission for access by ELV personnel. Mission data shall include, but not be limited to mission description, mission schedules, points of contact, list of mission deliverables with corresponding web links, links to spacecraft websites, and links to

documentation developed for the mission. The contractor shall collect and input mission information into the mission folder within the MIT Coordination Folders in the share drive for NASA internal use.

The contractor shall prepare a mission plan for each mission immediately preceding the Authority To Proceed (ATP) for the LSP. The mission plan shall be accessible to payload customers through a controlled website.

Using inputs from the MIT, the contractor shall prepare and maintain an integrated mission schedule that shall be compatible with Milestones Professional scheduling software. The contractor shall evaluate mission integration schedules to identify potential schedule conflicts and inform NASA.

Using inputs from MIM and other team members, prepare, maintain, and distribute a schedule for the support of spacecraft Announcement of Opportunities (AO) by KSC.

The contractor shall provide a tracking system for each mission for all the Contract Deliverables Requirements Lists (CDRLs) that are received/reviewed by the MIT, as noted in DRD-1, Access to Contract Data, CDRL Review Tracking. The system shall include, but not be limited to date of receipt from the LSP or payload customer, date delivered to the responsible reviewer, date when reviewed document is received back, date delivered to the LSP or payload customer as applicable, and identify any relevant issues related to the mission. The contractor shall submit payload customer deliverables and ELV review results to the ELV Library for each mission.

The contractor shall input data into the Independent Review Database to record and track action closure for independent reviews. Database shall be accessible to reviewers and ELV Program/Project personnel.

The contractor shall maintain the ELV-Plan-To-Manifest based on the official NASA Headquarters Flight Planning Board Manifest. This document includes ELV launches dates and launch slips as well as Space Shuttle launch dates for the current year.

The contractor shall maintain and NASA ELV Payload Planner's Guide using information provided by the MIM.

The contractor shall prepare documentation and input into the Mission Telemetry Assets Database to determine if additional launch telemetry assets are required. The contractor shall use the K-ELV-02.12.002, Launch Telemetry Requirements as a guideline. If additional assets are required, the contractor shall assemble requirements packages and trajectory documentation, arrange and attend associated teleconferences, and assist in letter preparation.

Performance Standards:

All mission-related information and all schedules/databases are correct/current and updated within two working days of new data being available. All potential conflicts identified in the schedules are presented to NASA to ensure prompt resolution.

Mission plan is correct and available one month prior to ATP.

6.1.2 Administrative Services

The contractor shall input data into the Mission Management Office Website to include administrative and schedule items such as staff notes and administrative actions.

The contractor shall develop documentation packages (e.g. Risk sheets, MIWG presentations) for mission management and MIT activities to include, but not be limited to meetings, briefings, reviews and other activities that are at the Agency, Program, Project, and MIT levels.

The contractor shall create, update, and distribute MIT assignment matrices as noted in DRD-1, Access to Contract Data—MIT Functions, to include members of the MIT and other support personnel for all missions in flow.

Performance Standards:

Documents shall be accurate, technically sound, professionally prepared, and delivered per NASA schedule. Matrices shall be maintained accurate and updated within two working days of any change.

6.1.3 Secretariat Functions

The contractor shall provide secretariat function services for all Lessons Learned reviews to include, but not be limited to the following: develop meeting minutes/actions and publish/distribute preliminary and final versions, prepare agendas, coordinate meet-me numbers for teleconferences, arrange facility accommodations and presentation equipment, reproduce meeting materials, and record attendance. The contractor shall assemble documentation and input into the ELV Lessons Learned Database using inputs from the MIT, the extended MIT, and the launch team.

The contractor shall provide secretariat function services for all MIT reviews to include, but not be limited to the following: develop meeting minutes/actions and publish/distribute as noted in DRD-1, Access to Contract Data—MIT Functions, prepare agendas, coordinate meet-me numbers for teleconferences, arrange facility accommodations and

presentation equipment, reproduce meeting materials, and record attendance. The contractor shall coordinate facility arrangements for KSC-hosted customer and supplier workshops and record minutes and actions.

Performance Standards:

All Lessons Learned are captured in the minutes and coordinated to closure.

All actions and minutes from MIT reviews are captured, distributed electronically within two working days of meeting, and tracked to completion.

All facility accommodations are appropriate for the size and type of meeting.

6.2 Engineering Technical Integration Services

The contractor shall provide mission integration coordination services as described under Sections 6.2.1 through 6.2.3.

6.2.1 Engineering Review Board Services

The contractor shall provide technical services to assist in organizing information, scheduling, and documenting engineering review board's activities. The contractor shall include appropriate measures for control of proprietary LSP data. The contractor shall provide technical integration services to include, but not be limited to the following:

- Organize ERBs, including reserving conference facilities and scheduling teleconferences as required.
- Record, organize, and track ERB actions and recommendations. Maintain electronic records of ERB presentations, action closures, and recommendations. Manage ERB tracking number assignments, as described in DRD-1, Access to Contract Data—ERB Functions.

Performance Standards:

All actions are captured and tracked to completion. Actions are distributed electronically within two working days of meeting.

Facility accommodations are appropriate for the size and type of meeting.

The contractor shall organize and input data in the ERB Database to include ERB Results & Recommendations, Engineering Review Summaries, and ELV information and flight/test telemetry data. Accordingly, the contractor shall perform the following:

- Organize and maintain ELV flight and test data archives.
- Organize and maintain engineering technical document library.
- Develop and maintain secure systems for accessing LSP flight data and technical document storage systems.
- Create, maintain, and modify database-reporting forms for use by the engineering team to fill in. The contractor shall input engineering team forms into the databases.
- Conduct research in engineering database on Government specified criteria and create reports.

Performance Standards:

Database shall be updated within two working days of action updates/closures.

6.2.2 Administrative Services

The contractor shall provide technical integration services to include, but not be limited to the following:

- Collect, research, organize, and document technical requirements and recommendations.
- Develop schedules, create reports, organize technical interchange meetings, and create presentations.
- Collect, organize, and document technical requirements and recommendations needed to develop engineering processes and procedures. Prepare draft process documents for review and approval by the engineering management team.
- Create presentation charts and schedules for monthly status reports.
- Analyze and evaluate launch vehicle provider production and manifest schedules for consistency with NASA schedules and create reports describing changes and schedule conflicts.

Performance Standards:

Documents shall be accurate, technically sound, professionally prepared, and delivered per NASA schedule.

Schedules are correct and current within two working days of new data.

6.2.3 Launch Engineering Team (LET) Services

The contractor shall provide technical services to the Launch Engineering Team (LET) formed to support NASA and NASA-sponsored ELV launches to include, but not be limited to the following:

- Organize LET member deployment on console during launch day activities. Organize and document requirements for communications and data inputs to be used in launch support facilities.

- Create and maintain LET deployment schedules during launch campaigns.
- Prepare launch support guidelines for the LET.
- Document, organize, and track internal and external action items that are significant to the LET in preparation for readiness reviews during the launch campaign such as Pre-Vehicle-On-Stand (Pre-VOS) Reviews, Systems Reviews, Flight Readiness Reviews (FRR), Launch Readiness Reviews (LRR), and related technical readiness reviews.
- Coordinate Technical Interchange Meetings (TIM) to include participation from offsite engineering organizations. Document, organize, and track internal and external action items that are relevant to the LET.
- Organize and document LET inputs to the Lessons Learned review.
- Collect, organize, and document technical requirements and recommendations from the engineering team and from various launch support personnel to define and document telemetry data archive, transfer, and conversion requirements.
- Reference DRD-1, Access to Contract Data—LET Functions for data access noted above

Performance Standards:

Documents shall be accurate, technically sound, professionally prepared, and delivered per NASA schedule.

Schedules are correct and current within two working days of new data.

7.0 Communications and Telemetry

The contractor shall provide engineering, operations, and maintenance of NASA ELV communications and telemetry systems in all operational areas for NASA supported ELV missions including commercial and other payload customers of the NASA ELV Program. The contractor shall be responsible for the following operational areas:

- Telemetry Lab at Hangar AE and Building 836
- Mission Directors Center at Hangar AE and Building 840
- Launch Vehicle Data Centers at Hangar AE and Building 836
- Communication Rooms at Hangar AE and Building 836
- Customer support areas of Hangar AE and Building 836
- Launch Site Support Trailers on Eastern and Western Ranges
- NASA Tracking Station near Building 836

NASA ELV customers may be located in the following locations:

- Hangar AE, CCAFS
- Building E&O, CCAFS
- Building 836, VAFB
- Building 840, VAFB
- Building 1610, VAFB
- Space Launch Complexes on the Eastern or Western ranges,
- NASA or Commercial PPFs on or near the Eastern or Western Ranges

Core work for KSC and VAFB is defined as the engineering, operations, and maintenance activities needed to maintain the communications and telemetry systems ready to support operations. Operations support to NASA ELV customers shall be available during the core work hours. Telemetry Lab operations support outside the core work shift hours shall occur in support of mission test and launch activities, and will be approved by NASA through the issuance of task orders for Mission-Direct Support Services defined in SOW section 9.0.

There may be periods where support to mission testing and launch activities will be at a minimum, especially at VAFB. During these periods the core work activities needed to maintain the readiness of communications and telemetry systems to support operations will be lessened. Other activities shall be supported during these periods including, but not limited to, backlog of maintenance and repair of Telemetry Lab equipment, maintaining the readiness of mission payload customer test equipment, and advance configuration of communications circuits and equipment for mission support.

The contractor shall provide technical interchange with NASA to provide status and immediately communicate any significant issues.

Performance Standards:

Support for daily operations shall be available not later than 15 minutes after the start of the core work hours and shall cease no earlier than 15 minutes before the end of core work hours. During operation activities, the contractor shall provide continuous monitoring of communications and telemetry lab at both Hangar AE and Building 836.

During launch operations, full support shall be available no less than 15 minutes prior to launch vehicle power on and shall remain fully operational until no less than 15 minutes after vehicle power off or final loss of signal has occurred.

No failure in contractor operated equipment or contractor provided service shall result in an operation delay or scrub.

7.1 Operation & Maintenance of Communications and Telemetry Systems

Within the operational areas listed in Section 7.0, the contractor shall be responsible for:

- Power-up
- Power-down
- Configuration Control
- Operation and Maintenance
- Troubleshooting for all equipment
- Sustaining Engineering

For all missions supported by NASA, the contractor shall be responsible for the following communications and telemetry support activities while processing at NASA and/or Commercial PPFs:

- Disposition Requirements
- Engineering and Planning
- Setup and Activation
- Configuration Control
- Maintenance
- Troubleshooting
- Breakdown and Stowage

The contractor shall provide troubleshooting and platform services for ELV customers where required. In facilities with non-ELVIS transport (CSOC, Range, commercial, etc), the contractor shall coordinate and schedule customer requirements. The contractor shall create a customer interface for data services to adapt customer equipment to the facility transport where necessary.

The contractor shall permit specific equipment to remain operational and un-attended during non-supported hours when requested by NASA. The contractor shall report to NASA the risks associated with unattended operation of this equipment and shall take appropriate steps to mitigate these risks.

The contractor shall provide maintenance management services and implement a comprehensive proactive maintenance program incorporating the Reliability-Centered Maintenance (RCM) philosophy for all Telemetry and Communications systems, and equipment, as described in NPG 8831.2, NASA Facilities Maintenance Management. Implementation of RCM program shall ensure continued operations for mission support and long-term Government asset protection and prevent the consequences of degradation and critical equipment breakdowns.

7.1.1 Communications Systems

Using Installation-Provided Property (IPP), the contractor shall provide the following services to all NASA ELV customers:

- Voice
- Video

- Data
- Timing

The contractor shall operate and maintain all assigned audio and video systems for ELV missions. The contractor shall create and maintain video recordings of all launch attempts. The contractor shall make copies of these recordings as requested by NASA and deliver them to the appropriate destination. With NASA concurrence, the contractor shall create and implement a schedule for the storage and destruction of these recordings as appropriate.

For customers outside of Hangar AE and Building 836, the contractor shall request and schedule communications circuits and support from the responsible organizations to meet all requirements. The contractor shall coordinate directly with these outside organizations to assist in the activation and troubleshooting of these assets. The contractor shall field support equipment to outfit these communications circuits to satisfy customer requirements. This support shall include communications services local to the facilities, as well as communications connectivity to other facilities at CCAS and KSC. Additionally the contractor shall support the activation and troubleshooting of cross-country communications circuits through commercial and government communications service providers.

The contractor shall operate and maintain cable plant and end equipment within the ELV ground station facilities such as Single-mode fiber, Multi-mode fiber, Unshielded Twisted Pair (UTP) copper, Coax/Twinax, and Radio Frequency (RF) waveguide including supply of GN2 K-bottles for the purge system.

The contractor shall interface with local and long-line providers such as USAF contractors at CCAFS and VAFB, Consolidated Space Operations Contract (CSOC) ground and space network, and commercial carriers for meeting external communications requirements including, but not limited to scheduling, testing, and validation.

The contractor shall provide real-time end-to-end testing and troubleshooting of all communication links. The contractor shall maintain a comprehensive set of tools and communications test equipment (such as oscilloscopes, meters, and analyzers) in sufficient quantity to conduct troubleshooting and testing activities for multiple operations in separate locations. The contractor shall provide all necessary resources to rapidly transport and deploy, in 30 minutes or less, test equipment to any customer locations at CCAFS, KSC, and VAFB.

The contractor shall install, operate, and maintain communications equipment for Asynchronous Transfer Mode (ATM), Telephone Digital Hierarchy (T-Carrier), mission and administrative Ethernet LAN equipment, analog and digital multiplexers. Equipment maybe located at

space launch complexes, PPFs, and other remote facilities to satisfy payload requirements.

The contractor shall operate the MDC Timing system in support of major tests and launches. MDC Timing system operation shall be conducted under the guidance of the Mission Operation's Director.

The contractor shall provide communication services for the public affairs video and audio production and satellite uplink activities for all NASA sponsored missions. This shall include all required planning of external contractor video and audio productions and technical support to interface equipment with NASA communication and video circuits.

At VAFB, the contractor shall operate and maintain the antennas and RF assets, including the 28 foot dish/tracking antenna. Also, the contractor shall operate and maintain the 450 ft structure at VAFB for the purpose of antenna mounting, antenna alignment, cable installation, antenna system maintenance, and tower structure assessment.

Performance Standards:

Voice, video, timing, or data downtime resulting from equipment failures internal to NASA ELV facilities shall not exceed 15 minutes. During launch operations, this downtime shall not exceed 5 minutes. A circuit is considered down if it does not meet commercially accepted standards for that application.

Total downtime of NASA ELV User communications due to ELV contractor-fielded support equipment shall not exceed 1% of total operational time. During launch operations, this downtime shall not exceed 0.5% of total operational time.

Loss of communications resulting from failures of external service providers shall be identified and isolated in less than 15 minutes and appropriate coordination steps taken to correct the failure.

7.1.2 Telemetry Systems

The contractor shall provide time-tagged reception, recording, processing, and display of all incoming telemetry data. Telemetry data shall consist of: FM/FM telemetry, PCM/FM telemetry and separate analog signals. This data shall arrive via hard-line, fixed RF antenna, NASA Integrated Services Network (NISN), Internet-protocol Operational Network (IONET), or modem. The contractor shall provide playback telemetry data support including displays and stripcharts as required by NASA.

Equipment available to accomplish this task includes RF receivers, discriminators, bit synchronizers, decommutators, a high speed data sharing bus (Link Mux), wideband analog recorders, an in-house

developed telemetry processing computer system Computer-Aided Record and Display System (CARDS), a telemetry display system using in-house developed software Enhanced Telemetry Display System (ETDS), pen-based stripcharts, and thermal array stripcharts.

The contractor shall provide operation, regular maintenance, and sustaining engineering of assigned NASA ELV RF assets at KSC, CCAFS, and VAFB such as, but not limited to, receivers, antennas, modulators and demodulators. The contractor is expected to participate in activities by the Checkout, Assembly and Payload Processing Services (CAPPS) contract for troubleshooting and major RF system upgrades.

The contractor shall plan, develop, maintain, and troubleshoot software on the telemetry processing systems as required.

The contractor shall create and maintain the required initialization files to properly process and display all incoming telemetry. These initialization files shall include but are not limited to measurement descriptions, conversion coefficients, frame descriptions, stripchart channel assignments, and telemetry display page descriptions. These files shall be available on the administrative LAN to NASA with the appropriate security controls.

The contractor shall provide an interface with LSPs to maintain correct initialization of all telemetry processing equipment and conversion of initialization data form LSP proprietary data formats. The contractor shall provide appropriate control of all sensitive and proprietary data.

The contractor shall perform software maintenance on both the telemetry processing system (CARDS) and the display system (ETDS) to enhance capability and performance as requested by NASA. The current CARDS system is based upon 68040-based computers running Commodore AmigaDos. The CARDS upgrade system under development is based upon Sun Solaris and VxWorks computers. The ETDS software operates under Microsoft Windows NT/2000. All software is written using C/C++ compilers.

The contractor shall create and maintain processed telemetry data capture files of all launches and major tests. These capture files shall include all PCM telemetry frames recorded and all FM and analog data received at 500 samples per second or better. The contractor shall archive all processed telemetry to LAN-based servers and maintain it in an appropriate format for subsequent playback and analysis by NASA. These capture files shall be available to NASA on the administrative LAN with appropriate security controls.

The contractor shall provide analog recording and reproduction of unprocessed telemetry data and timing. The contractor shall make copies of these tapes as requested by NASA and deliver them to the

appropriate destination. The contractor shall create and maintain a set of paper stripchart recordings for all major tests and launch attempts, and copies of these recording will be delivered to the appropriate destination. With NASA concurrence, the contractor shall create and implement a schedule for the storage and destruction of these tapes as appropriate.

Performance Standards:

User consoles unable to display telemetry data shall be repaired, replaced, or reassigned within 15 minutes. During launch operations, this downtime shall not exceed 5 minutes.

Telemetry recordings of all received data shall not exceed 1% data loss during periods of expected telemetry as defined by link-loss analysis. Redundant recording equipment shall be used to satisfy this requirement.

Stripcharts being used to record telemetry data shall be repaired, reassigned, or replaced within 15 minutes of the loss of capability. During launch operations, this downtime shall not exceed 5 minutes.

During major tests, telemetry displays and stripchart recordings shall accurately show raw and processed values for at least 95% of all measurements processed. An allowable exception is for stripcharts or display page changes requested within one day of a major test.

Requested stripchart playbacks shall be scheduled and started within 4 hours of the request from NASA telemetry. For any playbacks that require longer than 4 hours to complete, the contractor shall notify the playback requestor of the time of completion.

Telemetry data playbacks that do not require stripcharts shall be started within 30 minutes of the request from NASA Telemetry.

Data tapes of recorded unprocessed telemetry data shall be retained according to Launch Data Acquisition Desk Procedure for media retention.

7.1.3 Repairs for IPP

The contractor shall be responsible for all maintenance and repairs on all Communications and Telemetry Installation Accountable Property (IAP) up to the limit of $500 per maintenance or repair activity, not including contractor-provided labor. The contractor shall utilize in-house labor to the fullest extent possible to effect repairs of IAP. For maintenance or repair activities over $500, the contractor will be reimbursed for incurred costs on a non-fee bearing basis. The contractor shall coordinate with NASA to accomplish a cost-effective and prompt repair. Also, the

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contractor shall have written concurrence from the Government assigned technical monitor prior to authorizing maintenance or repair on equipment that exceeds $500.

Representative examples of allowed maintenance include hardware and software upgrades to improve longevity of systems, maintenance agreements with equipment manufacturers for technical support, streamlined equipment repair and other maintenance services, software patch support, firmware upgrades, component parts incidental to the repair work, calibration, and licensing associated with use of the products.

The contractor shall establish all maintenance, repair, service agreements and calibration agreements/subcontracts that the contractor deems necessary for the operation and maintenance of SOW Section 7.0 equipment that is identified in Section J, Attachment J-4a, IAP.

Performance Standards:

No scheduled operation shall be impacted due to equipment not being operationally ready.

7.1.4 Configuration Management

The contractor shall create and maintain a complete set of detailed drawings for user requested communications circuits. For each scheduled operation, the contractor shall create and maintain a complete set of documentation identifying the configuration of all support equipment required for the operation including but not limited to all telemetry lab equipment, telemetry processing and display computers, digital voice switch, video switch, and CSU/DSUs, Muxes, and network equipment.

Performance Standards:

Documentation shall be accurate, professionally prepared, and delivered per NASA schedule.

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7.2 Upcoming Launches Scheduling, Planning, and Status Reporting

The contractor shall create, maintain, and implement an integrated schedule for all the services provided for each scheduled mission. This schedule shall include estimates of completion dates for all open and pending activities for all missions within the next 6 months.

The contractor shall provide implementation plans for meeting mission communications and telemetry requirements including design drawings, procurement documentation, resource allocation, agreements with external service providers, and detailed scheduling.

The contractor shall maintain the ELV telephone status message. This status message shall detail the schedule for operations for the next seven days.

The contractor shall participate in technical interchange meetings to provide status to NASA and to receive customer requirements. The contractor shall also conduct facility and console familiarization presentations to NASA ELV customers.

The contractor shall participate in launch readiness reviews and briefings and provide presentations during these reviews on facility and equipment readiness status. The contractor shall provide readiness reports to responsible critical activity review boards and status including testing results, training, certification, hardware and software status, and procedures. Prior to each Flight Readiness Review (FRR) scheduled 5 days before launch, the contractor shall provide to NASA a detailed status of all equipment and resources required for the launch.

This launch status briefing shall include but not be limited to:

- Configuration of all support equipment
- Version identification of all software
- Identification of all technical leads
- Any issues/concerns which may impact launch support
- Brief summary of any equipment, resources, or services which shall be used for the "first time" to support a launch
- Brief review of any problems which impacted the last launch and the actions taken as a result of these problems
- A formal declaration of the capability to support from the contractor

The contractor shall create and make available a written post-test briefing for all launch attempts and major tests including, but not limited to Wet Dress Rehearsals, Sim Flights, and Flight Program Verifications. This briefing shall include but not be limited to the following:

- Descriptive information to identify the vehicle and a brief account of support provided
- Success or failure of test and reason for failure
- Summary of successes and problems with support
- List of all consumables (telemetry tapes, video tapes, stripchart paper, etc.) consumed by the operation

The contractor shall provide written problem reports describing any loss of support and including but not limited to the following:

- Symptoms of problem
- Diagnosis of problem
- Solution taken to correct problem
- Impact to ability to support with specific attention to loss of capability for supporting major tests and launches

The contractor shall keep a log of activities related to services and operations.

All required logs, briefings, reports, drawings and schedules shall be made available to NASA in an electronic format and shall be maintained in an on-line archive available over the administrative LAN, as noted in DRD-1, Access to Contract Data, Communications and Telemetry Functions. Organization of the on-line archive shall be coordinated with NASA. The contractor shall protect these records against unintentional alteration, loss. The contractor shall also secure against inappropriate access by personnel outside of NASA ELV.

Performance Standards:

Changes and updates shall be incorporated into all relevant logs, briefings, reports, drawings, schedules and plans no later than 5 working days after any change or update has occurred.

All relevant briefings, reports, drawings, schedules, and plans shall be validated prior to major operations for a mission.

The contractor shall place special emphasis on the proper handling of launch vehicle data and documentation. The contractor shall support and implement NASA Data Impound Plans for appropriate control of all launch vehicle data following a declared anomaly.

7.3 Technical Points of Contact (POC)

For each mission, the contractor shall have a single point of contact in the following areas:

- Telemetry operations,
- Real-Time data processing,
- Communications,
- RF Systems operations,
- Mission Operations Director,
- Data Impound Coordinator

These POCs shall be responsible for the following:

- Providing NASA status on contractor support for the mission,
- Coordinating operation of the service during major tests and launch attempts for the mission,
- Provide the post launch briefing for services provided for the launch,
- Provide the problem report and resolution for issues and concerns that affected mission support.

The contractor shall notify NASA of the selection of the POC's before mission planning and support begin and shall notify NASA of any changes to the POC designates as they occur. To the maximum extent possible, the contractor shall promote cross training of personnel to avoid single failure points.

7.4 Development Projects

The contractor shall support NASA-led development efforts including providing needed services for testing and qualification. The contractor shall support these activities by providing operation of the facility systems including but not limited to voice, video, data, and timing and by participating in design reviews to make sure operations concerns are factored into system design. The contractor shall monitor the life cycle of equipment to upgrade and replace the current support equipment.

The contractor shall provide real-time and playback telemetry data support, communications, timing, and equipment operation and maintenance support to NASA development efforts as required.

The contractor shall create and implement a plan to test NASA developed systems in preparation for their replacement of existing telemetry lab, real-time data system, or communication production systems. This test shall be created under the guidance and concurrence of NASA. Upon successful completion of this qualification test, the contractor shall accept the operation of this equipment for use in providing communications services to NASA LSP customers. The contractor shall also coordinate the excess of obsolete production systems according to established government guidelines.

7.5 Telemetry Station Computers and Networks Support

The contractor shall operate and maintain telemetry station computers running Windows and Unix, and shall also maintain the capability to plan, setup, administer, and troubleshoot operational Ethernet networks. The contractor shall designate an Information Technology Point of Contact (IT POC) for the coordination of all operational IT activities. The contractor shall assure that the IT POC has the appropriate skills to accomplish these activities.

The contractor shall provide IT security support as required by section 10.5.8 of this SOW.

8.0 Vandenberg Air Force Base Unique Support

The contractor shall provide all planning, management, manpower, and capabilities needed to operate and maintain all facilities, facility systems, and support equipment assigned to NASA at VAFB to provide base services and to satisfy support requirements for NASA payload customers and NASA resident and transient personnel.

Core work for VAFB is defined as the engineering, operations, and maintenance activities needed to maintain the facility, facility systems, and support equipment ready to support operations. Support to NASA LSP customers shall be available during core work hours. VAFB operations support outside the core work hours shall occur in support of mission test and launch activities, and will be called up as approved by NASA issuance of task orders for Mission Direct Support Services defined under Section 9.0.

There may be extended periods where VAFB support to mission testing and launch activities will not be needed. During these periods the core work activities needed to support operations will be lessened. Other activities shall be supported during these periods including, but not limited to, backlog of maintenance and repair of facilities, facility systems, and support equipment; maintaining the readiness of mission payload customer test equipment; and

advance configuration of facilities, facility systems, and support equipment for mission support.

8.1 Facilities, Facility Systems, and Support Equipment at VAFB

8.1.1 Operations and Maintenance

The contractor shall provide all functions of operations for all assigned facilities at VAFB as specified in Attachment J-3.

The contractor shall be responsible for the safe, reliable, and efficient operation of all assigned fixed and portable structures, facilities, systems, and equipment to include, but not be limited to the following:

- Electrical distribution systems,
- Potable and fire suppression water systems,
- Septic systems,
- Furniture,
- Lighting systems,
- Non-interruptible power supply systems,
- Backup electrical generation systems,
- Heating, ventilation, and air conditioning systems including boilers, chillers, air handlers, and all associated plumbing, ducting, and control systems

The contractor shall establish all maintenance, repair, and calibration agreements/subcontracts that the contractor deems necessary for the operation and maintenance of the facilities, facility systems and equipment identified in Section J Attachments J-3 and J-4."

The contractor shall operate and maintain the Facility Management System (Andover) for the monitoring and control of facilities, systems, and equipment by authorized personnel. The contractor shall ensure the computer system and associated network is maintained and tested such that it is fully operational any time flight hardware is in an Andover-supported facility. The contractor shall ensure that the Andover computer system and associated software are and remain compatible.

The contractor shall operate and provide routine maintenance of all VAFB IPP. The contractor shall operate lifting equipment such as cranes and hoists and perform proof-load testing. When required, the contractor shall proof-load payload customer equipment. The contractor shall document results and provide NASA access to data related to maintenance records, troubleshooting efforts, problem causes, and corrective actions taken, proof-test certificates, operational and test procedures, and test data records in accordance with DRD-1, Access to Contract Data, Maintenance Records.

The Contractor shall provide operation and maintenance management of two NASA-owned 6,000-psi tube-bank trailers at VAFB and one gaseous nitrogen system located at Building 1610. Maintenance shall be performed at a level to maintain the pressure vessels' certification. Personnel certified for work on high-pressure gas systems shall perform tube-bank operation. The Contractor shall make connections for high-pressure gas supply at support locations on VAFB and shall properly configure components such as high-pressure hoses, filters, regulators and gages as appropriate. The Contractor shall transport the tube-banks to locations inside VAFB for pressurization and/or for connection to a supply or purge systems as required for NASA mission support. The Contractor shall maintain certification and maintenance records per DRD-19, Pressure Vessel/System Certification Report.

The contractor shall provide a Certification of Facility Readiness as defined in DRD-24, Certification of Facility Readiness for all facilities used to support spacecraft processing.

The contractor shall collect, analyze, and prepare utility consumption reports and plans for submission to the Government in accordance with DRD-25, Energy Conservation Plan/Report.

Performance Standard:

Facilities shall be ready to support flight hardware processing operations at least 5 days prior to the scheduled use.

The contractor shall operate and maintain equipment in accordance with vendor operations and maintenance manuals, vendor data, and to best commercial standards.

The forklifts, facility hoists and cranes, and related material handling equipment shall be operated and maintained in accordance with Eastern-Western Range Safety Requirements (EWR 127-1) and NASA NSS/GO-1740.9B, Safety Standard for Lifting Devices and Equipment.

Equipment shall be operated and maintained according to 81K00268, Specification for External Cleaning, Corrosion Control and Protective Coating of Propellant Equipment; and KSC-SO-S-9, Standard for Retest and Refurbishment of Compressed Gas Trailers and Movable Storage Units. The contractor shall maintain pressure vessels sufficient to keep them certified. The Contractor shall provide tube-bank support safely, reliably and on time according to mission support schedules.

The contractor shall operate and maintain the existing carpentry and machine shop areas to provide services to NASA in support of the operations and maintenance activities for all facilities, facility systems, and

support equipment. The contractor shall operate and maintain the existing paint booth in accordance with all local, state, and federal regulations for such equipment.

The contractor shall provide electrician services to include, but not be limited to troubleshooting, reconfiguration, modification, and general maintenance of facility electrical systems.

The contractor shall take measures to avoid migratory bird nesting in NASA facilities in accordance with local, state and federal regulations.

The contractor shall be responsible for all repairs on VAFB Installation Accountable Property (IAP), Section J, Attachment J-4a. The contractor will not be reimbursed up to the limit of $1,000.00 per repair not including contractor-provided labor. The contractor shall utilize in-house labor to the fullest extent possible to effect repairs of IAP. For maintenance or repairs over $1000, the contractor will be reimbursed for incurred costs on a non-fee bearing basis. The contractor shall coordinate with NASA to accomplish a cost-effective and prompt repair. The contractor shall obtain written concurrence from the Government assigned technical monitor prior to authorizing maintenance or repair activities on equipment that exceeds $1,000.

The contractor shall establish all maintenance, repair, service agreements and calibration agreements/subcontracts that the contractor deems necessary for the operation and maintenance of SOW Section 8.1.1 equipment at VAFB that is identified in Section J, Attachment J-4a.

8.1.2 Maintenance Management

The contractor shall provide maintenance management services and implement a comprehensive proactive maintenance program incorporating the Reliability-Centered Maintenance (RCM) philosophy for all assigned facilities, systems, and equipment, as described in NPG 8831.2, NASA Facilities Maintenance Management. Implementation of RCM program shall ensure continued operations for mission support and long-term Government asset protection and prevent the consequences of degradation and critical equipment breakdowns.

The contractor shall identify and document immediately upon discovery all real time problems related to mission-critical and safety-critical facilities, systems, and equipment. The contractor shall coordinate resolution with all affected parties, including other contractors, to ensure effective responses and to provide mitigation. The Contractor shall provide a monthly report describing activities in this area as specified in DRD–31, Facilities, Systems, and Equipment Maintenance Report to the Government.

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The contractor shall demonstrate the condition of the assigned facilities, systems, and equipment through regular condition assessments provided to NASA as defined in DRD-7, Facility Condition Assessment Report and DRD-17, GSE Condition Assessment Report.

On an annual basis, the contractor shall review all existing and proposed modification projects/new projects that cost in excess of $50,000. The contractor shall provide to the Government an up-to-date list of proposed capital improvement upgrades to facilities, as described in DRD-23, Facility Modifications Design and Construction Plan). The items on the list shall be ranked in order of priority (as determined by the contractor), and include estimated costs, year proposed, and rationale for submission and priority. In addition, in adherence to NPG 8820.2C, the Plan will include design costs for the proposed projects 2 years before the scheduled midpoint of construction date.

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The Contractor shall obtain necessary approvals for all work accomplished on VAFB facilities for which the Contractor has maintenance management responsibilities.

The contractor may be required to provide maintenance and repair in cases where the USAF Base Civil Engineering (BCE) services (reference Attachment J-3) where the USAF support cannot be obtained in a prompt manner. In these cases services will be acquired through fixed price task orders issued by the Government as specified in Section 11.0.

Performance Standards:

Mission-critical and safety-critical facility and equipment problems shall be identified and documented promptly upon discovery and NASA shall receive notification within one hour of discovery.

Critical problem solutions shall be promptly addressed and pursued as necessary to maintain essential support and capability.

All required approvals shall be completed in time for work to start as scheduled.

Repairs to facilities and equipment shall be made in a prompt manner to meet mission support requirements.

8.1.3 Sustaining Engineering

The contractor shall provide all necessary sustaining engineering services to include safety analysis, configuration management, preparation and tracking of Engineering Order and Engineering Support Request, reliability analysis, and maintainability analysis to ensure economical operations and maintenance of all assigned facilities, systems, and equipment.

The contractor shall release engineering documentation through the NASA KSC Technical Documentation (TechDoc) System and provide documentation to USAF Base Civil Engineering (BCE) for all NASA VAFB equipment and facility modifications within 30 days of implementation completion, DRD-1, Access to Contract Data – Released Drawing Revisions. In addition the contractor shall acquire new engineering documentation generated by the USAF BCE for NASA assigned facilities and release it in the NASA KSC TechDoc System within 30 days of receipt.

The contractor shall operate the Computer-Aided-Design (CAD) System to maintain facility configuration drawings and communications equipment configuration documentation of special payload requirements.

Performance Standard:

The configuration of and changes to facilities and systems shall be documented and maintained within 30 days of a permanent modification.

VAFB documentation shall be maintained current in the NASA KSC TechDoc system.

3.2 Base Operations Services

3.2.1 Administrative Support

The contractor shall provide reproduction services and operation and maintenance of reproduction equipment. The contractor shall report reproduction equipment usage and problems monthly.

The contractor shall provide United States Postal Service and VAFB internal mail pickup and delivery.

The contractor shall coordinate NASA personnel, customer, and contractor telephone requirements, change requests, and trouble reports with the USAF 30th Communication Squadron.

The contractor shall obtain photo and video services from the USAF 30th Visual Flight and provide coordination to satisfy NASA personnel, customer, and contractor photo and video requirements.

Performance Standards:

Reproduction products are delivered on time as specified by NASA.

United States Postal Service and VAFB internal mail pickup and delivery shall be performed once per operations day.

3.2.2 Conference Room Equipment

The Contractor shall input and coordinate scheduling requests for Video Teleconferencing Systems (ViTS) locations and serve as a scheduling point of contact for ViTS conferences scheduled by other centers. The Contractor shall maintain the ELV ViTS in ready operating condition. The Contractor shall set up and activate ELV ViTS according to the system

conference schedule. The Contractor shall operate the ViTS during television conferences.

The Contractor shall schedule and prepare ELV conference rooms and related presentation equipment for use as requested at VAFB.

8.2.3 Graphics Services

The contractor shall provide computer and manual graphics (drafting). This shall include, but not be limited to facility and equipment illustrations, organization charts, certificates, photograph, guest badges, and guest bus placards.

8.2.4 Transportation Services

The contractor shall manage transportation services to meet all operations requirements to include, but not limited to spacecraft servicing equipment on site at VAFB. The contractor shall maintain the special skill certifications to drive tractor/high pressure gas tube bank trailer truck and to transport hazardous materials/wastes.

The contractor shall provide maintenance/repair coordination services for the GSA vehicles assigned to the NASA Resident Office.

The contractor shall provide transportation services for assembly, setup, moving, and reconfiguration of facility furnishings.

8.2.5 Shipping and Receiving

The contractor shall provide services to include shipping, receiving, packing and crating, pick up and delivery of supplies, materials, equipment, and flight hardware. The contractor shall receive all mail, packages, and truck shipments, check for damage, and notify end user of its arrival. The contractor shall provide shipment services including overnight and point-to-point package delivery.

Performance Standards:

Hazardous items utilized by the project and its customers shall be packed and transported in accordance with applicable local, state, and federal regulations.

8.2.6 Janitorial Services

The contractor shall provide janitorial services in administrative office and operational areas excluding Clean Rooms and maintain all assigned areas safe, orderly, and clean. The contractor shall provide additional janitorial services during launch campaigns and working group meetings.

The contractor shall respond to all requests for clean up and replenishment of supplies.

8.2.7 Laboratory Services

The contractor shall operate and maintain gas-sampling equipment and obtain gas samples from tube bank trailers and K-bottles and coordinate chemical analysis from USAF Chemical Laboratory at VAFB.

8.2.8 Non-Destructive Evaluation (NDE) Services

The contractor shall provide test and inspection services including in situ NDE. The contractor shall provide a written report detailing inspection results, as noted in DRD-1, Access to Contract Data, NDE Report.

The contractor shall perform non-destructive evaluation of handling equipment after structural modification and proof-load testing. The dye penetrant inspections shall be in accordance with American Society for Testing and Materials Standard Practice for Liquid Penetrant Examination (ASTM E 1417-99). Personnel performing the evaluation shall be trained in accordance with American Society for Nondestructive Testing (ASNT) documents ASNT CP-189-1991 "Standard for Qualification and Certification of Nondestructive Testing Personnel" and SNT-TC-1A "Recommended Practice for Personnel Qualification and Certification in Nondestructive Testing."

8.3 Security Services

The contractor shall manage all necessary services and equipment needed for security, access permits/badges, and locksmith services. The contractor shall operate and maintain a system for making and issuing personnel picture badges for contractor and subcontractor personnel. The contractor shall seek approval from the USAF and NASA for the badge design.

The Contractor shall actively participate in the THREATCON and INFOCON activities at VAFB.

The contractor shall provide and implement DRD-27, Security Plan for all necessary services and equipment for security, access permits/badges, and locksmith services.

Performance Standards:

The capability to secure any NASA facility shall not be compromised. The contractor shall comply with NHB 1620.3C, NASA Security Handbook.

8.3.1 Permits and Badges

The contractor shall provide area access permits/badges for contractor employees and temporarily assigned payload customers and other visiting personnel for access to payload or flight hardware processing areas. The contractor shall maintain records of badges issued and account for the non-issued badge stock, as noted in DRD-1, Access to Contract Data—Permits and Badges. The contractor shall assure that any person being issued an access badge has received the appropriate Safety training required for the corresponding location to be visited.

The contractor shall provide controlled area permits/badges/entry authorization lists, DRD-1, Access to Contract Data—Authorization Lists, when required by customer projects within NASA facilities assigned to the contractor. The contractor shall verify that personnel obtaining permits, badges, or inclusion on an entry authorization list meet the requirements for unescorted access within the controlled area.

The contractor shall provide badge requests for contractor personnel for access to USAF restricted areas.

Performance Standards:

Entry authorization lists shall be updated and released within 4 working hours of any change. When badges and area access permits are required, they shall be produced within one working day of receipt of all required information

8.3.2 Lock and Key Control

The contractor shall provide lock and key control including periodic inventory of keys in the NASA/VAFB master key system, posting classified document containers, changing lock combinations, and maintaining key control records, DRD-1, Access to Contract Data—Lock Control Records, for facilities where the contractor has operations and maintenance management responsibility.

Performance Standards:

All keys shall be inventoried annually.

8.3.3 Security Inspections

The contractor shall provide end-of-workday securing inspections for all NASA-assigned facilities specified in Attachment J-3 and log all security inspection efforts, as noted in DRD-1, Access to Contract Data—Security Inspection Log.

8.3.4 Guest Services

The contractor shall receive/screen requests for visits and process/maintain records of visit requests and authorization letters, DRD-1, Access to Contract Data—Guest Requests. The contractor shall coordinate with VAFB entry control personnel in accordance with USAF regulations to assure proper credentials are ready when the visitor arrives. The contractor shall be prepared to resolve and expedite entry control problems with VAFB security officials.

The contractor shall operate and maintain a system to provide foreign national escort services in support of payload operating schedules. The contractor shall be responsible for providing continuous escorting and transportation services for foreign national visitors while on VAFB property.

The contractor shall develop and maintain visitor control lists as required for access to specific areas controlled by USAF and other contractors. The contractor shall input data into the Visiting Personnel Security Database to include visiting personnel and their facility entry authorization at any given time.

8.4 Mission-Direct Support at VAFB

8.4.1 Payload Support

The contractor shall provide transportation services for spacecraft and flight hardware to the PPFs at arrival according to KDP-P-1101, Payload Processing Support at VAFB.

The contractor shall provide transportation and setup services for support equipment including the Launch Site Support Trailer as specified in K-ELV.13.3, LSST Ops Guide and K-ELV-13.5, LSST Transportation Procedure. The contractor shall coordinate transportation and setup services with Communications and Telemetry personnel.

For Pegasus missions, the contractor shall operate, maintain, and setup the Spacecraft Close-out Shelter (SCS) as specified in K-ELV-13.2, SCS Setup and Stowage Procedure and K-ELV-13.4, SCS Operator's Guide.

8.4.2 Clean-Room Services and Cleanliness Requirements

The contractor shall prepare a Facility Contamination Control Plan using K-STSM-14.2.1, KSC Payload Facility Contamination Control Requirements/Plan as a guideline (DRD-22). The contractor shall ensure that all Clean Rooms (Bldg. 1610 and Bldg. 836) and clean work area facilities and associated support equipment meet payload customer cleanliness requirements using the. The contractor shall manage all

clean room operations to assure customers follow all established contamination control procedures. The contractor shall report facility environmental measurements in accordance with DRD-22.

The contractor shall provide complete and thorough cleaning of the Clean Rooms in preparation for moving flight hardware into the facility. The contractor shall provide assistance to customers in cleaning equipment prior to moving it into the clean room.

The contractor shall operate and maintain clean room particle counting equipment.

The contractor shall implement customer-produced contamination control plans. In the event the customer does not have a written contamination control plan, the contractor shall coordinate/implement contamination control requirements with the customer.

The contractor shall obtain certification of clean rooms by a nationally-recognized professional certifying authority prior to arrival of a payload requiring certified clean rooms to a PPF, but no more than annually.

The contractor shall make system parameter changes as requested by flight hardware customers to include, but not be limited to changes in temperature, air flow rate, and relative humidity. The contractor shall provide written reports and records of Andover-recorded parameters. The contractor shall monitor the Andover system continuously whenever flight hardware is present in and Andover-supported facility.

Performance Standard:

Flight hardware shall not be exposed to contamination levels in excess of those established in the approved mission contamination control plan for parameters under the contractor's control.

Cleaning shall be sufficient to assure the clean room meets customer contamination control requirements.

The contractor shall respond to alarm messages in an appropriate manner and time to assure flight hardware is not compromised.

8.4.3 Propellant Services

The contractor shall coordinate requirements for propellant handlers ensembles with the USAF and the USAF protective equipment maintenance and operations contractor. The contractor shall manage the scheduling of self-contained apparatus protective ensemble (SCAPE) and other propellant handlers protective equipment training for customers.

The contractor shall coordinate the pre-operations and post-operations servicing of spacecraft fueling equipment as specified in KDP-P-1101, Payload Processing Support at VAFB.

8.5 Environmental Compliance

The contractor shall ensure that NASA operations at VAFB are compliant with all applicable federal, state, county, NASA, and VAFB environmental rules, regulations, and management plans. The contractor shall maintain an environmental management program that closely interfaces with NASA and the USAF environmental management efforts. The contractor shall act as the technical point-of-contact (POC) and maintain a cooperative working relationship with USAF who has overall environmental compliance responsibility over all operations at VAFB. The contractor shall coordinate with USAF and NASA prior to contacting a regulatory agency related to environmental issues.

The contractor shall keep NASA informed of all environmental issues affecting NASA operations. The contractor shall represent NASA position in environmental meetings/working groups and provide to NASA evaluations/recommendations about the USAF position. The contractor shall work with the USAF to resolve discrepancies identified by environmental agencies.

The contractor shall provide environmental services to NASA for environmental programs. Services include technical regulatory consultation for interface with regulatory agencies; inspection of regulated facilities and systems; preparation of permits, reports, and other regulatory documents; and development and review of environmental documentation.

The contractor shall maintain an awareness of changing regulatory requirements to avoid citation for an environmental deficiency. The contractor shall support USAF Environmental Compliance Assessment Management Program (ECAMP) at VAFB and other audit/oversight programs. The contractor shall participate in environmental incident investigation boards.

The contractor shall coordinate with USAF any proposed new activities that may have environmental impact including facility modification, construction, or hazardous operations. The contractor shall comply with USAF VAFB environmental impact analysis process (AFI 32-7064). The contractor shall ensure all spacecraft customers and construction contractors working in NASA facilities meet all environmental compliance requirements. The contractor shall provide oversight and inspection to assure all spacecraft operations performed in NASA facilities meet all environmental compliance requirements.

The contractor shall monitor Air Force environmental remediation activities in and around NASA facilities and determine their nature, scope, and schedule. The contractor shall report these activities to NASA and determine if there is any potential impact to ongoing and planned NASA activities.

The Contractor shall comply with all applicable Federal, state, county, local, and territorial statutory and regulatory environmental requirements, including VAFB unique procedures, and Executive Orders applicable to NASA operations at VAFB. Orders involved include the following: energy efficiency, water conservation, hazardous materials usage reduction, hazardous waste generation reduction, environmental management systems, alternative fueled vehicles, protection of cultural and natural resources, environmental justice, and pollution prevention. Environmental media covered include the following: air pollution, wastewaters, solid and hazardous waste, storage tanks, pesticides, threatened and endangered species, storm water, drinking water, historical and archaeological resources, and any other applicable at VAFB.

The Contractor shall provide environmental services to NASA VAFB operations including:

- Written evaluation and assessment of projects for requirements of the National Environmental Policy Act (NEPA).
- Preparation of NEPA documentation, e.g., Environmental Assessments, Environmental Impact Statements.
- Written evaluation of processes to determine permitting requirements and preparation of permit applications when identified.
- Ensure environmental permits are current and operations are in compliance with permit requirements. Written recommendations for corrective action to correct non-compliances.
- Preparation and delivery of reports to meet regulatory deadlines, e.g., permit compliance reports, Emergency Planning and Community Right-to-Know Act (EPCRA) reports, Toxic Release Inventory (TRI) reports, etc.
- Inspection of regulated facilities and systems for compliance in all media areas. Written recommendations and track corrective action for identified non-compliances.

The Contractor shall be thoroughly familiar with all Federal, state, and local laws, rules, policies and regulations concerning environmental requirements:

- Review of current laws, rules, policies and regulations to ensure compliance.
- Review of proposed laws, rules, policies, and regulations to determine potential impacts to NASA operations and provide written record of review findings.
- Provide written comments and recommended revisions to NASA.

The Contractor shall establish a working relationship with County regulatory agencies to consult on interpretation of regulations. The Contractor shall interface with the Environmental Protection Agency and with other Federal and local agencies to ensure NASA operations at VAFB are in compliance with environmental regulations. The Contractor shall participate on environmental committees as assigned by NASA and provide reports to NASA.

The Contractor shall be responsible for management of hazardous materials throughout their life cycle at VAFB – procurement, usage, and disposal. They shall:

- Obtain approval from USAF VAFB for use of hazardous materials.
- Maintain records of storage and usage for emergency management purposes and EPCRA and TRI reporting.
- Maintain material safety data sheets (MSDS) for hazardous materials used and/or ensure that MSDS are given to central location.
- Ensure safe storage and use of hazardous materials including development of operational procedures for storage, use, and disposal.
- Control, package, and process hazardous and controlled wastes generated during NASA operations in accordance with Federal, state and local procedures and regulations.
- Provide training to NASA personnel, contractors, and customers concerning the handling and use of hazardous materials and wastes to meet Federal, state, and local training requirements. Maintain the training records in a manner compliant with Federal, state, and local requirements.
- Develop and maintain a Spill Prevention and Countermeasures Plan.
- Coordinate activities with the USAF VAFB asbestos program officer to ensure the proposed operations are properly permitted, that personnel are properly trained, and that proper mitigation measures are in place.
- Identify and label all electrical equipment with the potential to contain Polychlorinated Biphenyls (PCB). The contractor shall process all PCB-containing devices in accordance with federal, state, and local regulations.
- Identify any construction, renovation, or maintenance efforts where lead-based paint may be present or potentially disturbed or impacted. The contractor shall coordinate activities with the USAF VAFB lead-based paint program officer, and ensure that personnel are properly trained.
- Manage potential pathogenic hazards in NASA facilities. The contractor shall identify all potential pathogenic hazards in NASA facilities and determine mitigation measures to be taken and coordinate all such activities with VAFB 30th Aerospace Medicine Squadron Bioenvironmental Engineering Flight.

Performance Standard:

Contractor identifies all environmental issues that impact processing of NASA missions at VAFB. No project delays shall be attributable to lack of environmental planning on the part of the contractor.

NASA operations shall not be cited for an environmental deficiency not resolved by the contractor.

No NASA customer or construction contractors shall receive a notice of violation caused by insufficient or erroneous information provided by the contractor.

Records shall be maintained current and available on request.

9.0 Mission-Direct Services

9.1 Additional hourly support for Safety and Mission Assurance, Launch Site Support Engineering, and Technical Integration Services for Mission-Direct Support.

The contractor shall provide hourly support exclusively for mission related activities outside of the core work hours. The contractor shall provide this support at KSC, VAFB, Resident Offices at LSP locations, and other launch sites as identified by NASA including Kodiak, Alaska; Wallops Island, VA; and Kwajalein Island. The occurrence of these activities after core work hours is a result of payload customer and LSP schedules and shall include payload customer support for integration/testing of the payload/flight components at the PPFs, any major integration/testing activity during vehicle processing, any major spacecraft integration activities to the launch vehicle, and any launch campaign activities at the launch pad.

9.2 Additional hourly support for VAFB operations, troubleshooting, and repair activities for Mission-Direct Support.

For VAFB missions, the contractor shall provide hourly support for operations, troubleshooting, and repair of facilities, facility systems, and equipment exclusively for mission related activities outside of the core work hours. The occurrence of these activities after core work hours is a result of scheduled payload customer and LSP activities and shall include payload customer support for integration/testing of the payload/flight components at the PPFs, any major integration/testing activity during vehicle processing, any major spacecraft integration activities to the launch vehicle, and any launch campaign activities at the launch pad. Also included are unscheduled (call-out) troubleshooting and repair activities outside of core hours in support of mission related activities.

9.3 Hourly Support for Communications and Telemetry Outside of Core Work Hours

The contractor shall provide hourly support of telemetry, voice, video, data, and timing services for a single focused mission related operation only. This support shall be provided outside of the core work hours as detailed in Section 7.0. This support shall be limited to that required for major vehicle testing or launch support for one launch vehicle and its associated spacecraft. This service is not expected to entail multiple simultaneous operations support or full use of the station capabilities.

The contractor shall support the major test or launch attempt by providing all required deliverables for operations, troubleshooting, and repair (excluding regular maintenance) from Sections 7.1, 7.1.1, and 7.1.2 as they relate to the single launch vehicle and its associated spacecraft. These deliverables can

include, but are not limited to, the following as required to support the test and launch activities:

- Operate all audio and video systems to include recordings of all launch attempts
- Request and schedule communications circuits and support from the responsible organizations to meet all requirements
- Field support equipment to outfit communications circuits to satisfy customer requirements
- Activation and troubleshooting of cross-country communications circuits through commercial and government communications service providers
- Install and operate communications equipment for Asynchronous Transfer Mode (ATM), Telephone Digital Hierarchy (T-Carrier), analog and digital multiplexers
- Operate the MDC Timing system in support of major tests and launches under the guidance of the Mission Operation's Director
- Provide communication services for the public affairs video and audio production and satellite uplink activities
- Provide time-tagged reception, recording, processing, and display of all incoming telemetry data
- Create required initialization files to properly process and display all incoming telemetry
- Create processed telemetry data capture files of all launches and major tests
- Provide analog recording and reproduction of unprocessed telemetry data and timing
- Create a set of paper stripchart recordings for all major tests and launch attempts

Performance Standards:

Continuity with "Core Work Hours" operations shall be maintained if required.

Voice, video, timing, or data downtime resulting from equipment failures internal to NASA ELV facilities shall not exceed 15 minutes. During launch operations, this downtime shall not exceed 5 minutes. A circuit is considered down if it does not meet commercially accepted standards for that application.

Total downtime of NASA ELV User communications due to ELV contractor-fielded support equipment shall not exceed 1% of total operational time. During launch operations, this downtime shall not exceed 0.5% of total operational time.

Loss of communications resulting from failures of external service providers shall be identified and isolated in less than 15 minutes and appropriate coordination steps taken to correct the failure.

User consoles unable to display telemetry data shall be repaired, replaced, or reassigned within 15 minutes. During launch operations, this downtime shall not exceed 5 minutes.

Telemetry recordings of all received data shall not exceed 1% data loss during periods of expected telemetry as defined by link-loss analysis. Redundant recording equipment shall be used to satisfy this requirement.

Stripcharts being used to record telemetry data shall be repaired, reassigned, or replaced within 15 minutes of the loss of capability. During launch operations, this downtime shall not exceed 5 minutes.

During major tests, telemetry displays and stripchart recordings shall accurately show raw and processed values for at least 95% of all test measurements being processed. An allowable exception is for stripcharts or display page changes requested within one day of a major test.

Requested stripchart playbacks shall be scheduled and started within 4 hours of the request from NASA telemetry. For any playbacks that require longer than 4 hours to complete, the contractor shall notify the playback requestor of the time of completion.

Telemetry data playbacks that do not require stripcharts shall be started within 30 minutes of the request from NASA Telemetry.

Data tapes of recorded unprocessed telemetry data shall be retained according to published NASA standards for data retention.

9.4 Reduced Hourly Support for Communications and Telemetry Outside of Core Work Hours

The contractor shall provide reduced hourly support (skeleton crew) of telemetry, voice, video, data, and timing services for mission related support only. This support is usually either a communications activity or a telemetry activity with the associated underlying communications services. This support shall be provided outside of the normal "First Shift" support detailed in Section 7.0. This support shall be limited to that required for major vehicle testing or launch support for one launch vehicle and its associated spacecraft and is estimated to be approximately 10% of the effort as defined in Sections 7.1, 7.1.1, and 7.1.2.

The contractor shall support the test activities by providing all required deliverables for operations, troubleshooting, and repair (excluding regular maintenance) from Section 7.1, 7.1.1, and 7.1.2 as they relate to the single launch vehicle and its associated spacecraft to include test activities similar in nature to the following: Telemetry and Communications bent pipe operations, Public Affairs Office (PAO) production/Uplink, spacecraft Test support, spacecraft or launch vehicle simulations, Telemetry Playbacks, Displays, and Recordings. The outcome of this service shall be the successful support to the spacecraft,

PAO, or launch vehicle and results can include, but not be limited to telemetry display materials (stripcharts, electronic displays), recordings (magnetic tapes), or relay of (possibly re-formatted or processed) signals to a remote location (external customer or other NASA center).

9.5 Hourly On-Call Troubleshooting and Repair Support

The contractor shall provide a single point-of-contact (POC) that can be reached after core work hours to provide short term troubleshooting and repair of unattended equipment for which the contractor is responsible in support of spacecraft testing. This service is only required for customers located at either Eastern or Western ranges or commercial PPFs. The contractor shall remain at all times available for contact by the NASA customer. The contractor shall provide written status and problem reports to NASA at the completion of the on-call support detailing all problems and their resolution during the on-call period.

Performance Standard:

The contractor shall be continuously available to the customer when on-call.

If the problem involves contractor-operated equipment, the problem shall be resolved in a prompt manner and not to adversely affect the spacecraft or flight hardware.

If the problem involves equipment other than that operated by the contractor, the contractor shall determine the problem and notify the responsible organization within one hour. If the problem exists for longer than 2 hours or it has been determined that the problem will seriously impact spacecraft operations, the contractor shall notify NASA.

9.6 Guard Services at VAFB

The contractor shall provide for continuous (24 hours) guard services for NASA-sponsored payloads while processing in a NASA PPF per each access entry at all times. The contractor shall use authorized access lists and post orders detailing a minimum of tasks to be done to meet security requirements and exercise an emergency call tree.

Performance Standards:

At no time shall NASA-sponsored payload be left unattended within a NASA PPF. No unauthorized personnel shall have access to NASA spacecraft or flight hardware.

9.7 Access Control Monitors (ACM) at VAFB

9.7 Access Control Monitors (ACM) at VAFB

The contractor shall provide trained personnel to perform as Access Control Monitors (ACM) continuously (24 hours) when payloads are in the Hazardous Processing Facility (Bldg. 1610). The ACMs shall be responsible for monitoring personnel limits in the facility, enforcing safety constraints, logging facility anomalies, contacting appropriate people in response to an anomalous condition, and operating the video and communications systems within the Hazardous Processing Facility. The ACM shall not perform as a security guard. In the event of an anomalous occurrence, the established call tree shall be exercised.

Performance Standards:

No violations of personnel loading per established procedures during hazardous operations shall occur.

9.8 Satellite Uplink Services for NASA Public Affairs Support

For VAFB missions, The contractor shall provide mobile satellite uplink services for a NASA sponsored mission to support mission-direct activities including an end-to-end communications test prior to launch day and/or a launch attempt.

9.9 NASA Public Affairs Support

For VAFB missions, The contractor shall provide launch site viewing services for 50 guests (and additional guests in units of 25 guests) to NASA for one launch attempt. These services shall include processing of requests, set-up of a guest check-in area, arrange for tent/canopy, restroom facilities, chairs, drinking water and dispensers, TV monitors, public address system, traffic control, emergency medical service at the viewing area, transportation of guests, and conducting tours of the NASA facilities at VAFB.

9.10 Mission Communications: Voice and Data Support via Satellite

The contractor shall provide a commercial satellite link from one of the NASA LSP ground stations to a remote facility in support of an expendable launch vehicle mission. This link will transport launch vehicle, spacecraft, or ground systems voice and data from the remote facility to the contractor-operated facilities at either Building 836 at VAFB, CA, or Hangar AE at CCAFS, FL. This link shall be either one-way (simplex) or two-way (full-duplex) as required for mission support. In support of this task, the contractor shall provide the following:

- Leased space segment transponder time sufficient to include link verification testing, all ground tests, and launch support, as well as a plan for additional time as required for launch delays;
- All satellite ground terminal equipment necessary to support the link, including spares as necessary, to appropriately manage risk while utilizing NASA-owned equipment to the maximum extent possible;
- Transport of all equipment to and from the designated operational location(s);
- Personnel to operate the ground terminals with the appropriate experience in satellite uplink and downlink operations to manage real-time operations and troubleshooting;
- Operation of the satellite link, including dataflow testing to verify readiness and real-time support of mission tests and launches;

- An Operations Plan for each mission support activity that details all technical requirements, travel details for personnel, transportation schedules for equipment, and risk management details. The Operations Plan shall also include a list of hardware spares required, and operator training and/or experience.

The Operations Plan shall be kept updated through the end of the mission. This plan shall describe oversight of support readiness prior to mission use and shall provide lessons-learned after the mission is complete.

All technical details shall be coordinated through the NASA LSP Chief of Ground Systems Integration or delegate.

10.0 Vehicle Engineering and Analysis

The contractor shall perform engineering and analyses for the NASA ELV Program. The contractor shall review and evaluate Launch Service Provider (LSP) tasks and products delivered as part of each expendable launch vehicle launch service so that the NASA ELV Vehicle Engineering Division can provide approval of mission unique items and a knowledgeable "go/no-go" for NASA missions as specified in NPD 8610.23. The requirements in Section 10.0 apply in their entirety to Sections 10.1, 10.2, and 10.3.

The contractor shall evaluate the LSP's launch vehicle systems design, analyses, manufacturing, verification, validation, assembly, integration, testing, checkout, and launch preparations for compliance with applicable requirements and robustness in the areas of performance, safety, reliability, and quality. The contractor shall assess both core vehicle and mission specific items implemented by the LSP as part of the ELV launch service for compliance with applicable

interface control documentation, industry best practices, NASA launch service contract technical requirements, and the LSP's own internal design and qualification guidelines. The contractor shall document the results of these evaluations, identify any perceived deficiencies, and recommend corrective actions. Technical evaluations and assessments specified in sections 10.0 thru 10.3 shall be provided by the contractor using the Engineering Review Process (K-ELV-2.6), Project Risk Management Plan (K-ELV-12.2), ELV Project Monthly Status Review, ELV Project Monthly and Quarterly Risk Reviews, and technical reports delivered to NASA. As required, the contractor shall prepare and deliver technical briefings to spacecraft and launch vehicle external review teams. In addition, the contractor shall provide informal technical interchange with NASA to provide status and immediately communicate any significant issues. By identifying all significant issues that could potentially impact mission success, schedule milestones, and cost, the contractor's communications shall enable NASA to resolve the technical issues and risks associated with the launch service.

In accordance with the requirements for technical evaluations, assessments and interchange, the contactor staff shall reside at KSC except as specified in Section 10.3.

The contractor shall have the ability to investigate and evaluate the design, modification, development, and implementation of all launch vehicle systems, ground support systems and equipment at all ELV and payload processing facilities and launch complexes used to provide ELV launch services to NASA. The contractor shall review, evaluate and provide an assessment of launch vehicle systems where NASA identifies a requirement for technical insight into the development, design, manufacturing. testing, integration, and launch of the affected systems and launch vehicle.

The contractor shall participate in LSP run reviews and payload customer reviews, which are chaired by NASA ELV personnel, in order to provide technical evaluations and recommendations of the designs, analyses, manufacturing methods, tests, and operations presented at those technical meetings. The meetings include technical interchange meetings (TIM), mission integration working groups (MIWG), preliminary design reviews (PDR), critical design reviews (CDR). design certification reviews (DCR), Quarterly Program Reviews (QPR), Payload Planning Meetings, Payload Ground Operations Working Group (GOWG), Safety Review Meetings, Flight Readiness and Launch Readiness Reviews.. Prior to attending the review, the contractor shall review available requirements, specifications, and drawings as they relate to the existing configurations and the proposed design. The NASA review chairman shall be informed of items reviewed in preparation for the review and potential issues that may arise during the review. After the review, the contractor shall document an assessment of. the proposed design and its ability to meet performance, producibility, and schedule requirements, including appropriate identification of risk for NASA's management of the risk.

The contractor shall review, evaluate, and provide technical assessment of all required LSP documents delivered as part of the integration of each ELV mission so NASA can approve items specified in the launch service contracts (e.g., CDRLs, MIWG minutes and action items). .The contractor shall be well versed in analyses methodologies used by all NASA LSPs. For assessments of LSP CDRLs, the contractor shall provide a written report to the NASA Mission Integration Team to include a summary of the CDRL reviewed, rationale for agreement or disagreement, ground rules used for any contractor analysis performed, results and sound explanation which corroborate contractor analytic results, final conclusions and recommendations, and appropriate identification of risk and risk rating. At a minimum, the contractor shall identify all significant issues that could potentially impact mission success, schedule milestones, or cost for NASA resolution with the LSP.

Throughout the life cycle of each NASA ELV mission, from identification of mission requirements until completion of post-launch data review, the contractor shall gather data from LSPs and spacecraft customers as well as perform their own independent research. The contractor shall evaluate and assess mission specific launch vehicle systems, mechanical and electrical interfaces, mission-specific software, predicted spacecraft environments, and LSP actions for NASA ELV missions. . Contractor technical assessments shall be provided to NASA for NASA resolution with the LSP.

Throughout the build cycle for each NASA launch vehicle, from design requirements developrnent until completion of post-launch data review, the contractor shall participate in NASA and LSP technical activities and take all other steps necessary to maintain a knowledge base adequate to ensure prompt, accurate and complete evaluation of all flight and ground system technical issues or anomalies effecting NASA missions. The assessments shall include documentation of discrepancies, dispositions and corrective action plans. This requires knowledge for all ELV systems utilized by the ELV Program Office, including knowledge of specific vehicles assigned to NASA and to non-NASA missions. .

For launch vehicles undergoing certification to NPD 8610.7, the contractor shall gather data from the LSP, perform their own independent research and analyses, and evaluate the launch vehicle in accordance with KSC documents K-ELV-10.2 "Launch Vehicle Certification", K-ELV-10.3 "Launch Vehicle Certification Plan" and the specific launch vehicle certification plan generated by NASA. The contractor shall review, evaluate, and provide technical assessment of all required LSP documents delivered as part of the certification effort. The contractor shall prepare Engineering Review Board packages and supporting reports which document the contractor's evaluation of the LSP's compliance with the certification requirements. The contractor shall participate in NASA ERB's, Project Decision Meetings, and other management or independent reviews to provide technical interchange with NASA on the contractor's assessment of the LSP's compliance with the certification requirements.

The contractor shall gather data, review telemetry, research requirements, review as-built documentation and as-run procedures, and perform any other investigative steps necessary to prepare and present evaluations to NASA-chaired Failure Review Board (FRB) meetings in the event of a failed mission. Evaluations of anomalies shall be presented to the KSC Engineering Review Board. The contractor shall evaluate the failed or anomalous systems in order to aid the determination of root cause so that NASA can direct or approve LSP corrective action plans and/or return-to-flight activities.

10.1 Mission Analysis

The contractor shall provide rapid, accurate, and complete assessments of analytical items throughout the life cycle for each NASA ELV mission and build cycle for each NASA vehicle. The contractor shall perform reviews of LSP provided documents in order to ensure prompt technical assessments of all relevant issues that arise during the integration process. Evaluation of these issues may require the contractor to perform an independent analysis in order to verify or better understand the LSP data. Documentation of evaluations and recommendations to NASA shall be as defined in Section 10.0 such that NASA approval of analyses and/or direction to the LSP for corrective actions can be accomplished. The analytical areas that shall be covered include the following:

- Loads and Structural Dynamics
- Dynamic Environments
- Stress
- Flight Design
- Flight Software
- Controls and Stability
- Thermal/Thermodynamics
- Electromagnetic Compatibility
- CFD/Aerodynamics

As specified in section 10.0, the contractor shall evaluate LSP analyses for compliance with applicable mission and vehicle requirements for each of the disciplines listed above so that the NASA Vehicle Engineering Division can provide prompt approval of mission unique items and a knowledgeable "go/no go" for NASA missions as specified in NPD 8610.23. The contractor shall evaluate and provide technical assessments to NASA of the relevant LSP CDRL's, vehicle system design, testing (such as that required for flight software or environments), robustness in the areas of performance and reliability, and post flight data.

For each discipline listed, the contractor shall also perform a review of required data and document this review as described in Section 10.0 for vehicle certification activities. Independent analysis, as directed by NASA, may also be required for certification.

Review and or analysis shall be performed as required for trade studies during the advanced mission phase and pre-advanced Orbital Space Plane (OSP) program feasibility phase in order to establish technically credible options for NASA to pursue with the LSP and spacecraft customer. The contractor shall document all ground rules, recommendations and conclusions as described in section 10.0 for CDRLs.

For all of the disciplines listed above, specific technical expertise required by the contractor shall include the ability to:

- Develop and create complex vehicle models
- Simulate these models using relevant code
- Modify or update analytical code as required
- Understand the LSP tools and models such that input and output files can be reviewed efficiently and accurately.
- Review incoming reports and perform analytical checks as required

Technical issues and data shall be communicated to the Mission Integration Team as well as the appropriate teams that comprise the disciplines listed.

10.2 Vehicle Systems Engineering

The contractor shall provide rapid, accurate, complete assessment of vehicle systems issues and provide notification to the NASA Vehicle Systems Lead and the NASA Chief Engineer in accordance with the Engineering Review Process. As specified in section 10.0, the contractor is responsible for reviewing and evaluating LSP tasks and products so the NASA Vehicle Engineering Division can provide prompt approval of mission unique items and a knowledgeable "go/no-go" for NASA missions as specified in NDP 8610.23. The contractor's vehicle systems engineers shall evaluate and provide technical assessments of the LSP_launch vehicle systems design, analyses, manufacturing, verification, validation, assembly, integration, testing, checkout, and launch preparations for compliance with applicable requirements and robustness in the areas of performance, safety, reliability, and quality.

The contractor shall provide expertise in the following areas:

- Electrical/Avionics Engineering: electrical wiring avionics boxes, guidance and control systems, vehicle instrumentation, vehicle telemetry, vehicle Radio Frequency (RF) systems vehicle power systems, data acquisition/handling systems and Ground Launch Control Software, and electrical ground support equipment.

- Mechanical/Structural Engineering: structures, composite materials, payload adapters, mechanical separation systems, pneumatics systems, hydraulics systems, liquid and solid propulsion systems, ordnance systems, and contamination control methods.

10.2.1 Electrical/Avionics Engineering

The contractor shall assess flight and ground ELV electrical and avionics systems for NASA's determination of their readiness for launch. The contractor shall determine failure trends of components and investigate latent defects.

The contractor shall assess mission unique requirements imposed on the design, modification, development, implementation, and flight performance of all electrical and avionics systems.

The contractor shall participate in , and assess launch vehicle processing, payload integration and testing activities at both the launch site and at payload customer facilities (e.g., fit-checks) to verify overall LSP compliance with test procedures and acceptability of test results

The contractor shall document their evaluation and engineering analyses of the LSP existing and proposed ground launch control systems and verification of Flight Constants and Flight Program loads into the launch control system flight buffers.

The contractor shall review and document all changes to flight buffer contents, software trouble reports, software change logs, and software procedures. Verify and document that all test documentation satisfies requirements throughout the launch control system and software configuration of the launch control computers, as well as the firmware configuration of pad PLCs.

The contractor shall assess data from powered launch vehicle tests, and perform telemetry and flight/ground instrumentation analyses.

0.2.2 Mechanical/Propulsion Engineering

The contractor shall assess flight and ground ELV mechanical and structural systems for NASA's determination of their readiness for launch. The contractor shall determine failure trends of components and investigate latent defects.

The contractor shall review and assess mission unique requirements imposed on the design, modification, development, implementation, and flight performance of all mechanical and structural systems.

The contractor shall participate in and assess launch vehicle processing, payload integration and testing activities at both the launch site and the payload customer facilities (e.g., fit-checks, environmental testing, payload shock testing) to verify overall LSP compliance with test procedures and acceptability of test results. In addition, the contractor shall evaluate and make recommendations on payload mechanical compatibility drawings for human access verification.

The contractor shall participate in and assess LSP plans to comply with mission cleanliness requirements in processing facilities, during transportation and payload/ELV integration, and under fairing environments. The contractor shall provide expertise in materials utilization/compatibility with mission unique requirements according to contamination control plans.

10.2.3 Electronic Drafting

The contractor shall provide electronic drafting capability to create, design and maintain 2-dimensional (2D) and 3-dimensional (3D) drawings (I-DEAS, ProE, Autocad, Microstation, etc.). The contractor shall develop and maintain diagrams, schematics, modeling for accessibility and/or feasibility assessments for mission integration requirements and launch vehicle systems, as noted in DRD-1, Access to Contract Data—Electronic Drafting Products. The contractor shall provide diagrams, schematics and modeling studies as part of the Engineering Review Process and the Mission Integration activities. Results to be supplied on hard copy and electronically to NASA.

10.3 Resident Offices

The contractor shall provide rapid, accurate, and complete assessment of technical issues uncovered within selected LSP facilities and notification to the NASA resident office members and the NASA KSC Vehicle Systems Lead. In order to maintain insight into the LSP facilities, and a knowledge base adequate to ensure prompt, accurate and complete technical assessment of all issues and anomalies that arise in the required LSP facilities, the contractor shall include on-site representation at the NASA LSP resident offices. The primary LSP facilities requiring representation are, Huntington Beach, California; Denver, Colorado; VAFB; and Pueblo, Colorado. Locations that may require representation include Chandler, Arizona; Decatur, Alabama; Dulles, Virginia; and other locations as new LSPs are identified.

As specified in section 10.0, the contractor is responsible for reviewing and evaluating LSP tasks and products so the NASA Vehicle Engineering Division can provide prompt approval of mission unique items and a knowledgeable "go/no-go" for NASA missions as specified in NDP 8610.23. The contractors at the Resident Offices shall evaluate and provide technical assessments of the LSP launch vehicle systems design, analyses, manufacturing, verification, validation, assembly, integration, testing, checkout, and launch preparations for compliance with applicable requirements and robustness in the areas of performance, safety, reliability, and quality.

The contractor shall provide expertise in the following areas: Systems Engineering, Electrical Engineering, Mechanical Engineering, Structures Engineering, Propulsion Engineering, and Integration Engineering.

In the contractor's area of technical expertise, and in addition to the requirements specified in section 10.0, the contractor shall:

- Develop and maintain insight into the LSP engineering and operations through daily contact with peers throughout the LSP organization.
- As identified through the other elements of the performance requirements, coordinate and perform technical interchange with KSC Engineering counterparts on Engineering Review items, Project Risk items, and incoming LSP documents.
- Participate in all reviews and meetings at the LSP location.
- Participate in selected reviews and activities at other locations (e.g., MIWG, Spacecraft-to-Vehicle Fit Check, LSP supplier product reviews).
- Participate in the NASA lead Launch Campaigns by directly participating in the Launch Engineering Team or providing support to the Launch Engineering Team from the resident office.
- Participate in Test Readiness Reviews, observe and report on development, qualification and/or other special tests at the LSP and LSP supplier locations. Provide technical assessments of the test activities.
- Perform independent investigations in order to identify and report to the NASA resident office member's items with risk implications for NASA's use of the LSP launch service. These investigations shall include but not be limited to manufacturing and/or design trend studies, facility walkdowns, hardware walkdowns.
- Systems engineering expertise shall be cross-utilized thru technical interchange with the NASA KSC Vehicle Systems Engineers and the NASA members at other resident office locations.
- Integration engineering expertise shall participate in the ICD development and verification matrix completion by providing technical evaluation of mission unique requirements and verifications for the KSC Mission Integration Team resolution with the LSP.
- Participate in the development of new launch vehicles that are being certified per NPD 8610.7.

The contractor shall establish off-site offices at Huntington Beach, California, Denver, Colorado and Pueblo, Colorado. These off-site offices shall maintain a neutral work environment for the contractor and NASA personnel to work non-LSP contractor or competitor projects outside the LSP facilities where they maintain a resident office. These offsite offices shall ensure confidentiality and computer security as well as maintain integrity when working with proprietary data of various launch service providers.

10.4 Special Studies

The contractor shall perform special studies, projects, and analyses in support of this contract. These activities include but are not limited to:

- Advance planning and feasibility studies in support of future missions
- Analyses in support of change requirements to authorized missions

- Development, fabrication, and test of hardware/software to support planning studies or special tests
- Mission unique studies
- Technology applications
- Safety and Mission Assurance
- Processing and launch of nuclear payloads
- Enhancement of the quality of LSP Program/Project services and capabilities

The contractor shall establish resources required (manpower, facilities, consumables and permits), plan and implement the tasks required, and provide a written report detailing the results at the conclusion of the study effort.

10.5 Information Technology (IT Support)

The contractor shall provide Information Technology services related to ELVIS Supported IT Resources (ESResources) as described in index 0.0 of the IT Support Functions Table in Attachment J-12 and in this section and subsections. The contractor shall comply with the most recent, released version of LSP-PLN-430.01, Launch Services Program Telemetry, Information Technology and Communications Control Board (TICCB).

The contractor shall provide consulting services, installation services, and maintenance services for the NASA Required IT Resources (NRResources). The contractor shall address deficiencies and enhancements for NRResources according to LSP-P-432.02, LSP IT Engineering Change Request Process. The contractor shall provide labor to repair or replace defective hardware components of NRResources, if the components are owned by NASA or the contractor, or if allowed by agreement between the contractor and the third-party owner. The contractor shall make arrangements with the maintenance agreement license vendors of components of NRResources to receive replacements for defective hardware and/or software, as allowed by the NASA provided maintenance agreements. If defective hardware and/or software is not fully covered by the maintenance agreement for NRResources, the contractor shall provide all necessary information to the NASA POC so that NASA is able to procure a NASA-STD-2804, Minimum Interoperability Software Suite (latest revision), and NASA-STD-2805, Minimum Hardware Configurations (latest revision), compliant replacement for defective hardware and/or software.

The contractor shall provide system performance analysis and tuning for NRResources. The contractor shall provide backup and recovery services for NRResources as defined by the documentation referenced in Attachment J-13.

The contractor shall comply with all of the following regulations, policies, and standards when developing, integrating, testing, and deploying new engineering products as required by NASA or when making significant changes to existing ESResources:

- Section 508 of the Rehabilitation Act
- LSP-P-432.03, LSP IT Project Approval Process (latest revision)
- NASA-STD-2804, Minimum Interoperability Software Suite (latest revision)
- NASA-STD-2805, Minimum Hardware Configurations (latest revision)
- KDP-KSC-P-1833, KSC Web Site Development and Maintenance (latest revision)

Additionally, the contractor shall develop a NASA approved acceptance test procedure for each of the said projects.

Performance Standards

The response time between the initial request for assistance concerning issues related to NRResources and the receipt by the requestor of the contractor's initial analysis report shall be no greater than two (2) working days.

The first run by each of the Government stakeholders of the acceptance test procedure for new engineering products and modified NRResources shall result in no application functionality discrepancies.

10.5.1 Administrative Workstation Desktop Services

The contractor shall provide computer desktop support for ELVIS Supported Administrative Desktops (ESDesktops) as specified below and in line item 1.0 of Attachment J-12.

The contractor shall provide support for ODIN workstations at VAFB Resident Office as allowed by the ODIN-ELVIS VAFB Support Agreement dated June 25, 2003.

The contractor shall integrate, deploy, and maintain ESDesktops according to NASA-STD-2804 (latest revision) and NASA-STD-2805 (latest revision). The contractor shall install NASA provided software requested by the users of NASA Required Desktops (NRDesktops) if the software is recommended by the latest revision of NASA-STD-2804. The contractor shall install NASA provided software requested by the users of NRDesktops when the software is not recommended by the latest revision of NASA-STD-2804 only if the software does not cause the workstation to become unstable. The contractor shall return an NRDesktop to its previous condition when installation of NASA provided software that is not recommended by the latest revision of NASA-STD-2804 causes the computer to become unstable.

The contractor shall ensure that ESDesktops comply with KSC naming conventions at the deployment of each new device, at the software reload of existing devices, or at the hardware life cycle replacement of existing devices

The contractor shall maintain NASA provided printers of each NASA provided desktop administrative workstation for NRDesktops.

10.5.2 Custom Desktop Software Tools

The contractor shall operate and maintain ELVIS Supported Desktop Software Tools (ESSoftware) as specified in line item 2.0 of Attachment J-12. The contractor shall manage user accounts for NASA Required Software (NRSoftware).

The contractor shall modify or create a user identification table for each ESSoftware that documents the Universal Uniform Personal Identification Code (UUPIC) for each user identifier no later than 120 days after incorporation of this requirement into this SOW. The contractor shall maintain the said user identification table. The contractor shall deliver a project plan for implementing two factor authentication for each ESSoftware, in accordance with DRD-36.

10.5.3 Networks

The contractor shall operate and maintain ELVIS Supported Networks (ESNetworks) as specified below and as identified by line item 3.0 of Attachment J-12.

The contractor shall maintain an adequate inventory of network equipment spares for NASA Required Networks (NRNetworks) to meet the Performance Standard. The inventory levels shall be defined in the ELVIS Six-Year IT Buy Plan.

The contractor shall update the NASA and KSC centralized databases for all devices with Internet Protocol (IP) addresses for ELVIS Supported Networks (ESNetworks), as specified by the LSP Organizational Computer Security Official (OCSO). The contractor shall use static IP addresses, rather than Dynamic Host Configuration Protocol (DHCP), for the networked ESResources, except where explicitly authorized by the NASA Information System Owner. The contractor shall ensure that the KSC official Domain Name Service (DNS) is updated for all devices with static IP addresses for ESNetworks.

The contractor shall test, migrate and maintain ESDesktops and ESServers into the KSC Domain while preserving full functionality as specified in the most recent, released revision of LSP-PD-120.06-R00065, KSCELV Domain Collapse Project Plan.

The contractor shall coordinate with other networking organizations that interconnect with NRNetworks to ensure the required quality of service. The contractor shall coordinate KSC boundary firewall modifications with the KSC contractor that manages the boundary firewalls.

In accordance with DRD-33, the contractor shall deliver an ELVIS Six-Year IT Buy Plan annually that includes a life-cycle plan of existing hardware, software, and maintenance agreements for ESNetworks. The contractor shall procure NASA-STD-2804 (latest revision) and NASA-STD-2805 (latest revision) compliant hardware, software, and maintenance agreements in accordance with the NASA approved ELVIS Six-Year IT Buy Plan for ESNetworks.

The contractor shall procure items for the effort in this section by utilizing the appropriate CLIN in the contract.

10.5.4 File Sharing Services

The contractor shall also provide file sharing services for ELVIS Supported File Sharing Resources (ESFiles) as specified below and as identified by line item 4.0 of Attachment J-12.

Upon request, the contractor shall provide assistance to LSP personnel in secure file transfers between external entities and NASA IT resources. The contractor shall ensure that ESFiles are accessible from all NASA-STD-2804 compliant versions of Microsoft Windows and Apple Macintosh operating systems.

The contractor shall ensure that the data owners have visibility and control over the access control lists for each of their folders for ESFiles. The data owner is determined by the properties of the data object. The contractor shall alter permissions to a folder only after concurrence is received from the data owner for ESFiles. The contractor shall ensure that contractor personnel do not use NRFiles as work-related personal file storage.

The contractor shall notify NASA within 5 working days when the percentage of free space available on each NRFiles device is less than 20 percent.

10.5.6 Websites

The contractor shall develop, operate, and maintain ELVIS Supported Websites (ESWebsites), as specified below and as identified by line item 6.0 of Attachment J-12.

The contractor shall modify or create a user identification table for each ESWebsite that documents the UUPIC for each user identifier no later than 120 days after incorporation of this requirement into this SOW. The contractor shall maintain the said user identification table. The contractor shall deliver a project plan for implementation of ESWebsite two-factor authentication for each Website in accordance with DRD-36, "HSPD-12-Ready Authentication.

The contractor shall manage user accounts for NASA Required Websites (NRWebsites).

10.5.7 Communications and Telemetry Development

The contractor shall assist NASA in development of new communications and telemetry (C&T) subsystems and applications as specified below.

The contractor shall deliver the Communications and Telemetry Development Plan in accordance with DRD-35. The contractor shall develop, component test, and deploy C&T products in accordance with the latest NASA approved C&T Development Plan. The contractor shall provide C&T services to support NASA's C&T development and testing on a non-interference basis with SOW 7.0 operational tasks.

10.5.8 IT Security

The contractor shall provide IT Security support for ESResources as specified in SOW sections 10.5.8.1 through 10.5.8.5 below, and as specified by NASA FAR Supplement (NFS) clause 1852.204-76. The contractor shall also comply with NPR 2810.1A for the contractor's corporate IT resources that interconnect with NASA systems. The contractor shall comply with NPR 2810.1A for the contractor's corporate IT resources that store, process, or transport NASA information, whether or not they interconnect with NASA systems.

The terms Information System Owner, Information Owner, Organizational Computer Security Official (OCSO), Information System Security Official (ISSO), and System Administrator are defined by NPR 2810.1A (reference § 2.3).

10.5.8.1 IT Security Program

The contractor shall assist the assigned ISSO in the performance of the defined tasks when applied to the ESResources. The contractor shall ensure that all contractor personnel satisfy the IT Security obligations with regards to NASA information systems, as specified by

NPR 2810.1A (reference § 2.4.9). The contractor shall perform all tasks and roles specified by the IT security planning documentation referenced in Attachment J-13.

The contractor shall deliver an IT Security Program Plan in accordance with DRD-34. Upon request, the contractor shall review Federal, Agency and Program policies, processes, and procedures for correctness and impacts.

10.5.8.2 Defining the Supported IT Resource

The contractor shall formulate the following IT security products for ESResources in accordance with the direction of the LSP OCSO:

- System characterizations (reference NPR 2810.1A § 7.1)
- Categorization of information (reference NPR 2810.1A § 7.2 and § 7.3)
- IT System types (reference NPR 2810.1A § 7.4)
- System boundaries (reference NPR 2810.1A § 7.5)
- Interconnection agreements (reference NPR 2810.1A Chapter 9)
- Selected security controls (reference NPR 2810.1A Chapter 11)

The contractor shall comply with NPR 2810.1A when selecting and procuring IT security products (reference § 10.4).

10.5.8.3 Management Controls

The contractor shall perform the risk management processes and the security planning processes for ESResources in accordance with the direction of the LSP OCSO as defined by NPR 2810.1A (reference Chapters 12 and 13). When authorized by the LSP OCSO, the contractor shall afford the Certifying Agent access to the contractor's facilities, installation, technical capabilities, operations, documentation, records, and databases to the extent required to carry out a certification process as defined by NPR 2810.1A (reference § 14.3).

10.5.8.4 Operational Controls

When authorized by the LSP OCSO, the contractor shall implement and maintain operational controls for ESResources as specified by the IT security planning documentation specified in Attachment J-13, NPR 2810.1A, and as specified below. The contractor shall perform a Business Impact Analysis (reference § 15.2) and Contingency Planning (reference § 15.3). The contractor shall monitor electronic data on ESNetworks (reference § 16.1). The contractor shall test security controls selected in the LSP IS IT Security Plan (reference § 16.2). The contractor shall perform a "self assessment" of all security controls from the same Plan (reference § 16.3.1.a).

The contractor shall mitigate or justify vulnerabilities found on ESResources and report to the LSP OCSO no later than 3 working days prior to the center deadline for quarterly vulnerability scan reporting, in accordance with NPR 2810.1A (reference § 16.4); KDP-KSC-P-1334, KSC Network Scan Process; and KDP-KSC-P-3323, Non-ODIN Printers Vulnerability Process.

The contractor shall provide configuration control of ESResources. The contractor shall provide continuous updates to the NASA provided hardware, software, and firmware inventories. The contractor shall independently validate each applicable line item in the

10.5.8.5 Technical Controls

The contractor shall implement and maintain technical controls for ESResources according to the IT security planning documentation specified in Attachment J-13 and as specified below.

The contractor shall install and integrate NASA provided card readers and device drivers with operating systems of the ESDesktops and ESServers in accordance with 2810.1A as directed by the LSP OCSO, but no earlier than January 1, 2009. The contractor shall integrate and implement ESResources with the NASA Account Management System (NAMS) no later than September 30, 2008, as specified by NPR 2810.1A (reference § 19.2.2). The contractor shall support the account management processes in accordance with NPR 2810.1A (reference Chapter 19).

The contractor shall ensure that authorized users of ESResources are provided authorized logical access in accordance with NPR 2810.1A (reference § 20.2). The contractor shall provide independent auditing of ESResources according to NPR 2810.1A (reference § 21.2). The contractor shall limit personnel (including system administrators) read access to files that contain employee's passwords such that read access is only granted when explicitly authorized by the NASA Information System Owner. The contractor shall remove data and licensed software from ESResources in accordance with KDP-KSC-P-1836, Removing Data and Licensed Software From Information Technology (IT) Storage Devices.

above inventories at least every 6 months. The contractor shall obtain LSP OCSO approval prior to making significant hardware or software configuration changes as defined by ITS-SOP-0014, Procedures for Approving Changes to NASA's Information Technology Baseline. The contractor shall implement the NASA provided patch management tool on networked IT devices, or provide appropriate justification to the LSP OCSO for approval. The contractor shall implement the NASA provided standard operating system benchmark templates or provide appropriate justification to the LSP OCSO for approval.

The contractor shall respond to security incidents according to LSP-P-433.01, LSP IT Security Incident Response Process; NPR 2810.1A (reference §§ 17.2.3 and 17.2.4); and the IT security planning documentation referenced in Attachment J-13 for theESResources. The contractor shall comply with the IT awareness and training requirements specified by NPR 2810.1A (reference § 18.2.1 and § 18.2.2) and by the IT security planning documentation referenced in Attachment J-13. The contractor shall fully cooperate with NASA IT security reviews and investigations of suspected non-compliance with all security controls specified in the LSP IS IT Security Plan and of computer crimes involving ESResources containing NASA information, or contractor corporate systems connected to NASA systems or containing NASA information.

10.5.8.5 Technical Controls

The contractor shall implement and maintain technical controls for ESResources according to the IT security planning documentation specified in Attachment J-13 and as specified below.

The contractor shall install and integrate NASA provided card readers and device drivers with the operating systems of the ESDesktops computers and ESServers in accordance with NPR 2810.1A no later than August 31, 2008. The contractor shall integrate and implement ESResources with the NASA Account Management System (NAMS) no later than September 30, 2008, as specified by NPR 2810.1A (reference § 19.2.2). The contractor shall support the account management processes in accordance with NPR 2810.1A (reference Chapter 19).

The contractor shall ensure that authorized users of ESResources are provided authorized logical access in accordance with NPR 2810.1A (reference § 20.2). The contractor shall provide independent auditing of ESResources according to NPR 2810.1A (reference § 21.2). The contractor shall limit personnel (including system administrators) read access to files that contain employee's passwords such that read access is only granted when explicitly authorized by the NASA Information System Owner. The contractor shall remove data and licensed software from ESResources in accordance with KDP-KSC-P-1836, Removing Data and Licensed Software From Information Technology (IT) Storage Devices.

11.0 Facility Upgrade/Modification/Repair Design and Construction

The contractor shall provide construction/project management and/or construction services in support of ELV Construction of Facilities (CofF) projects, which may include Preliminary Engineering Reports (PER), design packages, minor construction, modification/rehabilitation construction, and repair construction. These services shall include, but are not limited to Architect-Engineer (A/E) Services, engineering, project management, construction, supervision, inspection, documentation, and activation and validation as acquired through fixed price task orders issued by the Government.

At VAFB, the contractor may be required to provide maintenance and repair in particular cases where the USAF Base Civil Engineering (BCE) services (reference Attachment J-3) where the USAF support cannot be obtained in a prompt manner. In these cases services will be acquired through fixed price task orders issued by the Government.

12.0 Compliance and Reference Documents

Compliance Documents

Document No.	Document Title
EWR 127-1	Eastern/Western Range, Range Safety Requirements (Required for CCAFS and VAFB launch sites)
KHB 1710.2D	KSC Safety Practices Handbook (only applicable in NASA Facilities and property)
NPD/NPG 2810.1	Security of Information Technology
NPG 8621.1	NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Record-keeping
NPG 9501.2D	NASA Contractor Financial Management Reporting
NSS/GO 1740.9B	NASA Safety Standard for Lifting Devices and Equipment (only applicable in NASA Facilities and property)

Reference Documents

Document No.	Document Title
AFI 32-7064	USAF and VAFB Environmental Impact Analysis Process
ASNT CP-189-1991	ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel
ASTM E 1417-99	American Society for Testing and Materials Standard Practice for Liquid Penetrant Examination
ISO 10011	Guidelines for Auditing Quality Systems
K-ELV-1-.1	Implementation of NASA's Insight and Approval Role for Expendable Launch Vehicle (ELV) Services
K-ELV-02.12.002	Launch Telemetry Requirements
K-ELV-02.13	ELV Program Operating Structure
K-ELV-02.14	ELV Program Requirements Control Board Charter
K-ELV-02.15	ELV Launch Services Project Decision Meeting (PDM) Charter
K-ELV-02.16	Scheduling System Hierarchy for ELV (SSHELV)
K-ELV-2.6	Engineering Review Process
K-ELV-10.2	Program/Project Management Instruction: Launch Vehicle Certification
K-ELV-10.3	Program/Project Management Instruction: ELV Certification Plan
K-ELV-11.2	Guide for ELV Payload Processing at KSC and CCAFS
K-ELV-12.2	ELV Launch Services Project Risk Management Plan
K-ELV-13.2	SCS Setup and Storage Procedure
K-ELV-13.3	LSST Ops Guide
K-ELV-13.4	SCS Operator's Guide

K-ELV-13.5	LSST Transportation Procedure
K-ELV-14.000	Expendable Launch Vehicle Boilerplate LSSP
K-STSM-14.1.1	Facilities Handbook for Building AE
K-STSM-14.2.1	KSC Payload Facility Contamination Control Requirements/Plan
KDP-B-1028	KSC Business Objectives and Agreement for the Expendable Launch Vehicle (ELV) and Payload Carriers Program
KDP-KSC-P-1833	KSC Website Development & Maintenance
KDP-KSC-P-1836	Removing Data and Licensed Software from Information Technology Storage Devices
KDP-KSC-P-2579	KSC Customer Satisfaction Determination and Improvement
KDP-P-1066B	Launch Site Support Plan (LSSP) Development
KDP-P-1101	Payload Processing Support at VAFB
KDP-P-1104	Review and Approval of FUP at VAFB
KDP-P-2232	VAFB Safety Surveillance and/or Inspections
KDP-P-2233	VAFB Safety Support of Hazardous Operations
KDP-P-2234	VAFB Safety Procedure Processing
KHB 1610.1C	KSC Security Handbook
KHB 1710.2	KSC Safety Practices Handbook
KMI 8800.8B	KSC Environmental Management
KSC-HB-GP60-2	Automated Support Requirements System
KSC-SO-S-9	Standard for Retest and Refurbishment of Compressed Gas Trailers & Movable Storage Units
MIL-STD-1543	Reliability Program Requirements for Space and Launch Vehicles

NASA-STD 8709.2	NASA Safety and Mission Assurance Roles and Responsibilities for Expendable Launch Vehicle Services
NHB 1620.3C	NASA Security Handbook
NPD 2190.1	NASA Export Control Program
NPD/NPG 2210.1	External Release of NASA Software
NPD 8500.1	NASA Environmental Management
NPD 8610.23A	Technical Oversight of Expendable Launch Vehicle (ELV) Launch Services
NPD 8610.24A	Expendable Launch Vehicle (ELV) Launch Service Pre-Launch Readiness Reviews
NPD 8610.7	Launch Services Risk Mitigation Policy for NASA-Owned Or NASA-Sponsored Payloads
NPD 8710.5	NASA Safety Policy for Pressure Vessel and Pressurized Systems
NPG 2800.1	Managing Information Technology
NPG 8831.2C	NASA Facilities Maintenance Management
NPG 8820.2C	Facility Project Implementation Handbook
OSMA-IMAR-POP-03-03	Prelaunch Integrated Mission Assurance Review (IMAR) Process Operating Plan
SNT-TC-1A	Recommended Practice for Personnel Qualification and Certification in Non-Destructive Testing
	Software Engineering Institute at Carnegie Mellon University, *Continuous Risk Management Guidebook*, 1996, NTIS#: AD-A319533KKG, DTIC#: AD-A319 533\6\XAB
81K00268	Specification for External Cleaning, Corrosion Control and Protective Coating of Propellant Equipment
LDA Desk Procedure	Launch Data Acquisition (LDA) Desk Procedure

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Attachment J-2

Data Requirements List/Data Requirements Description (DRL/DRD's)

INSTRUCTIONS FOR COMPLETING CONTRACT APPLICATION INFORMATION

A. LINE ITEM NO. – Sequentially number line items beginning with number 001.

B. LINE ITEM TITLE – Enter the title of the data item, as shown in the Statement of Work (SOW), the PFP and/or as directed by the CTM.

C. OPR (OFFICE OF PRIMARY RESPONSIBILITY) – Enter the organization designated to exercise technical and/or administrative control over the data requirement. Use approved organizational code.

D. TYPE – Enter "Type of Data" code as follows:

CODE	DESCRIPTION
1	Data requiring written approval by the procuring activity prior to implementation into the procurement or development program.
2	Data submitted to the procuring activity for review not later than three weeks prior to project implementation. Data shall be considered approved unless the contractor has been notified of disapproval prior to project implementation.
3	Data submitted to the procuring activity for coordination, surveillance, or information.
4	Data retained by the contractor to be made available to the procuring activity upon request. The contractor shall furnish a list to the procuring activity.
5	Data to be retained by the contractor and reviewed by NASA on request.

E. INSPECT/ACCEDPT – Enter Inspection Acceptance code as follows:

CODE	INSPECTION	ACCEPTANCE	CODE	INSPECTION	ACCEPTANCE
1	Source	Source	4	Certificate of Conformance	(Mandatory)
2	Destination (OPR)	Destination (OPR)	5	Certificate of Conformance	(Optional)
3	Source	Destination (OPR)	6	No Inspection Required	No Acceptance Required

F. FREQ. OF SUBM. – Enter the frequency of submission code as follows:

CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
AD	As directed	PC	Per contract	PV	Per vehicle
AN	Annual	PD	Per failure	QU	Quarterly
AR	As required	PE	Per event	RD	As released
BE	Biennial	PF	Per facility	RT	One time & revisions
BM	Bimonthly (every two months)	PG	Per program	SA	Semi-annually
BW	Biweekly (every two weeks)	PI	Per equipment end item	SM	Semi-monthly
DA	Daily	PJ	Per project	TY	Three year period
DD	Deferred delivery	PL	Per launch flight mission	UR	Upon request
MO	Monthly	PS	Per system	WK	Weekly
OT	One time	PT	Per test		

G. INITIAL SUBMITTAL – Enter date of initial submittal as follows: Month/Day/Year. If calendar date is not scheduled, enter number of days preceding, or following, event to which the data requirement is related (e.g., 90 days prior to launch). Amplify in REMARKS, Item J, if necessary.

H. AS OF DATE – For 'Onetime Only' submittals, enter date by month/day/year. For recurring submittals, enter number coding (e.g., 30/10, 90/10, 15/5, etc.). The first digit(s) indicate the number of calendar days from the reporting periods (Block F) start to the data preparation cut off. The second digit(s), after the slash, indicate the number of calendar days from the cut off to the submittal date. Example: If Block F were "MO" and Block H were "30/10," the data would include the entire month and would be submitted within 10 days thereafter.

J. REMARKS – Enter in this space: (a) Minor exceptions to the DRD; (b) Stipulation of specific forms when multiple forms are authorized on the DRD; (c) The paragraph, page, etc., in an existing contract where the data requirement is specified. (This data may be removed at final approval.); and (d) Additional submittal information, if necessary.

K. DISTRIBUTION – Enter organizational symbol, number of copies, and type of copy code(s) (in parenthesis) required for each office. Type of copy codes are as follows:

CODE	DEFINITION	CODE	DEFINITION
A	Regular	C	Microfilm, Aperture Cards
B	Reproducible	D	Others (Explain in Remarks, Item J.)

EXAMPLE ENTRIES:
OP-LS (1 A) = One regular copy.
OP-MS (5 A, 1 B) = Five regular copies, One reproducible copy.
Enter the total number of copies by type in the space provided.

INSTRUCTIONS FOR COMPLETING DATA REQUIREMENT DESCRIPTION

GENERAL – The Data Requirement Description (DRD) will be prepared to describe the content and provide preparation information for data required in support of NASA programs.

1. TITLE – Enter the title or type of document required. The first word of the title should be a principal noun that best establishes the basic concept of the data. Subsequent words should be appropriate modifiers.
   EXAMPLE ENTRIES:
   Plan Project Development (SIVB)
   Specification, Test (GSE)
   Report, Quarterly Progress
   Proposal, Engineering Change (ECP)

2. NUMBER – Enter the appropriate number assigned to the DRD. This number will identify the appropriate data category.

3. USE – Enter a synopsys of the use of the document, stating reason for the requirement.

4. DATE – Enter the date of preparation.

5. ORGANIZATION – Identify the installation preparing the DRD.

6. REFERENCES – List applicable documents by number (NASA Management Manual, Mil Specifications, Federal Standards, NASA Procurement Regulation, etc.) to which the preparing office (e.g., NASA installations, contractors, etc.) may refer for additional information concerning the data requirement.

7. INTERRELATIONSHIP – Enter all affected approved DRDs within the scope of the program when the DRD under preparation creates a significant impact or interface relationship with existing DRDs. Include a brief narrative of the impact or relationship created and a statement that the new DRD does not cause a conflict with other DRDs.

8. PREPARATION INFORMATION – Provide ample information for preparation of the data required by the data requirements description; include all necessary details of preparation to satisfy the originator's formal requirements.

DATA REQUIREMENTS LIST		
DRL NUMBER	REVISION	
PROJECT/SYSTEM		
CONTRACT NUMBER	PREPARATION DATE	
CONTRACTOR		
CONTRACTOR	TECHNICAL APPROVAL	
ATTACHMENT NUMBER	EXHIBIT NUMBER	
ITEM NO.	TITLE	CHANGE STATUS
DRD-1	Access to Contract Data	
DRD-2	Logistics and Travel Activity Report	
DRD-3	Contractor Financial Management Reports	
DRD-4	Facility Utilization and Advance Planning	
DRD-5	Customer Information Documents	
DRD-6	Requirements Coordination Output	
DRD-7	Facility Condition Assessment Report	
DRD-8	Information Technology Certification & Accreditation Package	
DRD-9	Measurements and Performance Indicators	
DRD-10	Monthly Performance Activity Report	
DRD-11	Payload Support Requirements Implementation	
DRD-12	Quarterly Headcount Report	
DRD-13	Equal Employment Opportunity Report	
DRD-14	Fixed Price Mission/Project Allocation Report	
DRD-15	DR Distribution List	
DRD-16	VPP Performance Assessment	
DRD-17	GSE Condition Assessment Report	
DRD-18	Launch Site Support Plan	
DRD-19	Pressure Vessel/System Certification Report	
DRD-20	S&MA/Quality Reports	
DRD-21	Safety and Health Incidents, Mishaps, or Close	
DRD-22	Facility Contamination Control Plan and Report	
DRD-23	Facility Modifications Design and Construction	
DRD-24	Certification of Facility Readiness	
DRD-25	Energy Conservation Plan/Report	
DRD-26	Monthly Project Review Presentation	
DRD-27	Security Plan	
DRD-28	GIDEP Report	
DRD-29	Export Control Plan	
DRD-30	ELV Program Schedule	
DRD-31	Facilities, Systems, and Equip Maintenance	
DRD-32	Advance Notification of Workforce Reductions	

KSC FORM 16-245 (REV 1/82)

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-1

B. LINE ITEM TITLE: Access to Contract Data

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA	3	6	As Required	As Required	

J. REMARKS

K. DISTRIBUTION: VA-B; VA-C; SA-D-1; VA-F3; VA-F4; VA-F8; VA-E2; OP-LS

TOTALS NO.	TOTALS TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: Access to Contract Data

2. NUMBER:

3. USE: Data will be used for government insight into contract performance.

4. DATE: May, 2001

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP: Statement of Work

6. REFERENCES:

8. PREPARATION INFORMATION

See Attached Continuation Sheet

DRD-1, Block 8 Continued

PROGRAM MANAGEMENT

1. Contract Logs (SOW 3.4) –See Sample in Tech Library under Program Management Samples Page
2. Mission/Project Financial Performance Profiles (SOW 3.4)
3. Insight into Work Status (SOW 1.3.4)
4. Budgetary Database Management System (SOW 3.4)
5. TechDoc Status Weekly Report (SOW 10.5.1)
6. Secretariat Functions (SOW 3.5 table 3-1)
7. Documentation Maintenance Requirements Table 3-3 (SOW 3.6)
8. Program Operating Plan and Cost Phasing Budget Input (SOW 1.3.5)

TABLE 3-3 DOCUMENTATION MAINTENANCE REQUIREMENTS TABLE

PRODUCT	DESCRIPTION	FREQUENCY	DISTRIBUTION
(LSPinput into) KSC Roadmap	KDP-KSC-S-2001	As Required	To all via TechDoc
Program Operating Structure	K-ELV-02.13	As Required	To all via TechDoc

TECHNICAL INTEGRATION SERVICES

1. ERB Functions (SOW 6.2.1): Record, organize, and track ERB actions and recommendations. Maintain electronic records of ERB presentations, action closures, and recommendations. Manage ERB tracking number assignments
2. MIT Functions (SOW 6.1.2, 6.1.3): meeting/briefing/review minutes, record and track actions, MIT assignment matrices
3. CDRL Review Tracking (SOW 6.1.1): date of receipt from the LSP or payload customer, date delivered to the responsible reviewer, date when reviewed document is received back, date delivered to the LSP or payload customer as applicable, and identify any relevant issues related to the mission
4. LET Functions (SOW 6.2.3): Requirements documentation, deployment schedules during launch campaigns; launch support guidelines; tracking of internal and external actions; TIM internal and external actions items; LET inputs to Lessons Learned review; telemetry data archive, transfer, and conversion requirements documentations

COMMUNICATIONS AND TELEMETRY

1. Comm and Telemetry Functions (SOW 7.2): Logs, briefings, reports, drawings, schedules

VANDENBERG AIR FORCE BASE UNIQUE SUPPORT

1. Released Drawing Revisions (SOW 8.1.3)
2. Engineering Support Request and Engineering Order Tracking (SOW 8.1.3)
3. Maintenance Records (SOW 8.1.1): Maintenance records, troubleshooting efforts, problem causes, and corrective actions taken, proof-test certificates, operational and test procedures, and test data records, Facility Systems and Equipment lists, operations and maintenance instructions

4. NDE Report (SOW 8.2.8)
5. Permits and Badges (SOW 8.3.1)
6. Authorization Lists (SOW 8.3.1)
7. Lock Control Records (SOW 8.3.2)
8. Security Inspection Log (SOW 8.3.3)
9. Guest Requests (SOW 8.3.4)

VEHICLE ENGINEERING AND ANALYSIS

1. Electronic Drafting Products (SOW 10.2.3)

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO
B. LINE ITEM TITLE: Logistics and Travel Activity Report	DRD-2, Rev. 1

C. OPR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ	G. INITIAL SUB	H. AS OF DATE
VA-B	3	2	MO	30 days after contract start	

J. REMARKS

K. DISTRIBUTION: GG-C-D, VA-B1, VA-E1, VA-H

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Report, Logistics and Travel Activity	
3. USE	**4. DATE**
Information needed to allow NASA to itemize charging to external customers by mission and project	August 2008
	5. ORGANIZATION
	KSC
7. INTERRELATIONSHIP	**6. REFERENCES**
SOW Section 1.3.5 and DRD-3	

8. PREPARATION INFORMATION

This Report is intended to be a breakdown by mission/project of elements in DRD-3 (Contractor Financial Management Reports).

The contractor shall provide a logistics and travel activity report that itemizes by description (i.e., mission/project) and disbursement amount to include all burdens, travel expenses, supplies, materials, equipment, and minor services purchased each month in order to allow NASA to track and charge to external customers.

Contractor format is acceptable.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-3, Rev. 1

B. LINE ITEM TITLE:

Contractor Financial Management Reports

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-B	3	6	See Block J	30 days after contract start	

J. REMARKS

Pre-533 monthly report shall be coordinated with the LSP Resources Management Office. The 533 Monthly report is due 10 working days after the close of the contractor's accounting period and Quarterly reports are due on the 15th day of the month following the quarter being reported. Electronic Product shall be compatible with Microsoft Office suite of software.

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
VA-B, GG-C-A4, GG-C-D, OP-LS		

DATA REQUIREMENT DESCRIPTION

TITLE	2. NUMBER
Reports, Contractor Financial Management	

3. USE	4. DATE
Provides pre-533 monthly, 533 monthly, and quarterly accumulated expenditures and projections of program costs to ensure that the contractor cost and schedule performance are efficiently planned, effectively monitored, and properly reported.	July 2001
	5. ORGANIZATION: KSC
7. INTERRELATIONSHIP: SOW Section 1.3.5	6. REFERENCES: NPR 9501.2

8. PREPARATION INFORMATION

SCOPE

This DR establishes the requirements for the content and format of the financial management reports for cost reimbursable portions of the SOW.

CONTENTS

A. Reporting requirements include NASA Forms 533M and 533Q prepared in accordance with instructions in NPR 9501.2 and as supplemented herein.

B. The contractor's cost accounting system shall be capable of segregating, accumulating, and reporting costs for each element of cost as required by NPR 9501.2 and as supplemented herein for each item; summary level through third level in accordance with the most current SOW.

Block 8 DRD-3(Continued)

Monthly 533 reporting shall be in the latest NPR 9501.2 required format and as supplemented herein for WBS summary level through 2nd level of the SOW. Additionally, the monthly 533 will report the current fiscal year contract summary and first level summary. Also, the monthly 533 will report at the contract summary level both the monthly and cumulative contract period costs to date and the negotiated baseline plus any authorized changes.

Quarterly 533 reporting will be at WBS summary level with supplemental reporting at the second level at NASA request. In months where a quarterly 533 report is required, both monthly and quarterly 533 reports shall be provided.

Electronic versions of the monthly 533 shall be at the 3rd level.

The following data will be required for each WBS 2ND or 3rd level item (i.e., mission or project activity) as part of the monthly 533M reports.

	Reporting Month Act (Last closed acct month)	Cum (Contract Inception to Date)	Current Month Estimate (Reporting Month + 1)
Labor-Hours	X	X	X
Labor-Hours Cost	X	X	X
Material Cost	X	X	X
Total Cost	X	X	X

Pre-533M reporting shall be coordinated with the LSP Resources Management Office on the required format and due date. Report is to be at the 2nd level of the SOW. Electronic version of the Pre-533M shall be at the 3rd level (i.e., mission/project activity)

C. Labor Hours and Cost Element Data to be reported on the 533M and Q reports as indicated on Enclosure 1. Reporting instructions for labor hours and equivalent persons are provided in Enclosure 2.

D. Amounts shall be stated to the nearest tenths of thousands of dollars; Headcount and percentages to the nearest tenth of a whole number; Hours to the nearest whole number.

E. Furnish with the initial 533Q, the contractor's contract accounting calendar (ELVIS reporting calendar), which lists the accounting months, number of workdays included in each month, and all holidays applicable to the contractor for the duration of the contract, and the applicable productive factor. Subsequent revisions to this initial calendar will be provided to distribution as they occur.

F. Adjustments to prior period's costs recorded during the reporting period will be included in the reporting month (i.e., last closed accounting period) actual cost and cumulative cost columns of the applicable report, and itemized/explained in an addendum to the report. Detailed data by element of cost will be provided on request.

G. Variance Explanations

Pre-533M Variance Analysis with explanation will be provided at the summary level for labor and the elements of cost for any line item that deviates from the estimate (col. 7b) by +/-5%.

533M Variance Analysis will be provided at the summary level for labor and the elements of cost. Additionally, 533M Variance Analysis with explanation at the WBS first level will be provided for any WBS first level WBS element when:

> Monthly actual labor and/or cost (column 7a) for any first level WBS deviates from the estimate (column 7b) by +/-5%. (Note column 7b equals column 8a from previous month 533 form. It is the previous month's estimate, not contract value.)

H. In addition to the 533Q, the contractor shall submit an initial time phased by 6 month Award Fee Period contract baseline Labor and Cost Report (CONTRACT BASELINE REPORT). This report shall be updated on a quarterly basis to reflect any definitized baseline changes. This report shall use the elements of cost in accordance with the company's normal accounting practices. Report shall break out contract value by status (definitized/authorized), modification, line item, time, Total Contract Value for the Award Fee Period. Also a footnote shall be provided as to how contract value is computed.

I. On a monthly basis, under separate cover, the contractor shall provide a staffing report. The staffing report shall provide the equivalent head count data for all second and third levels of the WBS for the prior weeks.

The Preliminary 533M report shall include the following data:

1. Total ELVIS KSC headcount (excluding principal subcontractors) for current month actuals and one-month-out estimate; total cost and fee for current month and cumulative actuals, one-month-out estimate, and cumulative through the one-month-out estimate. Reporting level will correspond to NASA related task activity for specific missions or projects.

2. Analysis of any variance to the preliminary 533M (Column 7a vs. 7b) line items by +/- 5%.

3. Backup data in a NASA acceptable format electronically transmitted containing:

   a. Monthly increase (actuals) by first, second, and third level/line item.

   b. One-month-out estimate by first, second, and third level/line item.

4. Equipment bookings estimate vs. actual at WBS second level with explanations of significant variances, when the variance is +/- 5%.

J. On a monthly basis, under separate cover (not part of the 533 report itself), current month actual labor cost, contractor's fiscal year cumulative actual burden, and G&A cost (DIRECT LABOR, BURDEN, AND G&A COST ACTUALS) will be submitted to the Contracting Officer, the COTR, and Resources Management Office (GG-C-A4).

K. On a monthly basis, under separate cover (not part of the 533 report itself), the contractor shall submit a time-phased plan by month that will break out Subcontractor labor hours and labor dollars. This report shall reflect the Operating Plan (for SOW 10) submitted for the fiscal year and the Actual cost incurred for each month during the year. The report shall use the elements of cost in accordance with the company's normal accounting practices.

Enclosure 1:

SUMMARY OF THE DATA ELEMENTS FOR 533 M AND Q

DIRECT LABOR HOURS
- PRODUCTIVE STRAIGHT TIME
- PRODUCTIVE OVERTIME
- TOTAL

DIRECT LABOR COSTS
- PAID STRAIGHT TIME
- OVERTIME PREMIUM

LABOR BURDENS
- SUBTOTAL

SUPPLIES AND MATERIALS
EQUIPMENT
SUBCONTRACTS
OTHER DIRECT COSTS
OVERHEAD
- SUBTOTAL

GENERAL AND ADMINISTRATIVE
FAC. CAPITAL COST OF MONEY
TOTAL ESTIMATED COST
MAX. AVAILABLE AWARD FEE
TOTAL COST & FEE

	Column 7a	Column 7a	Column 7a	Column 7b Cumulative	Next Month Plan	Next Month Equivalent Headcount Plan
	Straight Time	Overtime	Overtime%			
ELVIS	X	X	X%	X	X	X
SUB A	X	X	X%	X	X	X
SUB B	X	X	X%	X	X	X
SUB C	X	X	X%	X	X	X
OTHERS	X	X	X%	X	X	X

Enclosure 2:

Elements of cost are defined in general in NPR 9501.2D and are further clarified below.

1. Straight Time Hours

   Those hours exclusive of non-productive hours which are incurred by direct labor personnel. No paid overtime hours are to be reported in this category.

2. Overtime Hours

   Those Premium hours incurred by direct labor personnel. Non-paid overtime hours are not to be reported in this category.

3. Non-Productive Hours

   Those hours incurred for vacation, sick leave, holiday, and other non-work periods. This only includes those hours for which the direct labor personnel are paid.

4. The average number of direct personnel working in any given area during a reporting period. It is calculated as follows:

   Equivalent Straight Time Headcount = $\frac{\text{Actual Straight Time Hours}}{\text{Applicable Productive Factor}}$

5. Equivalent Overtime Headcount

   Equivalent Overtime Headcount = $\frac{\text{Actual Overtime Hours}}{\text{Applicable Productive Factor}}$

6. Overtime Rate = $\frac{\text{Overtime Hours (Expended)}}{\text{Straight Time Hours + Non-Productive Hours}}$

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-4

B. LINE ITEM TITLE:
Facility Utilization Plan and Advance Planning Schedules

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-E	2	2	MO	30 days after contract start	

J. REMARKS

K. DISTRIBUTION

VA-B, VA-E2, VA-E2-A, VA-E1

TOTALS NO.	TOTALS TYPE

DATA REQUIREMENT DESCRIPTION

TLE	2. NUMBER
,an, Facility Utilization and Schedule, Advance Planning	
3. USE To provide assessments for facilities, GSE, flight hardware, missions, and manpower which will provide overall visibility and impacts to planned processing flows.	4. DATE March 2001 5. ORGANIZATION KSC
7. INTERRELATIONSHIP SOW Section 5.5.1	6. REFERENCES

8. PREPARATION INFORMATION

A. VAFB Facility Utilization Plan - Maintain utilization data for VAFB Payload Processing Facilities (PPFs) including Buildings 1610 and 836. This data shall include resource capabilities and payload requirements. Publish Utilization Plan based on mixed fleet manifest for payload facility utilization. Plan will cover a six-year time span.

B. KSC Facility Utilization Plan - Maintain utilization data for KSC PPFs. This data shall include resource capabilities and payload requirements. Publish utilization plan based on mixed fleet manifest for payload facility utilization. Plan shall cover a nine-year time span.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL

A. ITEM NO.: DRD-5, Rev. 3

B. LINE ITEM TITLE: Customer Information Documents

C. OP-LSR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB	H. AS OF DATE
VA-E	See Block J	See Block J	See Block J	See Block J	

J. REMARKS

Title	D. Type	E. Inspect/Accept	F. Frequency	G. Initial Submittal
Payload Facility Handbooks	3	2	3 yr	1 yr after start
Spacecraft Processing Guides	2	2	AR	AR

K. DISTRIBUTION: VA-B, VA-E1, VA-E2

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

TITLE: cuments, Customer Information

2. NUMBER:

3. USE: To document KSC requirements levied on Payload Developers & Owners, the basic launch site accommodations and facility configurations and the payload processing data for analysis

4. DATE: December 2007

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP: SOW Section 5.5.2

6. REFERENCES: See Block 8

8. PREPARATION INFORMATION

Develop and maintain the following spacecraft processing document:

- LSP-UG-332.02, Guide for NASA Spacecraft Processing at Vandenberg Air Force Base

Maintain the following existing spacecraft processing document:

- LSP-UG-332.01, Guide for Launch Services Program Spacecraft Processing at KSC and CCAFS

Maintain the following existing payload facility handbook documents:

- LSP-UG-411.01, Facilities Handbook for Building AE
- LSP-UG-411.04, NASA Facilities Reference Book for VAFB Facilities

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL					A. ITEM NO. DRD-6
B. LINE ITEM TITLE: Requirements Coordination Output					
C. OPR. VA-E	D. TYPE 2	E. INSPECT/ACCEPT 2	F. FREQ. See Block J	G. INITIAL SUB. See Block J	H. AS OF DATE

J. REMARKS

- Program Introduction (PI) for LSP Payloads as required to establish Job Order Numbers to collect Range charges for payload support.
- Statements of Capability (SC's) for all payloads required to be distributed within two weeks of receipt from Range.
- Payload Requirements Document (PRD)/Program Support Plan (PSP) required 2.5 months prior to LSSP Baseline.
- Operations Requirements (OR)/Operations Directives (OD) required 30 days prior to first test.

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
VA-B, VA-E1, VA-E2		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2 NUMBER
Documents, Support Requirements	
3. USE: To document user support requirements, KSC support and supporting organizations responses to facilitate planning and ensure user requirements are met.	4 DATE: May, 2001 5. ORGANIZATION: KSC
7. INTERRELATIONSHIP: LSSP DR # 18, SOW Sections 5.1, 5.1.2, 5.1.3	6. REFERENCES: KSC-HB-GP60-2

8. PREPARATION INFORMATION

All documents will be prepared in the Universal Documentation System (UDS) format.
NASA mixed fleet manifest will be used to document future payloads and establish new support items.

PI's and SC's

LSP PI's

LSP PI currently exists in the KSC document system.
LSP PI must be kept current to secure support from USAF for programs planned.
LSP PI's will be updated/developed as required to list requirements levied on the 45th Space Wing (SPW) to support payload processing at CCAS.

LSP SC's

In response to a given PI, SC will be prepared by the Range.
SC should be reviewed for supportability and distributed to affected KSC organizations

Enter routine and expedited payload requirements into the Automated Support Requirements System (ASRS) per KSC-HB-GP60-2.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-7

B. LINE ITEM TITLE:
Facility Condition Assessment Report

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-E	3	2	See Block J	90 Days after contract start	

J. REMARKS
Initial Plan is due 90 days after contract start
Initial Report is due 9 months after contract start
Thereafter, updated Reports are due Annually – See Block 8 for details

K. DISTRIBUTION
VA-B, VA-E, VA-E2, VA-E2-A, VA-E1

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE
·port, Facility Condition Assessment

2. NUMBER

3E
To verify and report the physical and operational condition of the assigned facility systems. Used to determine the long term usefulness/degradation of the infrastructure

4. DATE
June, 2001

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 8.1.2

6. REFERENCES
NPR 8831.2

8. PREPARATION INFORMATION
The purpose of this report is to document and report the condition of the facility systems and equipment. It is to include a discussion of the method of analysis and shall report the findings of each facility system with a summary by facility. The material and manpower costs for restoration shall be reported. In addition a recommendation for restoration, funding requirements and a proposed plan shall be presented. This report shall also include a "Facility Maintenance Self Assessment" which documents the following items:

1. Backlog of Maintenance and Repair
2. Unconstrained Annual Maintenance and Repair requirements (with & without CofF)
3. Annual Maintenance and Repair (with & without CofF)
4. Scheduled Work
5. Predictive Testing & Inspection (PT&I) "Finds"
6. PM & PT&I Work accomplished as a percentage of PM & PT&I Work scheduled
7. Breakdown Repairs as a Percentage of Total Repairs
8. Significant Failures Influenced by Constrained Resources
9. Significant Failures Avoided by the Use of PT&I
10. Conclusion identifying lessons learned, weaknesses/deficiencies, and corrective actions taken or ·lanned.

·e data, assessment of facility systems condition, shall be at least 20% updated each year, ınsuring a 100% update over 5 years in accordance with the latest revision of NPR 8831.2

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-8, Rev. 3

B. LINE ITEM TITLE: Information Technology Certification and Accreditation Package

C. OPR	D. TYPE	E. INSPECT ACCEPT	F. FREQ.	G. INITIAL SUB	H. AS OF DATE
VA-E1	1	2	AD	See Block J	

J. REMARKS

The contractor shall provide inputs pertaining to a draft Certification and Accreditation (C&A) Package as specified by Attachment J-13. The contractor shall review each draft of the C&A Package. The C&A Package will be updated prior to each tri-annual certification, after each certification, and after discovery of circumstances that negatively affect the security of the System.

K. DISTRIBUTION

See DR-15 (Distribution List)

TOTALS NO	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: Certification and Accreditation Package, Information Technology

2. NUMBER:

3. USE:) provide a mechanism for the contractor to propose the specific implementation of NPR 2810.1A .or each contractor-sustained IT system. Proposed waivers shall be submitted with the inputs to the plan for government approval.

4. DATE: June 2007

5. ORGANIZATION: KSC

6. REFERENCES: See Block 8

7. INTERRELATIONSHIP: SOW Section 10.5.8

8. PREPARATION INFORMATION

Deliver or update an Application/Subsystem Categorization Specification using KSC Form 7-645 for each ELVIS Supported IT Resources (ESResources) as required. ESResources are defined in Attachment J-12. Provide comments regarding the NASA provided system categorization specifications associated with ESResources.

Perform security planning processes for the ESResources. The NASA integrated security plans will be compliant with Subordinate IT Security Plan Template, Requirements, Guidance and Examples, ITS-SOP-0016B. Deliver security controls self-assessments according to NIST SP 800-26 as authorized by the LSP OCSO for the ESResources. Provide recommended changes to the LSP IS Plan of Action and Milestones (POA&M) associated with ESResources. Perform the planning processes for the LSP IS Contingency Plan associated with ESResources, and deliver results to NASA. Review and recommend appropriate changes for the NASA-provided LSP IS Privacy Impact Assessments (PIA) for ESResources.

Perform and provide analysis of compliance of ESResources with Agency Security Configuration Standards (ASCS). Recommend and implement approved variances to the ASCS.

Provide an electronic copy of all above referenced security plan inputs.

Provide the component information required by the System Sizing and Pricing Document, NASA Form 1749.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-9

B. LINE ITEM TITLE: Measurements and Performance Indicators

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-B	2	6	See Block 8	30 days after contract start	

J. REMARKS

K. DISTRIBUTION: VA, VA-A, VA-B, VA-C

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: Measurements and Performance Indicators

2. NUMBER

3. USE: To take internal LSP measurements of LSP Activity Progress

4. DATE: July, 2001

5. ORGANIZATION: KSC

6. REFERENCES

7. INTERRELATIONSHIP: SOW Sections 1.3.3, 3.3

8. PREPARATION INFORMATION

PRODUCT	DESCRIPTION	FREQ	DISTRIBUTION
CCR Queue Time Measurements	Duration of CCR received thru Disposition, Routine Disposition, and Expedited Disposition (3 separate charts) +	Monthly	VA, VA-A, VA-B
CCR Activity Measurements	Indicates the number of approved LSP CCRs in a six-month period, including closure activity	Monthly	VA, VA-A, VA-B
Risk Resolution Time Measurements	Indicates open LSP Launch Services Risks and their projected closure dates, including preceding monthly activity	Monthly	VA, VA-A, VA-B
Risk Processing Activity Measurements	Indicates the number of LSP Risks opened per month, category, and coinciding risk analysis ratings. including preceding months processing/closure/ acceptance activity for each Risk type	Monthly	VA, VA-A, VA-B
Launch Activity Performance Indicators	Includes Manifest, Launch Rate (Total, by Launch Site, and Enterprise); Total Missions in work; KSC FUP; VAFB FUP; Anticipated Work Schedule; World Launch History	Monthly	VA, VA-A VA-B
Mission Management	To be arranged with Mission Management Office	Quarterly	VA-A, VA-C-VA-

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-10

B. LINE ITEM TITLE: Monthly Performance Activity Report

C. CPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-B	3	2	MO	30 days after contract start	

J. REMARKS

K. DISTRIBUTION: VA, VA-B, VA-B

TOTALS NO.	TOTALS TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: Report, Monthly Performance Activity

2. NUMBER

3. USE: Report summarizes Project/Mission activities accomplished and documents significant performance related issues, concerns and milestones for LSP management.

4. DATE: June, 2001

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP: SOW Section 1.3.3

6. REFERENCES

8. PREPARATION INFORMATION

This report summarizes the contractor's activities in fulfilling obligations to the ELVIS contract with NASA Western Operations at Vandenberg Air Force Base, CA. Information contained in this report shall include activities in the Telemetry, Environmental, Facilities, Payload and Launch Processing Support, Safety, Reliability, and Quality Assurance, Engineering, Logistics, and Industrial Services areas. General activities, projects, operations, equipment status, and other pertinent information are covered in detail under individual sections.

Page limit Not To Exceed 10 pages

Contractor Format is Acceptable

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL					A. ITEM NO. DRD-11
B. LINE ITEM TITLE: Payload Support Requirements Implementation Plan					
C. CFR. VA-E	D. TYPE 1	E. INSPECT/ACCEPT 2	F. FREQ. AR	G. INITIAL SUB. See "J"	H. AS OF DATE
J. REMARKS Implementation plans for payloads to be published per contractor/government co-developed template for each payload/mission, based on the generic templates.					
K. DISTRIBUTION VA-B, VA-E1, VA-E2, VA-E2-A					TOTALS NO. / TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE Plan, Payload Support Requirements Implementation	2. NUMBER
3. USE To document the plan for meeting the payloads support requirements.	4. DATE March, 2001
	5. ORGANIZATION KSC
7. INTERRELATIONSHIP DRD-6, DRD-18, SOW Section 5.1	6. REFERENCES

8. PREPARATION INFORMATION

Provide an implementation plan for the payload/mission support requirements to include:

- Support Requirements Responses from the Payload Requirements Document/Program Support Plan (PRD/PSP).
- Detailed flow schedules providing the need dates for payload hardware, software, and documentation.
- Cost estimates for non-standard services (ELVIS provided only) as listed in the LSSP. Generic templates give the following dates for publication:
  -
  - Preliminary LSSP at L-14 months.
  - PRD/PSP at L-10.5 months.
  - Baseline LSSP at L-7 months.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL					A. ITEM NO. DRD-12
B. LINE ITEM TITLE: Quarterly Headcount Report					
C. OPR. OP	D. TYPE 3	E. INSPECT/ACCEPT 6	F. FREQ. Quarterly	G. INITIAL SUB. See Block J	H. AS OF DATE
J. REMARKS Initial submittal shall be first reporting quarter following contract start to be coordinated with Contracting Officer.					
K. DISTRIBUTION OP, VA-B, GG-C-A4					TOTALS NO. / TYPE

DATA REQUIREMENT DESCRIPTION

ɿport, Quarterly Headcount	2. NUMBER
3. USE Information for workforce reporting requirements	4. DATE March, 2001 5. ORGANIZATION KSC
7. INTERRELATIONSHIP SOW Section 1.3.3	6. REFERENCES None
8. PREPARATION INFORMATION	

SEE CONTINUATION SHEET

Cont'd
.tachment

A. Labor Reports shall be submitted monthly, not later than the 5th day of the following month.
B. A complete organization chart including all employees by skill or job classification shall be provided.
C. Labor data shall be submitted and formatted as follows:

TOTAL HEADCOUNT

Prime
On Site
Off Site
Dispossessed
Other Off Site
Total:_____

Subcontractors (by name): (Include only Subcontractors with on site personnel)
On Site
Off Site
Dispossessed
Other Off Site
Total:_____

Construction
Subcontractors (by name): Brief Description Total:_____

'ollowing definitions apply to the above terms:

'. On Site - Those personnel performing on the contract occupying physical space on the Kennedy Space Center or Vandenberg Air Force Base. Includes those personnel temporarily absent from assigned duty stations (e.g., on leave without pay, annual/sick leave).

2. Off Site - Total of those personnel performing on the contract but physically located outside the environs of KSC or VAFB.

a. Dispossessed - Those personnel who normally would occupy physical space within the environs of KSC or VAFB but who have located offsite due to non-availability of space.

b. Other Off Site - Those personnel within total contract headcount who are not planned to occupy physical space within the environs of KSC or VAFB.

3. Facility Design and Construction Subcontractors: Those personnel performing on the contract within the environs of KSC or VAFB. Include a brief description or title of the effort.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-13 Rev. 3

B. LINE ITEM TITLE: Equal Employment Opportunity Report (EEO-1)

C. OPR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
AJ	3	2	Annually	See Block J	

J. REMARKS
The contractor shall provide this report no later than September 30th of each year per Section I Clause 52.222-26 (MAR 2007) .

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
AJ, OP-LS		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Report, Equal Employment Opportunity	

3. USE	4. DATE
This document will be used by Government personnel to assess the contractor's equal employment and affirmative action management of the contract effort and may be used as a part of the award fee evaluation.	August 2008
	5. ORGANIZATION: KSC
7. INTERRELATIONSHIP: SOW Section 1.3.3, Section I Clause 52.222-26	6. REFERENCES

8. PREPARATION INFORMATION

A. The EEO-1 report must be filed annually with the EEOC by September 30. It must use employment numbers from any pay period in July through September of that year.

B. The EEO-1 report must be used beginning with the survey due by September 30, 2007. For the surveys due by September 2006, employers should continue to use the EEO-1 report format from previous years. This report is still available on the EEOC's website at https://apps.eeoc.gov/eeo1/eeo1.jsp

C. EEO-1 reports shall be submitted through the EEO-1 Online Filing System or as an electronically transmitted data file. Paper EEO-1 forms will be generated on request only, and only in extreme cases where Internet access is not available to the employer. Instructions on how to file are available on the EEOC's website at http://www.eeoc.gov/eeo1survey/howtofile.html.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO: DRD-14, Rev. 1

B. LINE ITEM TITLE: Fixed Price Mission/Project Allocation Report

C. OPR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ	G. INITIAL SUB.	H. AS OF DATE
VA-B	3	2	MO	30 days after contract start	

J. REMARKS

Monthly report is due 10 working days after the close of the contractor's accounting period.

K. DISTRIBUTION

GG-C-D, VA-B1

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: Report, Fixed Price Mission/Project Allocation

2. NUMBER:

3. USE: To facilitate charging to specific KSC external customers

4. DATE: August 2008

5. ORGANIZATION: KSC

6. REFERENCES:

7. INTERRELATIONSHIP: SOW Section 1.3.4

8. PREPARATION INFORMATION

Track and report Fixed-Price core mission hours and Mission Direct prices by mission (IDIQ SOW 9.0) or project (IDIQ SOW 11.0), to include all burdens, on a monthly basis according to established format.

Electronic Product shall be compatible with Microsoft Office suite of software.

Contractor format is acceptable.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO: DRD-15, Rev. 2

B. LINE ITEM TITLE: DR Distribution List

C. OP-LSR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ	G. INITIAL SUB	H. AS OF DATE
VA	3	NA	NA	NA	

J. REMARKS

K. DISTRIBUTION

TOTALS	
NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: DR Distribution List

2. NUMBER

3E

4. DATE: May 2001

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP

6. REFERENCES

8. PREPARATION INFORMATION

See Attached Continuation Sheet

DR	DR Title	Distribution List (Quantity)
1	Access To Data	VA-B; VA-C; VA-E2; VA-F3; VA-F4; VA-F7; VA-F8; OP-LS; SA-D
2	Logistics and Travel Activity Report	VA-B, GG-L
3	Contractor Financial Management Reports	VA-B, GG-L; OP-LS
4	Facility Utilization and Advance Planning Schedules	VA-B, VA-E1, VA-E2, VA-E2-A
5	Customer Information Documents	VA-B, VA-E1, VA-E2
6	Requirements Coordination Output	VA-B, VA-E1, VA-E2
7	Facility Condition Assessment Report	VA-B, VA-E, VA-E1, VA-E2, VA-E2-A
8	Information Technology Security Plan	VA-B, VA-E1, IT-B
9	Measurements and Performance Indicators	VA, VA-B, VA-C
10	Monthly Performance Activity Report	VA, VA-B
11	Payload Support Requirements Implementation Plan	VA-B, VA-E1, VA-E2, VA-E2-A
12	Quarterly Headcount Report	VA-B, GG-L, OP-LS
13	Equal Employment Opportunity Report	AJ, OP-LS
14	Fixed Price Mission/Project Allocation Report	VA-B, GG-L
15	DR Distribution List	VA-B, VA-E
16	VPP Performance Assessment	VA-B, SA-D

DR	DR Title	Distribution List (Quantity)
17	GSE Condition Assessment Report	VA-B, VA-E, VA-E1, VA-E2, VA-E2-A
18	Launch Site Support Plan	VA-E1, VA-E2, VA-E2-A
19	Pressure Vessel/System Certification Report	VA-E,VA-E2
20	S&MA Reports	SA-D
21	Safety and Health Incidents, Mishaps, and Close Calls	SA-D
22	Facility Contamination Control Plan/ Report	VA-B, VA-E1, VA-E2, VA-E2-A
23	Facility Modifications Design and Construction Plan	VA-B, VA-E2, VA-E2-A, GG-L, OP-LS
24	Certification of Facility Readiness	VA-B, VA-E1, VA-E2, VA-E2-A
25	Energy Conservation Plan/Report	VA-B, VA-E1, VA-E2, VA-E2-A, TA-C3
26	Monthly Project Review Presentation	VA, VA-B
27	Security Plan	VA-E2, VA-E2-A
28	GIDEP Report	SA-D
29	Export Control Plan	VA-C, OP-LS
30	ELV Program Schedule	VA, VA-B, VA-C, VA-E, VA-E1, VA-E2, VA-F, VA-F3, VA-F4, VA-F7, SA-D
31	Facilities, Systems, and Equipment Maintenance Report	VA-E, VA-E2

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DR-16

B. LINE ITEM TITLE:
VPP Performance Assessment Report

C. OPR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
QA	3	6	See Block J	See Block J	

J. REMARKS

1. Quarterly Status Report
2. One Report due 24 months after Start – See Block 8 for details

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
QA, VA-B		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Report, VPP Performance Assessment	

3. USE	4. DATE
To document the contractor's progress towards compliance with VPP	July, 2001
	5. ORGANIZATION: KSC

7. INTERRELATIONSHIP	
SOW 1.3.7	

8. PREPARATION INFORMATION

1. One-time report to be submitted 24 months after contract start documenting compliance with OSHA STAR certification

2. Identify all actions taken within the reporting period toward meeting the requirements identified in SOW. The Contractor shall identify all issues, problematic areas, and identified deficiencies in complying with OSHA VPP Star certification requirements.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-17

B. LINE ITEM TITLE:
Ground Support Equipment (GSE) Condition Assessment Report

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-E	3	2	AN	1 year after contract start	

J. REMARKS

K. DISTRIBUTION
VA-B, VA-E, VA-E2, VA-E2-A, VA-E1

TOTALS NO.	TOTALS TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE
PORT, GSE CONDITION ASSESSMENT

2. NUMBER

3. DESCRIPTION/PURPOSE
To verify and report the physical and operational condition of the assigned major GSE. Used to determine the long term usefulness/degradation of the GSE.

4. DATE
May, 2001

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
Sow Section 8.1.2

6. REFERENCES

8. PREPARATION INFORMATION
The purpose of this report is to document and report the condition of the significant items of ground support equipment (items whose value exceeds $10,000). It is to include a discussion of the method of analysis and shall report the findings of each item of GSE. The material and manpower costs for restoration shall be reported. In addition a recommendation for restoration, funding requirements and a proposed plan shall be presented. The plan shall include the next fiscal year and a projection for significant items that are anticipated to require restoration or repair in the following four years.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL					A. ITEM NO DRD-18
B. LINE ITEM TITLE: Launch Site Support Plan					
C. OPR. VA-E	D. TYPE 2	E. INSPECT/ACCEPT 6	F. FREQ. See Block J	G. INITIAL SUB. P: L-14 mos B/L: L-7 mos	H. AS OF DATE
J. REMARKS Preliminary (P) and Baseline (B/L) LSSP shall be prepared for each LSP mission based on inputs from the payload customer. A Baseline revision may be required due to late changes in requirements, PPF scheduling, etc.					
K. DISTRIBUTION VA-E2, VA-E2-A, VA-E1					TOTALS NO. / TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE Launch Site Support Plan	2. NUMBER
3. USE provide a signed agreement between the LSP Program and the spacecraft tomer for KSC-provided products and services needed to perform processing of the spacecraft at the launch site. To provide a formal means of distributing the spacecraft requirements to the Launch Site Support Team.	4. DATE March, 2001
	5. ORGANIZATION KSC
7. INTERRELATIONSHIP SOW Sections 5.1, 5.1.1	6. REFERENCES

8. PREPARATION INFORMATION

References: LSP-P-333.01, LSP-F-333.01

The purpose of this plan is to define for each LSP mission the payload customer's requirements for KSC-provided products and services needed to perform payload launch site processing. By KSC and payload customer joint signature, it shows KSC's commitment to provide these products and services. It includes the following information, arranged according to a specified format:

a. Description of the payload customer project and spacecraft;
- Overview of the payload launch site processing, including a summary of payload-unique processing requirements and special agreements;

b. Launch Service Provider (LSP) launch site processing requirements in a KSC Payload Processing Facility;
c. Launch site contingency planning summary;
d. Schedule of deliverable items to be provided by the payload customer and the LSP to support payload launch site processing;
e. Complete definition of deliverable items to be provided by KSC to support payload launch site processing.

The contractor shall maintain the payload customer team address list for use in the distribution of documents.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-19

B. LINE ITEM TITLE:
Pressure Vessel/System Certification Report

C. CPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-E	3	2	Annual	180 days after contract start	

J. REMARKS

K. DISTRIBUTION
VA-E,VA-E2

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE
Report, Pressure Vessel/System Certification

2. NUMBER

3. DESCRIPTION
a required to demonstrate implementation of NPD 8710.5, KSC-SO-S-9, and KNPR 8715.3, to ensure all ground-based pressure vessels and pressurized systems are certified safe to operate and are re-certified periodically.

4. DATE
May, 2001

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 8.1.1

6. REFERENCES
See Block 8

8. PREPARATION INFORMATION

8.1 SCOPE: The Pressure Vessel/System Certification covers all ground-based pressure vessels and pressurized systems under the contractor's responsibility. The contractor shall submit certification, as well as all records of maintenance done on the pressure vessels to keep certification.

8.2 APPLICABLE DOCUMENTS
NPD 8710.5 NASA Safety Policy for Pressure Vessel and Pressurized Systems

KSC-SO-S-9 Standard for Retest and Refurbishment of Compressed Gas Trailers & Movable Storage Units
81K00268 Specification for External Cleaning, Corrosion Control and Protective Coating of Propellant Equipment

KNPR 8715.3 KSC Safety Practices Procedural Requirements

8.3 CONTENTS: In accordance with guidelines in NPD 8710.5, KSC-SO-S-9, and KNPR 8715.3

8.4 FORMAT: Contractor format is acceptable.

8.5 MAINTENANCE: Changes shall be incorporated by change page or complete reissue

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-20

B. LINE ITEM TITLE: S&MA/Quality Reports

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
SA-D-1	3	2	See Block 8	See Block 8	

J. REMARKS

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
SA-D-1		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Reports, S&MA/Quality	
E	4. DATE
	5. ORGANIZATION: KSC
7. INTERRELATIONSHIP: SOW Section 4.1.2,4.1.3,4.1.4,4.1.5,4.1.6,4.2.3,4.2.4	6. REFERENCES
8. PREPARATION INFORMATION	

Weekly Report

- Identification of surveillance activities and process assessments performed.
- Summary of reviews, meetings, tests, and local site visits.
- Comprehensive notes on status and issues of flight assurance activities and program issues.
- Trip reports and training briefing notes in lieu of, or in addition to Weekly Report, as appropriate.
- Summary of GIDEP activities.

Special Notification Report

- Failures that occur during qualification, acceptance, test and inspection and integration of hardware and software.
- Unusual phenomena, occurrence or difficulty in manufacturing processing or operations.
- Hardware and software delivered, completed, or near completion which may require further evaluation or test.
- Designs, procedures or processes, which although in compliance with requirements, may compromise safety, quality, reliability, schedule or cost.
- Unplanned interruptions, major changes, or relocations of operations.
- Missed mandatory operations.

Surveillance Reports

Surveillance Reports shall be provided for:

- Safety and Mission Assurance Plan Reviews.
- Evaluations and independent assessments, observations, and surveys of LSP plans, performance and processes, design reviews, production reviews

Reports shall include, as applicable:

- Identification of personnel, location, operation or process assessed.
- Observations of performance and evaluations and assessments of processes.
- Results or events that have an effect on status, performance, or quality.
- Areas of noncompliance, corrective action taken or in process, and agreements reached.
- Summary of inspection and test results or mandatory inspections, and changes or planned changes affecting the level or degree of inspection or test.
- Use and management of documentation, and unauthorized use (e.g., disapproved or cancelled documents or use of documents prior to approval).
- Actual and proposed changes in contractor's key personnel.
- Tracking of all open items, anomalies and issues that affect present or future missions and similar launch vehicles or their components.
- Problems previously reported that remain unresolved.
- Summary of special processes reviewed or evaluated.
- Changes in facilities or process capabilities that could affect performance, including planned changes, accidents, or natural disasters.
- Assessments of build paper, test results, non-conformance reports, discrepancy history, failure analysis waivers, deviations and MRB activities presented at hardware reviews.

Quality Assurance Report

- Number of written and number of open Material Review Reports (MRR) for the launch vehicle (flight), and list of open MRRs.
- Number of written and number of open Material Review Reports (MRR) for the launch vehicle (fleet, related and, removed from vehicle), and list of open MRRs.
- Listing of Test Requirements Document waivers
- Summary of LSP work plan status, and quality assurance assessment.

Trip Reports

- Summary of major activities.
- Action Items resulting from activities.
- Assessment, areas of concern, recommendations.
- Attendance list and meeting handouts.

Safety Assessment Reports

- Identification of potential or actual hazards.
- Risk assessment of identified hazards.
- Identification of applicable safety requirements.

- Recommended corrective action or hazard mitigation.

Mission Flight Assurance Summary Report (MFAS)

- Summary of Flight Assurance activities for the mission
- Number and type of reviews, meetings, and tests conducted
- Trending Charts identifying:
  - Nonconformance (NC) issues or problem reports (PR) for the mission compared to similar missions.
  - Breakdown of NC or PR by launch vehicle system.
  - Corrective Action processing timeliness
- Flight Assurance (Safety and Mission Assurance) Special Interest items and First Flight Items
- GIDEP Activities

Procedure Review Report

- Summary of monthly procedure review activities defining number of procedures received, number reviewed, timeliness in meeting suspense requirements
- Trends for timeliness of procedural submittal and incorporation of comments by LSP.
- Areas of concern and recommended corrective actions

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-21

B. LINE ITEM TITLE:
Safety and Health Incidents, Mishaps, or Close Calls

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
SA-D-1	3	6	AR	AR	

J. REMARKS

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
SA-D-1		

DATA REQUIREMENT DESCRIPTION

1. TITLE
Safety and Health Incidents, Mishaps, or Close Calls

2. NUMBER

Document and investigate all Safety and health incidents, mishaps, or close calls.

4. DATE
March, 2001

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 4.1.1

6. REFERENCES
NPR 8621.1
KNPR 8715.3

8. PREPARATION INFORMATION
The contractor shall report and investigate all safety and health incidents, mishaps, or close calls IAW NPR 8621.1, NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Record-Keeping. They shall be recorded and submitted electronically to the Incident Reporting Information System (IRIS) on NF-1627, NASA Full Safety Incident Report, and IAW the IRIS instructions.

All Type A, B, and C mishaps as defined by KNPR 8715.3 shall be reported to the KSC ELV Safety and Mission Assurance Office when the contractor is in a NASA-owned or assigned facility.

All mishaps occurring in KSC payload processing facilities will be coordinated with facility safety personnel prior to formal mishap reporting.

DRD-21: Block 8 Continued

Data Requirements:

- An Initial Incident Notification shall be reported by telephone with fax or e-mail follow -up, to the KSC ELV Safety and Mission Assurance Office within one hour of the incident.

- An Initial Incident Report as defined by KNPR 8715.3 shall be provided to the KSC ELV Safety and Mission Assurance Office within four hours of the incident.

- An Assessment Report shall be provided to the KSC ELV Safety and Mission Assurance Office within three working days of the incident with the requirements as defined by KNPR 8715.3, if it is determined that the incident is not a mishap. A mishap report shall be submitted if no assessment is performed.

- A Mishap Report shall be provided to the KSC ELV Safety and Mission Assurance Office within 15 working days of the mishap with the requirements as defined by KNPR 8715.3, if the incident is a reportable mishap.

- A Corrective Action Plan shall be provided to the KSC ELV Safety and Mission Assurance Office within 45 working days of mishap occurrence with the requirements as defined by KNPR 8715.3. The contractor shall provide updates and status for the submitted corrective actions and completion dates.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-22

B. LINE ITEM TITLE:
Facility Contamination Control Plan and Report

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-E	3	2	See Block J	See Block J	

J. REMARKS
Facility Contamination Control Plan shall be submitted within 90 days of contract start and updated as required.
Facility Environmental Measurements Report shall be submitted monthly.

K. DISTRIBUTION
VA-B, VA-E2, VA-E2-A, VA-E1

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE
n and Report, Contamination Control

2. NUMBER

-E

Establishes the standard for facilities operational guidelines, requirements, and implementation for the monitoring and maintenance of environmental and cleanliness conditions and reports measurement.

4. DATE
May, 2001

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 8.4.2

6. REFERENCES
K-STSM-14.2.1

8. PREPARATION INFORMATION
This plan shall include contamination/cleanliness requirements, operational guidelines, monitoring, and maintenance implementation procedure descriptions.

Out of specification or other contamination incidents shall be reported immediately. Facility environmental measurements, particle count, temperature and humidity shall be reported on a monthly basis.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO DRD-23

B. LINE ITEM TITLE:
Facility Modifications Design and Construction Plan

C. OPR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-B	3	2	AN/See Block J	90 days after contract Start	

J. REMARKS
This plan shall be updated annually to support the Construction of Facilities (CofF) Budget Call Annual due date shall be coordinated with the Contracting Officer

K. DISTRIBUTION
VA-E2, VA-E2-A, VA-B, OP-LS, GG-C-A4

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE
Plan, Facility Modification Design and Construction

2. NUMBER

4. DATE

This plan will be used to forecast requirements for upgrades to facilities and their associated systems

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 8.1.2

6. REFERENCES
NPR 8820.2

8. PREPARATION INFORMATION
In response to the annual CofF budget call, this plan is shall document a five-year forecast of all proposed capital improvement upgrades to facilities and/or their associated systems that cost in excess of $50,000. The items on the list will be ranked in order of priority, and include estimated costs, year proposed, and rationale for submission. This list will be formulated to allow submission into the NASA Program Operating Plan cycle. This plan will be reviewed and updated once a year. The Contractor shall adhere to NPR 8820.2 when documenting Construction of Facilities type projects.
In addition, in adherence to NPR 8820.2, the Plan will include design costs for the proposed projects 2 years before the scheduled midpoint of construction date

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-24

B. LINE ITEM TITLE.
Certification of Facility Readiness

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-E	3	2	AR	AR	

J. REMARKS
Submittal is normally required 5 days prior to spacecraft arrival/established milestones.

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
VA-B, VA-E2, VA-E2-A, VA-E1		

DATA REQUIREMENT DESCRIPTION

1. TITLE
Certification of Facility Readiness

2. NUMBER

4. DATE
June, 2001

5. ORGANIZATION
KSC

6. REFERENCES

:eport certification the facility is ready to support the processing/testing and meets all established requirements.

7. INTERRELATIONSHIP
SOW Section 8.1.1

8. PREPARATION INFORMATION
Certification of Readiness shall include all the facility systems listed in Attachment J-3, which are required to support the spacecraft processing/testing throughout the required period. The certification shall also include those systems and commodities that are required to support, but are operated, maintained, and engineered by others.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-25

B. LINE ITEM TITLE: Energy Conservation Plan/Report

C. CFR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
TA-C3	3	6	See Block 8	See Block 8	

J. REMARKS

K. DISTRIBUTION

VA-B, TA-C3, VA-E2, VA-E2-A, VA-E1

TOTALS NO.	TOTALS TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE: Plan/Report, Energy Conservation

2. NUMBER:

s plan/report shall identify and document energy use and cost data

4. DATE: May, 2001

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP: SOW Section 8.1.1

6. REFERENCES:

8. PREPARATION INFORMATION

1. Electricity and fuel consumption per gross square foot, and cost for ELVIS responsible facilities per the AFEC (Assignment of Facilities for Energy Conservation). DUE MONTHLY
2. Energy Initiative Report: Status of projects to include a project description, point of contact, planned and actual energy cost avoidance (in BTUs and dollars). DUE MONTHLY
3. Variance Analysis: Comparison between the planned and actual monthly electric, fuel and natural gas consumption and cost. DUE MONTHLY
4. Forecasts: Project consumption to support the budget for the current FY and the four succeeding FYs. Include a listing and description of projects or actions that could significantly impact energy consumption. DUE AS REQUIRED TO SUPPORT BUDGET EXERCISES
5. Quarterly energy consumption and cost. DUE QUARTERLY
6. Semi-annual compliance Summary: Present data graphically, which shows planned versus actual energy consumption, consumption per gross square foot and cost. DUE SEMI-ANNUALLY
7. Annual report and Compliance summary: List and describe accomplishments from the preceding year. Also graphical and tabular data shall be shown to compare planned versus actual energy consumption, consumption per gross square foot, and cost. Tabulations shall also include actual energy reduction, for the past 12 months, from the baseline year. Adjustment to the baseline year will ə justified and documented. DUE ANNUALLY

References: 10CFR part 435; 10CFR part 436; KMI 8800.8; NPD 8500.1

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL					A. ITEM NO. DRD-26
B. LINE ITEM TITLE: Monthly Project Review Presentation					
C. OPR. VA-A	D. TYPE 3	E. INSPECT/ACCEPT 6	F. FREQ. Monthly	G. INITIAL SUB. 30 days after contract start	H. AS OF DATE
J. REMARKS					
K. DISTRIBUTION VA, VA-B					TOTALS NO. / TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Presentation, Monthly Project Review	
	4. DATE
Status of Monthly Project Activity	5. ORGANIZATION: KSC
7. INTERRELATIONSHIP: SOW Section 3.2	6. REFERENCES

8. PREPARATION INFORMATION

Presentation shall cover the following topics in detail:

- LSP Customer Performance Evaluation
- Manifest
- Developmental Items
- Engineering Division Issues
- Fleet Status
- Long Term Fleet Status
- Mission Analysis
- Engineering Review Board
- Facility Utilization
- Hangar AE Schedule
- Near Term Mission Status
- Long Term Red/Yellow Mission Status
- Mission Stoplight Chart
- Advanced Mission Status
- ELV Safety & Mission Assurance Office Report
- Project Decision Meeting
- Back Up Charts

KSC FORM 16-246 (REV. 1/

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL					A. ITEM NO. DRD-27
B. LINE ITEM TITLE: Security Plan					
C. OPR. TA-E2	D. TYPE 3	E. INSPECT/ACCEPT 2	F. FREQ. As Required	G. INITIAL SUB. 30 days after contract start	H. AS OF DATE
J. REMARKS					
K. DISTRIBUTION VA-E2, VA-E2-A					TOTALS NO. / TYP

DATA REQUIREMENT DESCRIPTION

1. TITLE [illegible]n, Security	2. NUMBER
Document shall detail Contractor approach to implementing KSC and VAFB security policies and directives.	4. DATE July, 2001 5. ORGANIZATION KSC
7. INTERRELATIONSHIP SOW Section 8.3	6. REFERENCES NHB 1620.3C KHB 1610.1C

8. PREPARATION INFORMATION

The Contractor Security Plan shall address the Contractor approach to implementing KSC policy and directive documents. Additionally, other Contractor security initiatives and innovative operating approaches or procedures shall be included. The basic plan shall be unclassified. Any KSC referenced documents that would be included in the basic Contractor Security Plan whose inclusions would be classified should be addressed as a separate appendix appropriately classified.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-28

B. LINE ITEM TITLE:
Government Industries Data Exchange Program (GIDEP) Alert Report

C. CPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
SA-D-1	3	6	AR	AR	

J. REMARKS

K. DISTRIBUTION
SA-D-1

TOTALS NO.	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE
›ort, Government Industries Data Exchange Program (GIDEP) Alert

2. NUMBER

3. DESCRIPTION
This report shall be used to alert/notify industry of hardware failures

4. DATE

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 4.2.2

6. REFERENCES

8. PREPARATION INFORMATION

1. This report will identify all matches of hardware provided under the ELVIS and LSP contracts.
2. The report shall identify the GIDEP Alert number, flight hardware impacted, analysis of the problem, and any corrective action required.
3. The report shall include results from any subcontractor GIDEP Alert Reviews.

KSC FORM 16-246 (REV. 1/

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-29

B. LINE ITEM TITLE:
Export Control Plan (ECP)

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-A	2	2	Annually	Section J	Section J

J. REMARKS
Draft plan shall be submitted 62 days after contract start. Final approved plan shall be submitted 16 days after draft plan submitted. The plan shall be reviewed at least annually thereafter and updated as required.

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
OP-LS, VA-C, VA-B		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Export Control	

USE	4. DATE
Document the contractor's concept for export control	

	5. ORGANIZATION
	KSC

7. INTERRELATIONSHIP	6. REFERENCES
SOW Section 1.3.8	

8. PREPARATION INFORMATION

CONTENTS: The contractor shall prepare and submit a Export Control Program (ECP) Plan to describe the contractor's planned approach for accomplishing contract functions while adhering to export laws, regulations, and directives.

FORMAT: Contractor format is acceptable.

MAINTENANCE: The plan shall be reviewed annually to ensure accuracy. Any updates to the plan require a resubmission of the plan.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-30

B. LINE ITEM TITLE: LSP Program Schedule

C. OPR	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA	3	6	Weekly	2 weeks after contract start	

J. REMARKS

Report also accessible electronically

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
VA, VA-B, VA-F, VA-C, SA-D-1, VA-E, VA-F3, VA-F4, VA-E1, VA-E2		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Schedule, LSP Program	
Status and schedule of LSP Program, Project, and Contract Activities	4. DATE: June, 2001
	5. Organization: KSC
7. INTERRELATIONSHIP: SOW Section 3.1	6. REFERENCES

8. PREPARATION INFORMATION

Schedule generated in Milestones Professional software

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-31

B. LINE ITEM TITLE:
Facilities, Systems, and Equipment Maintenance Report

C. CPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
VA-A	3	6	Monthly	30 days after contract start	

J. REMARKS

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
VA-E, VA-E2		

DATA REQUIREMENT DESCRIPTION

1. TITLE
Report, Facilities, Systems, and Equipment Maintenance

2. NUMBER

3. SE
Document monthly maintenance activities

4. DATE
July, 2001

5. ORGANIZATION
KSC

7. INTERRELATIONSHIP
SOW Section 8.1.2

6. REFERENCES

8. PREPARATION INFORMATION

The report shall include, but not be limited to the following:

- Number of problems discovered
- Time from discovery to reporting to the Government
- Time required from discovery to initial response
- Time required for complete problem resolution or current progress
- Impacts to operations, safety, or reliability that may have been incurred as a result of these problems.

FORMAT: Contractor format is acceptable.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION FOR DRL	A. ITEM NO. DRD-32

B. LINE ITEM TITLE:

Advance Notification of Workforce Reductions

C. OPR.	D. TYPE	E. INSPECT/ACCEPT	F. FREQ.	G. INITIAL SUB.	H. AS OF DATE
QA-A1	3	N/A	AR	See Block J	

J. REMARKS

The Contractor shall notify in writing the Industrial Relations Officer, Code QA-A, with a copy to the Contracting Officer, at least 15 calendar days in advance of notification to employees of any planned workforce reduction of permanent, full-time, and part-time employees that exceeds 10% of the total contract workforce or 25 employees, whichever is less. In addition, if Workforce Adjustment and Retraining Notification (WARN) Act notification is required, the contractor shall provide to the IRO and the Contracting Officer the information required by the WARN Act, section 639.7(c) and a listing of all organizations to be notified including those required by section 639.6(a), (c), and (d), at least five days prior to issuance of the notification.

K. DISTRIBUTION	TOTALS NO.	TOTALS TYPE
Contracting Officer Contracting Officer's Technical Representative QA-A1		

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Advanced Notification of Workforce Reduction	
3. USE Information for workforce reporting requirements	4. DATE 06-01-2003
	5. ORGANIZATION KSC/OP
7. INTERRELATIONSHIP Statement of Work Section 1.3.3	6. REFERENCES None

8. PREPARATION INFORMATION

The notification shall include the reason for the reduction in workforce, the number of employees impacted, Their physical location, and their location within contract organizational structure.

The notification shall also identify the expected date of the first separation and the anticipated schedule for making separations, as well as the name and telephone number of a company official to contact for further information.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION OF DRL	A. ITEM NO.
B. LINE ITEM TITLE: ELVIS Six-Year IT Buy Plan	DRD-33

C. OPR	D. TYPE	E. INSPECTION ACCEPT	F. FREQ	G. INITIAL SUB	H. AS OF DATE
VA-E1	1	2	AN	12/31/2007	

I. REMARKS: The reproducible copy shall be electronic.

K. DISTRIBUTION: VA-E1 (1 A, 1 B) - See block J.

TOTALS NO	TYPE
1	A
1	B

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Plan, ELVIS Six-Year IT Buy	DRD-33

3. USE	4. DATE
This deliverable shall demonstrate comprehensive planning to maintain usability of the IT ystems and to provide the Government a planning and prioritization tool for supported IT esources.	June 2007
	5. ORGANIZATION: KSC

7. INTERRELATIONSHIP	6. REFERENCES
None	

8. PREPARATION INFORMATION

The plan shall provide an itemized detailed list of hardware, software, and maintenance agreement licenses that will be required to life-cycle ESServers and ESNetworks from the current FY+1 to current FY+6. The plan shall include schedules of deliverables, and document impacts if each line item is not funded. The plan shall also include a schedule of items to be excessed. The Government shall approve the format. Each line item shall include the following properties: Description of each item with unit cost; projected costs per fiscal year for each item; a total projected cost per fiscal year; and a Grand Total for the entire plan period. The plan shall also include the impact per line item if that line item is not funded.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION OF DRL	A. ITEM NO: DRD-34

B. LINE ITEM TITLE: IT Security Program Plan

C. OPR	D. TYPE	E. INSPECTION ACCEPT	F. FREQ	G. INITIAL SUB	H. AS OF DATE
VA-E1	1	2	AR	1/31/2008	

J. REMARKS: The reproducible copy shall be electronic.

K. DISTRIBUTION: VA-E1 (1 A, 1 B) - See block J.

TOTALS NO	TYPE

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Plan, IT Security Program	DRD-35

3. USE: To demonstrate that the Contractor understands the Federal and NASA IT security requirements and details how they plan to implement IT security and remain compliant with hanging IT security requirements on IT resources used by the Contractor including: (1) The Contractor's corporate systems and applications that contain NASA information, (2) The Contractor's corporate systems or applications that are in NASA's internet protocol address space, and (3) NASA systems or applications that are operated or managed by the Contractor.

4. DATE: June 2007

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP: None

6. REFERENCES:

8. PREPARATION INFORMATION: The Government shall approve the format. The content requirements are defined in ITS-SOP-0018, Contract IT Security Program Plan Procedures.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION OF DRL	A. ITEM NO: DRD-35

B. LINE ITEM TITLE: Communications and Telemetry Development Plan

C. OPR	D. TYPE	E. INSPECTION ACCEPT	F. FREQ	G. INITIAL SUB	H. AS OF DATE
VA-E1	1	2	AR	12/31/2007	

J. REMARKS: The reproducible copy shall be electronic.

K. DISTRIBUTION: VA-E1 (1 A, 1 B) - See block J.

TOTALS NO	TYPE
1	A
1	B

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Plan, Communications and Telemetry Development	DRD-35

3. USE: To be used by the contractor to generate techical work products to integrate and manage the full spectrum of technical activities required to engineer C&T products. The plan shall also be used to evaluate the team's technical approach, to make technical risk assessments, and to measure progress. When the plan is approved by the OPR, the contractor will provide services and deliverables as per the plan.

4. DATE: June 2007

5. ORGANIZATION: KSC

7. INTERRELATIONSHIP: None

6. REFERENCES:

8. PREPARATION INFORMATION: The Government shall approve the format. The plan shall address resources to allocate, including cost, schedule, personnel, facilities, and deliverables required.

DATA REQUIREMENT

CONTRACT APPLICATION INFORMATION OF DRL	A. ITEM NO: DRD-36

B. LINE ITEM TITLE: HSPD-12-Ready Application Project Plan

C. OPR	D. TYPE	E. INSPECTION/ACCEPT	F. FREQ	G. INITIAL SUB.	H. AS OF DATE
VA-E1	1	2	PJ	12/31/2008	

J. REMARKS: The reproducible copy shall be electronic.

K. DISTRIBUTION: VA-E1 (1 A, 1 B) - See block J.

TOTALS NO	TYPE
1	A
1	B

DATA REQUIREMENT DESCRIPTION

1. TITLE	2. NUMBER
Plan, HSPD-12-Ready Project	DRD-36
3. USE: To be used by NASA to decide upon the approach for meeting the authentication requirements of HSPD-12.	4. DATE: March 2008
	5. ORGANIZATION: KSC
7. INTERRELATIONSHIP: SOW 10.5.2 and SOW 10.5.6	6. REFERENCES

8. PREPARATION INFORMATION

The Government shall approve the format. The plan shall formulate one or more approach(es) for satisfying the HSPD-12 authentication requirements within NASA's Enterprise Architecture. For each approach that requires major modifications to an application, the approach should utilize Commercial-Off-The-Shelf (COTS) solutions to the maximum extent possible. NASA's Enterprise Architecture for HSPD-12 authentication requires the implementation to be based on one of the following technologies: (i) Implement using Microsoft Internet Information Server (IIS) Integrated Windows Authentication, or (ii) Implement using the NASA eAuthentication system. The plan shall evaluate and compare each approach for effectiveness, maintainability, and technical complexity based on the needs of the user-community. For COTS solutions, the plan shall fully evaluate the costs for configuration, testing, deployment, and migration of content. For custom solutions, the plan shall more generally evaluate the strengths and weaknesses of each solution. The plan shall recommend one approach with rationale. If the recommended approach involves major modifications to existing custom applications or development of new custom applications, the plan shall justify the use of custom software over the use of COTS products, based on extensive market research and technical analysis.

Attachment J-3

**NASA Facilities and Facility Systems
At Vandenberg AFB**

Building 836 -	**Payload Processing Facility (PPF)**	**55271 sq. ft**
Lab-1 Clean-room	2450 sq. ft.	Class 10K
Lab-1 GSE Area	1818 sq. ft.	Raised Floor
Lab-3 GSE Area	1860 sq. ft	Raised Floor
Office Space	5000 sq. ft	

Building 1610 -	**Hazardous Processing Facility (HPF)**	**4134 sq. ft**
Clean-room	2450 sq. ft	Class 10K

Hazardous Fuels Spill-Containment
High-Bay and Storage Room Explosion-Proof Equipment

Bldg. 810	**Tracking Antenna**	**1000 sq. ft**
Bldg. 811	**Tracking Station Bldg.**	**965 sq. ft**
Bldg. 831	**Tech Support Shop**	**6400 sq. ft**
Bldg. 833	**Janitorial Storage**	**180 sq. ft**
Bldg. 834	**Collection Accumulation Point (CAP)**	**1602 sq. ft**
Bldg. 839	**Stockroom/Supply**	**6364 sq. ft**
Bldg. 840	**NASA offices, Mission Director's Center**	**26635 sq. ft**
Bldg. 1601	**Guard Shack**	**54 sq. ft**
Bldg. 1603	**Pump House**	**416 sq. ft**
Bldg. 1605	**HPF Monitor/Control**	**1090 sq. ft**
N/A	**120' Antenna Tower**	**N/A**

		Responsibility Codes (1)		
Facility	**Facility System**	**ELVIS Contract**	**Air Force**	**Notes**
All Assigned Facilities				
	Interior: Walls, doors, windows	O, M, E, U		(2) (3)
	Exterior: Walls, doors, windows	O, M, E, U		(3)
	Interior: Floors, ceilings	O, M, E, U		(2) (3)
	Electrical Distribution-Primary	O, U	O, M, E	(2) (3) (4)
	Electrical Distribution-Secondary	O, M, E, U		(3) (4)
	Lights-Above 12-feet, Inside, Outside	O, U	O, M, E	(2) (3) (5)
	Lights Below 12-feet, Inside, Outside	O, M, E, U		(3) (5)
	Plumbing, building heat hot water	U	O, M, E	(2)
	HVAC and Local Controls	U	O, M, E	(2) (3)
	Andover Facility Management System	O, M, E, U		(3)
	Water chillers	U	O, M, E	(2) (3)
	Fuel supplies (propane, natural gas)	U	O, M, E	(2)
	Fire alarm, sprinkler systems	U	O, M, E	(2)
	Roads and Grounds	U	O, M, E	(2)
	Roofs	U	O, M, E	(2)
	Roll-up Doors	O, U	M, E	(2) (3)
	Cipher locks	O, U	M, E	(2) (3)
	Cranes	O, M, E, U		(3)
Building 810	12 KVA UPS	O, M, E, U		(2) (3)
Building 836	Hangar rolling doors	O, U	M, E	(2) (3)
Building 1605/1610	Hazardous propellant containment systems	O, M, E, U		(3)
	Hazard-proofed equipment	O, M, E, U		(3)
	HPF Rolling Doors	O, U	M, E	(2)(3)
	Spin Table (Balancing Machine)	None	None	(6)
Building 836 & 1604	225 KVA UPS (1 ea)	O, M, E, U		(2) (3)
Building 811	15 KVA UPS	O, M, E, U		(2) (3)
	Backup generators (4)	U	O, M, E	(2) (3)
	Air compressors (5)	O, U	O, M, E	(2) (3)
	2 large welders, 1 small welder (old but good condition)	O, M, E, U		
	Plasma cutter (new)	O, M, E, U		
	Small paint booth	O, M, E, U		(3)

NOTES

(1) O = OPERATOR
M = MAINTAINER
E = SUSTAINING ENGINEERING
U = USER

(2) The contractor may be required to provide maintenance and repair in particular cases where the USAF Base Civil Engineering (BCE) services cannot be obtained in a prompt manner. In these cases services will be acquired though Task Orders issued by the Government (SOW Section 11.0).

(3) Facility modification, major repair, and upgrades will be acquired through Fixed-Price Task Orders issued by the Government (SOW Section 11.0).

(4) The USAF Base Civil Engineering (BCE) provides maintenance and repairs to electrical distribution systems throughout all assigned facilities. The contractor is required to maintain and repair secondary circuits unique to NASA project requirements from the main distribution systems.

(5) The USAF Base Civil Engineering (BCE) provides maintenance and repairs to all lighting systems installed by the Air Force under the Base Energy Conservation Program and all lighting systems above 12 feet. The contractor will provide maintenance and repairs to lighting below 12 feet.

(6) Spin Table (Balancing Machine, ECN 0400964), Building 1610, has been abandoned in place and is specifically not included in the list as equipment to be maintained. However, the property is still in the possession of the ELVIS contractor and will remain in Attachment J-4a, Installation-Accountable Property, as controlled property.

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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
195	See Block 16C		ELVIS

6. ISSUED BY CODE KSC

NASA/John F. Kennedy Space Center
Office of Procurement
Mail Code: OP-LS
Kennedy Space Center FL 32899

7. ADMINISTERED BY (If other than Item 6) CODE KSC

NASA/Kennedy Space Center
Office of Procurement
Mail Code: OP-LS
Attn: Janice M. Nieves
Kennedy Space Center FL 32899

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

ANALEX CORP
2677 Prosperity Avenue, Suite 400
Fairfax VA 22031-4906

CODE FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

x 10A. MODIFICATION OF CONTRACT/ORDER NO. NAS1002026

10B. DATED (SEE ITEM 13) 06/05/2002

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	FAR 52.243-1, Changes - Fixed Price (Alternate II)
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of this modification is to update Attachment J-4a, Installation-Accountable Property and Attachment J-4b, Government Furnished Property. Remove Attachment J-4a, pages 199-255 and J-4b, pages 255a-255c and replace with the attached Attachment J-4a, page 199 plus 88 pages (current as of 12/5/08) and Attachment J-4b, page 255a plus 1 page (current as of 12/16/08).

There is no cost associated with this change.

All other terms and conditions remain unchanged.
Delivery Location Code: KSC
NASA/Kennedy Space Center
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Ryan J. Philpot, Manager, Program Control	Janice M. Nieves

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
Ryan J. Philpot (Signature of person authorized to sign)	12-17-08	Janice M. Nieves (Signature of Contracting Officer)	12/17/08

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED NAS1002026/195	PAGE 2 OF 2

NAME OF OFFEROR OR CONTRACTOR
ANALEX CORP

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	KENNEDY SPACE CENTER FL 32899				

Attachment J-4a

Installation-Accountable Property

The attached list is delineated by Analex Custodian as follows:

Erin M. Spera	$ 49,644.00
Ruby R. Montoya	$ 40,230.00
Brian K. Welliver	$5,584,342.00
Jerri L. Dunn	$ 40,388.00
Diane M. Gray	$ 74,456.00
Diane M. Cunningham	$ 67,999.00
Laura H. Brumm	$ 129,786.00
Richard C. Hefelfinger	$5,384,904.00
Allen C. Daniels	$ 6,467.00
David G. Reigada	$ 275,218.00
David F. Run	$ 104,291.00
Elizabeth K. Huber	$ 16,898.00
Grand Total	**$11,774,623.00**

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1392387	RECORDER-REPRODUCER, VIDEO	66557	JVC CO OF AMERICA	KS-M7355	3139C	N019	11030929	HRS5200U	527916526	ERIN M SPERA	1995	$ 574.00
2019311	CPU, LAPTOP	DELLC	DELL COMPUTER CORP	KS-M7355	2006A	N019	6Q24201	CPX	527916526	ERIN M SPERA	2000	$ 3,106.00
2191037	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123E	N019	77WS074	GX280	527916526	ERIN M SPERA	2005	$ 1,364.00
2191092	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3139C	N019	38N9S71	GX280	527916526	ERIN M SPERA	2004	$ 1,595.00
2191095	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3018D	N019	35N9S71	GX280	527916526	ERIN M SPERA	2004	$ 1,595.00
2191107	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3136B	N019	D7N9S71	GX280	527916526	ERIN M SPERA	2004	$ 1,595.00
2212746	SCANNER	2U186	FUJITSU AMERICA INC	KS-M7355	3102	N019	000320	FI-5900C	527916526	ERIN M SPERA	2006	$ 17,247.00
2212908	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3102	N019	6571NB1	GX620	527916526	ERIN M SPERA	2006	$ 1,463.00
2212910	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3134E	N019	2571NB1	GX620	527916526	ERIN M SPERA	2006	$ 1,463.00
2213474	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3134E	N019	CPCN9C1	DCSM	527916526	ERIN M SPERA	2006	$ 1,692.00
2214108	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3136E	N019	GYRJHD1	DCSM	527916526	ERIN M SPERA	2007	$ 825.00
2214112	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3018A	N019	HOSJHD1	DCSM	527916526	ERIN M SPERA	2007	$ 825.00
2214113	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3018C	N019	D0SJHD1	DCSM	527916526	ERIN M SPERA	2007	$ 825.00
2214118	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N019	9ZRJHD1	DCSM	527916526	ERIN M SPERA	2007	$ 825.00
2214121	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3120	N019	60SJHD1	DCSM	527916526	ERIN M SPERA	2007	$ 825.00
2214136	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2041B	N019	J0SJHD1	DCSM	527916526	ERIN M SPERA	2007	$ 825.00
2506406	CAMERA	S5329	NIKON CORP	KS-M7355	2006B	N019	3797884	COOLPIX 5400	527916526	ERIN M SPERA	2005	$ 500.00
2507426	PRINTER/SCANNER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3136B	N019	CNLJ60208	Q6500A	527916526	ERIN M SPERA	2006	$ 819.00
3019491	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3102	N019	G5LHL31	DHM	527916526	ERIN M SPERA	2003	$ 1,222.00
3019503	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2181	N019	CN05Y232716 1838QAA02	DHM	527916526	ERIN M SPERA	2003	$ 615.00
3019508	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3091C	N019	CN05Y232716 1838PAAHA	DHM	527916526	ERIN M SPERA	2003	$ 615.00
3059700	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3102	N019	CNGY425321	430DTNS	527916526	ERIN M SPERA	2004	$ 2,330.00
3059931	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3136G	N019	9GFXX81	DCSM	527916526	ERIN M SPERA	2005	$ 1,462.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3060006	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2041	N019	82FWR91	DCSM	527916526	ERIN M SPERA	2006	$ 1,800.00
3060008	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2023	N019	62FER91	DCSM	527916526	ERIN M SPERA	2006	$ 1,800.00
3060146	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2006A	N019	J7F2851	GX270	527916526	ERIN M SPERA	2004	$ 1,837.00
Overall Result												$ 49,644.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2030118	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-NOC	SPARE	N008	JX1SW11	DHM	944014223	RUBY R MONTOYA	2002	$ 809.00
2191034	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	348	N008	85QJG61	D800	944014223	RUBY R MONTOYA	2005	$ 3,038.00
2191049	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DENVR	N008	685TX41	GX270	944014223	RUBY R MONTOYA	2004	$ 1,942.00
2191052	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DNVER	N008	J75TX41	GX270	944014223	RUBY R MONTOYA	2005	$ 1,942.00
2191068	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	212	N008	JYLV441	GX270	944014223	RUBY R MONTOYA	2004	$ 1,989.00
2212895	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N008	DNL 7NB1	D820	944014223	RUBY R MONTOYA	2006	$ 2,048.00
2212899	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DENVR	N008	5NL 7NB1	D820	944014223	RUBY R MONTOYA	2006	$ 2,048.00
2213236	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DENVR	N008	4HFK251	POWER EDGE 700	944014223	RUBY R MONTOYA	2004	$ 2,982.00
2213472	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	350	N008	6M8H9C1	DCSM	944014223	RUBY R MONTOYA	2006	$ 1,692.00
2213476	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	358	N008	FPCN9C1	DCSM	944014223	RUBY R MONTOYA	2006	$ 1,692.00
2213936	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N008	JHJLHD1	PP04X	944014223	RUBY R MONTOYA	2007	$ 1,455.00
2214105	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N008	F0SJHD1	DCSM	944014223	RUBY R MONTOYA	2007	$ 825.00
2214131	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N008	31SJHD1	DCSM	944014223	RUBY R MONTOYA	2007	$ 825.00
2214137	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N008	JYRJHD1	DCSM	944014223	RUBY R MONTOYA	2007	$ 825.00
2214444	COMPUTER, LAPTOP	43KZ8	LENOVO	KS-NOC	#	N008	LVL1487	7673-74U	944014223	RUBY R MONTOYA	2007	$ 1,723.00
3019459	COMPUTER SYSTEM, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	SPARE	N008	J7LVK31	PP04S	944014223	RUBY R MONTOYA	2003	$ 2,139.00
3059698	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3173B	N008	HHJBQ71	D800	944014223	RUBY R MONTOYA	2005	$ 2,099.00
3060011	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DENVR	N008	92FWR91	DCSM	944014223	RUBY R MONTOYA	2006	$ 1,800.00
3060012	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	#	N008	72FWR91	DCSM	944014223	RUBY R MONTOYA	2006	$ 1,800.00
3060021	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	#	N008	70X8S91	PP15L	944014223	RUBY R MONTOYA	2006	$ 2,320.00
3060022	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DENVR	N008	80X8S91	PP15L	944014223	RUBY R MONTOYA	2006	$ 2,320.00
3063951	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	DENVR	N008	BK5Q2B1	PP15L	944014223	RUBY R MONTOYA	2006	$ 1,917.00
Overall Result												$ 40,230.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
11080	GENERATOR, SIGNAL	28480	HEWLETT-PACKARD CO	KS-836	22	N305	2733A00124	8660D	192782210	BRIAN K WELLIVER	1987	$ 13,188.00
11081	GENERATOR, SIGNAL, PLUGIN	28480	HEWLETT-PACKARD CO	KS-836	22	N305	2712A04489	86603A	192782210	BRIAN K WELLIVER	1987	$ 11,445.00
11082	GENERATOR, SIGNAL, PLUGIN	28480	HEWLETT-PACKARD CO	KS-836	22	N305	2637A02106	86633B	192782210	BRIAN K WELLIVER	1987	$ 3,203.00
11083	GENERATOR, SIGNAL, PLUGIN	28480	HEWLETT-PACKARD CO	KS-836	22	N305	2645A00813	86634B	192782210	BRIAN K WELLIVER	1987	$ 2,487.00
11132	DECODER, TIME OF DAY	62767	KODE/A DIV ODETICS F-MOXON	KS-840	B209	N305	0021339	285-318	192782210	BRIAN K WELLIVER	1988	$ 5,670.00
11863	OSCILLOSCOPE 400 MHZ	80009	TEKTRONIX INC	KS-811	1	N305	B011526	2465B	192782210	BRIAN K WELLIVER	1988	$ 5,273.00
11911	OSCILLOSCOPE, 50 MHZ	80009	TEKTRONIX INC	KS-836	12	N305	H702358	2225	192782210	BRIAN K WELLIVER	1990	$ 1,135.00
12322	CAMERA, VIDEO, COLOR	S5175	PANASONIC	KS-840	B209	N305	94B07201	WV-CL302	192782210	BRIAN K WELLIVER	1989	$ 784.00
12323	CAMERA, VIDEO, COLOR	S5175	PANASONIC	KS-840	B207	N305	94B07202	WV-CL302	192782210	BRIAN K WELLIVER	1989	$ 784.00
44137	OSCILLOSCOPE	28480	HEWLETT-PACKARD CO	KS-836	12	N305	US36181516	54600B	192782210	BRIAN K WELLIVER	1996	$ 2,631.00
46298	LENS	S4432	FUJI OPTICAL CO	KS-840	B207	N305	NA	S12X5BRM	192782210	BRIAN K WELLIVER	1999	$ 2,808.00
175203	REFLECTOMETER, TIME DOMAIN	ZZZZZ	UNKNOWN	KS-836	21	N305	4115587	NONE	192782210	BRIAN K WELLIVER	1988	$ 6,713.00
239243	SYNCHRONIZER, PCM BIT	86360	FAIRCHILD IND COMM & ELECTR	KS-836	12	N305	1440	720-02-0-1-4	192782210	BRIAN K WELLIVER	1985	$ 8,592.00
239245	SYNCHRONIZER, PCM BIT	86360	FAIRCHILD IND COMM & ELECTR	KS-836	12	N305	1441	720-02-0-1-4	192782210	BRIAN K WELLIVER	1985	$ 8,592.00
251999	MONITOR, WAVEFORM	80009	TEKTRONIX INC	KS-840	B213	N305	B104678	1480R	192782210	BRIAN K WELLIVER	1985	$ 5,600.00
252945	MONITOR, VIDEO, COLOR, 26	S5175	PANASONIC	KS-840	A202	N305	EH5554538	CT-2600M	192782210	BRIAN K WELLIVER	1986	$ 720.00
252948	AMPLIFIER SYSTEM	22198	EON INSTRUMENTATION INC	KS-836	12	N305	5355	H132-6A	192782210	BRIAN K WELLIVER	1986	$ 9,294.00
252952	TEST SET, BIT ERROR	55744	DECOM SYSTEMS INC	KS-836	12	N305	010009-L	7191	192782210	BRIAN K WELLIVER	1986	$ 5,415.00
252977	TUNER, RF, 2200-2300 MHZ	32352	MICRODYNE INSTRUMENTS INC	KS-811	1	N305	1301	1115-VT (4) (D)	192782210	BRIAN K WELLIVER	1987	$ 5,130.00
252979	GENERATOR, SIGNAL	28480	HEWLETT-PACKARD CO	KS-836	12	N305	2706A06098	8660C	192782210	BRIAN K WELLIVER	1987	$ 17,804.00
252980	GENERATOR, SIGNAL, PLUGIN	28480	HEWLETT-PACKARD CO	KS-836	20	N305	2712A04455	86603A	192782210	BRIAN K WELLIVER	1987	$ 11,445.00
252994	COUNTER, PARTICLE	53882	PACIFIC SCIENTIFIC INSTRUMENTS	KS-839	7	N305	88245110D	200-1-115-1	192782210	BRIAN K WELLIVER	1987	$ 7,950.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
253002	MONITOR, VIDEO, COLOR, 13	S5175	PANASONIC	KS-1605	NONE	N305	FA7450225	BT-S1300N	192782210	BRIAN K WELLIVER	1987	$ 535.00
253028	RECEIVER, REMOTE CONTROL	60008	VISUAL COMMUNICATION SPECIALIS	KS-1610	POLE	N305	20663	RC2050/ES	192782210	BRIAN K WELLIVER	1987	$ 792.00
253030	MULTIMETER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	12	N305	2231A03769	3468B	192782210	BRIAN K WELLIVER	1987	$ 750.00
253041	MULTICOUPLER 1435 MHZ 2300 MHZ	31563	MU-DEL ELECTRONICS INC	KS-836	12	N305	295301	MDP-1423	192782210	BRIAN K WELLIVER	1987	$ 5,800.00
253052	CAMERA COLOR NTSC CRYSTAL	05159	COHU INC	KS-836	61	N305	140501	1815-51000000	192782210	BRIAN K WELLIVER	1988	$ 1,150.00
253064	BIT SYNC W/SLIDES	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	1629	EMR720	192782210	BRIAN K WELLIVER	1988	$ 9,024.00
253086	SYNCHRONIZER	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	1636	720-02-0-1-4	192782210	BRIAN K WELLIVER	1988	$ 9,024.00
253248	RECORDER, SIGNAL DATA	28009	METRUM INFORMATION STORAGE	KS-836	20	N305	0100120NC86	97	192782210	BRIAN K WELLIVER	1986	$ 73,300.00
400030	TRACKING FEED	10110	SCIENTIFIC-ATLANTA INC	KS-1610	YARD	N305	011	70C	192782210	BRIAN K WELLIVER	1980	$ 10,250.00
400473	POWER SUPPLY	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	2782	223B01	192782210	BRIAN K WELLIVER	1983	$ 7,340.00
400572	RECEIVER	04773	GTE COMM SYS F-GTE LENKURT	KS-836	20	N305	337013BA	778C2	192782210	BRIAN K WELLIVER	1974	$ 7,349.00
400685	TRUCK LIFT FORK	78640	CATERPILLAR INDUSTRIAL INC	KS-1610	HIBAY	N305	26N505	M50A	192782210	BRIAN K WELLIVER	1974	$ 10,383.00
400812	ANTENNA	78702	TACO COMMUNICATIONS INC	KS-811	YARD	N305	1	000	192782210	BRIAN K WELLIVER	1974	$ 101,950.00
400836	RECEIVER	30245	MICRODYNE CORP	KS-811	1	N305	728	1100AR	192782210	BRIAN K WELLIVER	1982	$ 5,250.00
400860	GENERATOR	28480	HEWLETT-PACKARD CO	KS-836	21	N305	1947A02747	8660C	192782210	BRIAN K WELLIVER	1980	$ 13,733.00
400862	TUNING UNIT	28480	HEWLETT-PACKARD CO	KS-836	12	N305	1921A01659	86603A	192782210	BRIAN K WELLIVER	1980	$ 8,991.00
400947	RECEIVER	04773	GTE COMM SYS F-GTE LENKURT	KS-836	20	N305	NONE	778C3	192782210	BRIAN K WELLIVER	1980	$ 6,481.00
400964	BALANCING MACH	D9356	TREBEL GMBH	KS-1605	NONE	N305	402924614	FVD1000	192782210	BRIAN K WELLIVER	1969	$ 111,525.00
401150	OSCILLOSCOPE	80009	TEKTRONIX INC	KS-836	12	N305	B029062	2465	192782210	BRIAN K WELLIVER	1985	$ 5,600.00
401180	POWER SUPPLY	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	2037	223B01	192782210	BRIAN K WELLIVER	1970	$ 7,340.00
401201	POWER SUPPLY	06141	FAIRCHILD WESTON SYSTEMS	KS-836	61	N305	3136	223B01	192782210	BRIAN K WELLIVER	1969	$ 7,340.00

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401227	ANALYZER, SPECTRUM	28480	HEWLETT-PACKARD CO	KS-811	1	N305	2208A01870	8559A	192782210	BRIAN K WELLIVER	1982	$ 10,185.00
401286	OSCILLATOR	28480	HEWLETT-PACKARD CO	KS-836	20	N305	2502A01731	83592A	192782210	BRIAN K WELLIVER	1985	$ 19,373.00
401291	ANALYZER	28480	HEWLETT-PACKARD CO	KS-836	12C	N305	2516A01703	8566B	192782210	BRIAN K WELLIVER	1985	$ 51,975.00
401294	AMPLIFIER	99313	VARIAN ASSOC MICROWAVE DIV	KS-836	61	N305	5906	VZU6991K1	192782210	BRIAN K WELLIVER	1985	$ 10,670.00
401486	AMPLIFIER	99313	VARIAN ASSOC MICROWAVE DIV	KS-836	61	N305	5905	VZU6991K1	192782210	BRIAN K WELLIVER	1985	$ 10,670.00
401522	AMPLIFIER, AUDIO	99313	VARIAN ASSOC MICROWAVE DIV	KS-836	12	N305	6006	VZS-6951K2	192782210	BRIAN K WELLIVER	1985	$ 10,476.00
401525	AMPLIFIER, AUDIO	20641	VARIAN ASSOC INSTRUMENT DIV	KS-836	12	N305	6007	VZS-6951K2	192782210	BRIAN K WELLIVER	1985	$ 10,476.00
401845	SYNCHRONIZER	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	1268	720-02-0-1-4	192782210	BRIAN K WELLIVER	1983	$ 8,503.00
653018	SYNCHRONIZER	06141	FAIRCHILD WESTON SYSTEMS	KS-836	21	N305	1257	720-02	192782210	BRIAN K WELLIVER	1983	$ 8,503.00
698273	TRAILER, COMPRESSED GAS CYLIND	22264	JOHN F KENNEDY SPACE CENTER	KS-831	YARD	N305	000108	U72-8341	192782210	BRIAN K WELLIVER	1977	$ 43,886.00
749413	SYNTHESIZER	28480	HEWLETT-PACKARD CO	KS-836	21	N305	2449A04210	8672A	192782210	BRIAN K WELLIVER	1985	$ 35,990.00
750195	SYNCHRONIZER, PCM BIT	06141	FAIRCHILD WESTON SYSTEMS	KS-836	21	N305	1428	720	192782210	BRIAN K WELLIVER	1985	$ 8,592.00
816446	ANALYZER TAPE MOTION	14028	SYPRIS DATA SYSTEMS	KS-836	21	N305	30328	TMA-3000	192782210	BRIAN K WELLIVER	1992	$ 9,615.00
816447	METER, SELECTIVE LEVEL	28480	HEWLETT-PACKARD CO	KS-836	21	N305	2946A02881	3586C	192782210	BRIAN K WELLIVER	1992	$ 12,162.00
816452	ANALYZER, SPECTRUM, PORT	28480	HEWLETT-PACKARD CO	KS-836	21	N305	3212A00346	8594A	192782210	BRIAN K WELLIVER	1992	$ 13,391.00
816454	ANALYZER, COMMUNICATIONS	61141	ACTERNA	KS-836	20A	N305	15309	MC6000	192782210	BRIAN K WELLIVER	1992	$ 8,795.00
816465	FIBERSCOPE	OLMPC	OLYMPUS CORP INDUSTRIAL FIBER	KS-839	8	N305	721262	IF-11D-30	192782210	BRIAN K WELLIVER	1978	$ 6,925.00
817017	MODULE, S-BAND TUNER	MICYE	MICRODYNE CORP	KS-836	12	N305	164	1415-D	192782210	BRIAN K WELLIVER	1994	$ 5,600.00
817023	MODULE, L&S BAND TUNER	MICYE	MICRODYNE CORP	KS-811	1	N305	042	14316	192782210	BRIAN K WELLIVER	1994	$ 7,320.00
817026	MODULE, S-BAND TUNER	MICYE	MICRODYNE CORP	KS-836	12	N305	165	1415-D	192782210	BRIAN K WELLIVER	1994	$ 5,600.00
817030	MODULE, S-BAND TUNER	MICYE	MICRODYNE CORP	KS-836	12	N305	163	1415-D	192782210	BRIAN K WELLIVER	1994	$ 5,600.00

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817039	MODULE, L&S BAND TUNER	MICYE	MICRODYNE CORP	KS-811	1	N305	043	14316	192782210	BRIAN K WELLIVER	1994	$ 7,320.00
817056	RECEIVER, TELEMETRY	30245	MICRODYNE CORP	KS-836	21	N305	329	1400-MR	192782210	BRIAN K WELLIVER	1985	$ 11,200.00
817074	MULTIPLEXER	39941	RAD DATA COMMUNICATIONS INC	KS-836	22A	N305	8408517	OP4T1	192782210	BRIAN K WELLIVER	1999	$ 2,760.00
817075	MULTIPLEXER	39941	RAD DATA COMMUNICATIONS INC	KS-836	22A	N305	8408516	OP4T1	192782210	BRIAN K WELLIVER	1999	$ 2,760.00
817080	CAMERA, DIGITAL	19139	EASTMAN KODAK CO	KS-840	C102	N305	EKH82601309	DC260	192782210	BRIAN K WELLIVER	1998	$ 859.00
817082	SCANNER	0EHB7	PERCON ACQUISITION INC	KS-839	WHSE	N305	F201117032	320	192782210	BRIAN K WELLIVER	2001	$ 2,095.00
817083	SCANNER	0EHB7	PERCON ACQUISITION INC	KS-839	WHSE	N305	F201117033	320	192782210	BRIAN K WELLIVER	2001	$ 2,095.00
817084	SCANNER	0EHB7	PERCON ACQUISITION INC	KS-839	WHSE	N305	F200179026	320	192782210	BRIAN K WELLIVER	2001	$ 2,095.00
817085	SCANNER	0EHB7	PERCON ACQUISITION INC	KS-839	WHSE	N305	F201117037	320	192782210	BRIAN K WELLIVER	2001	$ 2,095.00
817086	MODEM, FIBER OPTIC	39941	RAD DATA COMMUNICATIONS INC	KS-1622	BLKHS	N305	12800285-4	FOM-T3	192782210	BRIAN K WELLIVER	2001	$ 2,415.00
817087	CAMERA, INFRARED	64869	FLIR SYSTEMS INC	KS-840	C102	N305	278001831	1196364	192782210	BRIAN K WELLIVER	2006	$ 6,750.00
862636	PANEL, REMOTE CONTROL	62767	KODE/A DIV ODETICS F-MOXON	KS-836	23	N305	0011339	506-144	192782210	BRIAN K WELLIVER	1988	$ 7,725.00
863790	SYNCHRONIZER	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	1670	720-02-0-1-4	192782210	BRIAN K WELLIVER	1988	$ 9,400.00
863818	MULTICOUPLER	31563	MU-DEL ELECTRONICS INC	KS-836	12	N305	304902	MDP-1423	192782210	BRIAN K WELLIVER	1989	$ 5,808.00
863841	LIFT ELEC DUAL PERSON	59497	GENIE INDUSTRIES	KS-836	HIBAY	N305	1589-3031-B	DPL-24LP	192782210	BRIAN K WELLIVER	1989	$ 6,913.00
863842	LIFT ELEC DUAL PERSON	59497	GENIE INDUSTRIES	KS-836	HIBAY	N305	1589-3032-B	DPL-36LP	192782210	BRIAN K WELLIVER	1989	$ 9,463.00
863868	RECEIVER, VIDEO	10110	SCIENTIFIC-ATLANTA INC	KS-836	20A	N305	NONE	9640	192782210	BRIAN K WELLIVER	1990	$ 638.00
871103	CAMERA, VIDEO	S5175	PANASONIC	KS-836	2	N305	99B12156	WV-CL302	192782210	BRIAN K WELLIVER	1989	$ 759.00
872755	TRAILER, COMPRESSED GAS 6,000	72869	EIDAL INTERNATIONAL CORP	KS-831	YARD	N305	104	GST 25	192782210	BRIAN K WELLIVER	1972	$ 35,343.00
872756	COUNTER, MICROWAVE 20 GHZ	50483	MARCONI ELECTRONICS INC	KS-836	20	N305	1873882/001	52440-302R	192782210	BRIAN K WELLIVER	1990	$ 5,348.00
872759	CALIBRATOR, TAPE SYSTEM	18519	DATATAPE INC F-BELL & HOWELL	KS-836	21	N305	20618	TSC-2000	192782210	BRIAN K WELLIVER	1990	$ 10,549.00

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872763	BIT SYNCHRONIZER PCM	30373	EMR-AEROSPACE SCIENCES DIV	KS-836	21	N305	1798	702	192782210	BRIAN K WELLIVER	1990	$ 9,566.00
872767	RECORDER, SIGNAL DATA	28009	METRUM INFORMATION STORAGE	KS-836	12	N305	0100323AA91	97	192782210	BRIAN K WELLIVER	1990	$ 94,700.00
872768	RECORDER/REPRODUCER, MAG TAPE	28009	METRUM INFORMATION STORAGE	KS-836	12	N305	0100324AB91	MD97A	192782210	BRIAN K WELLIVER	1990	$ 94,700.00
872769	TEST SET, DECODER-RECEIVER	20747	AYDIN MONITOR SYS F-STELLAR-	KS-836	12	N305	9102084	604M	192782210	BRIAN K WELLIVER	1990	$ 9,500.00
1032192	DECOMMUTATOR, PAM-DUAL	22264	JOHN F KENNEDY SPACE CENTER	KS-836	61	N305	CSC002	CV1136	192782210	BRIAN K WELLIVER	1991	$ 15,000.00
1122310	CART, REGULATOR, PORTABLE	MCDDO	MCDONNELL DOUGLAS	KS-1610	HIBAY	N305	NONE	82K00995-1	192782210	BRIAN K WELLIVER	1992	$ 42,500.00
1122311	PANEL, REGULATOR, FIXED	MCDDO	MCDONNELL DOUGLAS	KS-1610	HIBAY	N305	NONE	82K00996-1	192782210	BRIAN K WELLIVER	1992	$ 42,500.00
1122410	MONITOR, WAVEFORM	80009	TEKTRONIX INC	KS-840	B111	N305	B107689	1485R	192782210	BRIAN K WELLIVER	1992	$ 7,721.00
1122902	RECORDER, SIGNAL DATA	28009	METRUM INFORMATION STORAGE	KS-836	12	N305	0100363BF92	97	192782210	BRIAN K WELLIVER	1991	$ 116,620.00
1127710	TIMING BUFFER UNIT	11165	TRAK SYSTEMS DIV OF TRAK MICRO	KS-836	12	N305	360	8424-8	192782210	BRIAN K WELLIVER	1992	$ 5,695.00
1127721	AMPLIFIER, POWER	50435	HEWLETT-PACKARD CO SCIENTIFIC	KS-836	21	N305	2548A0070A	83498	192782210	BRIAN K WELLIVER	1982	$ 6,720.00
1127749	COUNTER, FREEQ. MICROWAVE	09553	MARCONI ELECTRONICS INSTR DIV	KS-836	21	N305	187421/030	2440	192782210	BRIAN K WELLIVER	1992	$ 5,601.00
1127752	PRINTER, LASER JET	28480	HEWLETT-PACKARD CO	KS-836	23	N305	3208JLXRR	HP 33481A	192782210	BRIAN K WELLIVER	1992	$ 991.00
1127789	PANEL ASSY, STE CALIBRATION	04236	MARTIN MARIETTA AEROSPACE	KS-839	8	N305	00006	F70V0006-12	192782210	BRIAN K WELLIVER	1982	$ 10,000.00
1127841	SWEEPER, SYNTHESIZED	50438	HEWLETT-PACKARD CO DATA SYS DV	KS-811	1	N305	2520A00404	83411A	192782210	BRIAN K WELLIVER	1982	$ 42,240.00
1127876	REFLECTOMETER, TIME DOMAIN	80009	TEKTRONIX INC	KS-836	21	N305	8114496	1502	192782210	BRIAN K WELLIVER	1985	$ 6,713.00
1128152	CAMERA, CCD AUTO 8MM	05159	COHU INC	KS-836	20	N305	208975	8215-100/ES08	192782210	BRIAN K WELLIVER	1993	$ 1,465.00
1128155	SIMULATOR, PCM/PAM	58359	GENERAL DATA PRODUCTS INC	KS-836	20	N305	124	233	192782210	BRIAN K WELLIVER	1993	$ 9,700.00

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1128159	PCM, FORMAT SYNCHRONIZER	58359	GENERAL DATA PRODUCTS INC	KS-836	12	N305	105	225S	192782210	BRIAN K WELLIVER	1993	$ 12,950.00
1128169	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	444	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128170	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	416	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128171	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-811	1	N305	410	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128172	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	412	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128173	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	445	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128174	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	420	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128175	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	415	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128176	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-811	1	N305	417	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128177	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	12	N305	421	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128178	CHASSIS, TELEMETRY RECEIVER	MICYE	MICRODYNE CORP	KS-836	21	N305	422	1400-MRA	192782210	BRIAN K WELLIVER	1994	$ 14,400.00
1128189	RECEIVER, TELEMETRY	30245	MICRODYNE CORP	KS-836	21	N305	327	1400-MR	192782210	BRIAN K WELLIVER	1985	$ 11,200.00
1128196	PRINTER, LASER, ACTION 1500	61722	EPSON AMERICA INC	KS-811	44	N305	1DS0173717	L160A	192782210	BRIAN K WELLIVER	1994	$ 790.00
1128204	MILLING MACHINE, IPS VERTICAL	IPSXX	IPS INC	KS-831	SHOP	N305	JMT-2256	YFTM-2	192782210	BRIAN K WELLIVER	1981	$ 5,995.00
1128208	DISCRIMINATOR	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	606	4142-06-0-1-4	192782210	BRIAN K WELLIVER	1985	$ 17,900.00
1128212	DISCRIMINATOR	06141	FAIRCHILD WESTON SYSTEMS	KS-836	12	N305	610	4142-06-0-1-4M11	192782210	BRIAN K WELLIVER	1985	$ 17,900.00
1128221	RECORDER, CAMERA VHS	PANAS	PANASONIC E DONOVAN	KS-839	1	N305	K7WA19383	PV-320	192782210	BRIAN K WELLIVER	1989	$ 1,317.00

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1128225	FORKLIFT, 5TN	07517	ALLIS-CHALMERS INDUS TRACTOR	KS-836	HIBAY	N305	AEM511158	ACP100NCPS	192782210	BRIAN K WELLIVER	1986	$ 36,661.00
1128226	FORKLIFT, 5700LB	11794	YALE ENGINEERING CO	KS-831	SHOP	N305	L383021	GP060RDJUAS094	192782210	BRIAN K WELLIVER	1988	$ 14,554.00
1128256	SYNCHRONIZER, PCM FRAME	58359	GENERAL DATA PRODUCTS INC	KS-836	12	N305	108	225S	192782210	BRIAN K WELLIVER	1994	$ 12,200.00
1128257	SYNCHRONIZER, PCM FRAME	58359	GENERAL DATA PRODUCTS INC	KS-836	12	N305	107	225S	192782210	BRIAN K WELLIVER	1994	$ 12,200.00
1128258	PRINTER, LASER	28480	HEWLETT-PACKARD CO	KS-836	13	N305	JPGL007029	HP4 PLUS	192782210	BRIAN K WELLIVER	1994	$ 1,399.00
1128260	PRINTER, LASER	28480	HEWLETT-PACKARD CO	KS-840	C203	N305	USCC051692	HP4L	192782210	BRIAN K WELLIVER	1994	$ 715.00
1128302	PRINTER, LASER	1X966	HEWLETT-PACKARD CO N AMERICAN	KS-840	C111	N305	USBC026615	C2001A	192782210	BRIAN K WELLIVER	1992	$ 1,150.00
1128309	CAMERA, COLOR	05157	COHU INC ELECTR DV F-KIN TEL	KS-836	61	N305	234885	8212-1000	192782210	BRIAN K WELLIVER	1995	$ 5,791.00
1128316	SYNCHRONIZER, PCM BIT	55744	DECOM SYSTEMS INC	KS-836	12	N305	063095-1692	7700	192782210	BRIAN K WELLIVER	1995	$ 10,450.00
1128317	SYNCHRONIZER, PCM BIT	55744	DECOM SYSTEMS INC	KS-836	12	N305	063095-1693	7700	192782210	BRIAN K WELLIVER	1995	$ 10,450.00
1128328	TRUCK LIFT FORK	30612	ALLIS-CHALMERS INDUS TRUCK DV	KS-836	HIBAY	N305	40253000	FE60-24	192782210	BRIAN K WELLIVER	1974	$ 7,426.00
1128360	PSK SUBCARRIER GENERATOR	58359	GENERAL DATA PRODUCTS INC	KS-836	12	N305	125	782	192782210	BRIAN K WELLIVER	1995	$ 8,850.00
1128372	PRINTER, LAZERJET, 4 PLUS	28480	HEWLETT-PACKARD CO	KS-836	01	N305	USFC321535	C2037A	192782210	BRIAN K WELLIVER	1995	$ 1,385.00
1128386	SYNCHRONIZER, BIT, DIGITAL	57304	LORAL CORP	KS-836	12	N305	26232	DBS430-C	192782210	BRIAN K WELLIVER	1996	$ 8,995.00
1128387	SYNCHRONIZER, BIT, DIGITAL	57304	LORAL CORP	KS-836	12	N305	26233	DBS430-C	192782210	BRIAN K WELLIVER	1996	$ 8,995.00
1128389	FIBER, UNIVERSAL TEST SYSTEM	EXFOE	EXFO ELECTRO-OPTICAL ENGR	KS-836	23	N305	3119-1N	FTB-300	192782210	BRIAN K WELLIVER	1996	$ 39,985.00
1128392	PRINTER, DESKJET	28480	HEWLETT-PACKARD CO	KS-840	A202	N305	USB6B08496	1600C	192782210	BRIAN K WELLIVER	1996	$ 1,296.00
1128396	FORKLIFT, 33K	11083	CATERPILLAR TRACTOR CO	KS-836	HIBAY	N305	6DP00172	DP150	192782210	BRIAN K WELLIVER	1996	$ 86,781.00
1128398	RECORDER, VHS, REAL TIME	S4915	SANYO DENKI CO LTD	KS-1605	#	N305	80111932	SRT-600	192782210	BRIAN K WELLIVER	1997	$ 825.00
1128405	COMPUTER, LAPTOP, 486	65685	COMPAQ COMPUTER CORP	KS-836	64	N305	7639HYC32704	1120	192782210	BRIAN K WELLIVER	1997	$ 5,200.00
1128412	PRINTER, LASERJET, 6P	HEWPA	HEWLETT PACKARD	KS-840	A102	N305	USBDO26511	C4212A	192782210	BRIAN K WELLIVER	1997	$ 730.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1128415	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	B210	N305	USKC257627	C3916A	192782210	BRIAN K WELLIVER	1997	$ 1,048.00
1128416	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	C206	N305	USKC257628	C3916A	192782210	BRIAN K WELLIVER	1997	$ 1,048.00
1128417	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	C210	N305	USKC257615	C3916A	192782210	BRIAN K WELLIVER	1997	$ 1,048.00
1128419	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	A202	N305	USKC257631	C3916A	192782210	BRIAN K WELLIVER	1997	$ 1,048.00
1128444	COMPUTER, DIGITAL	0G3K8	GATEWAY COMPANIES INC	KS-839	#	N305	0007420947	ATX TOWER	192782210	BRIAN K WELLIVER	1997	$ 5,243.00
1128449	CONTAINER, SAFETY HAZ MAT	47484	SAFETY STORAGE INC	KS-839	OUTSD	N305	NONE	8X8X15'	192782210	BRIAN K WELLIVER	1990	$ 9,440.00
1128634	MULTIPLEXER/DE MULTIPLEXER	32760	GRASS VALLEY GROUP INC THE	KS-836	12	N305	185	87	192782210	BRIAN K WELLIVER	1991	$ 14,175.00
1373745	POWER SUPPLY	30373	EMR-AEROSPACE SCIENCES DIV	KS-836	61	N305	151	223B-01	192782210	BRIAN K WELLIVER	1969	$ 7,340.00
1373746	POWER SUPPLY	30373	EMR-AEROSPACE SCIENCES DIV	KS-836	61	N305	359	223B-01	192782210	BRIAN K WELLIVER	1969	$ 7,340.00
1373747	POWER SUPPLY	30373	EMR-AEROSPACE SCIENCES DIV	KS-836	12	N305	360	223B-01	192782210	BRIAN K WELLIVER	1969	$ 7,340.00
1377692	TEST SET, SIGNAL KEYPAD	61141	ACTERNA	KS-836	20A	N305	4405	41934	192782210	BRIAN K WELLIVER	1995	$ 1,075.00
1378968	MULTIPLEXER	50717	COASTCOM	KS-836	20A	N305	6734	D/IMUXIII	192782210	BRIAN K WELLIVER	1994	$ 8,106.00
1378969	MULTIPLEXER	50717	COASTCOM	KS-836	20A	N305	6728	D/IMUXIII	192782210	BRIAN K WELLIVER	1994	$ 8,106.00
1378970	MULTIPLEXER	50717	COASTCOM	KS-836	20A	N305	6729	D/IMUXIII	192782210	BRIAN K WELLIVER	1994	$ 8,106.00
1393318	ANALYZER, PCM	61141	ACTERNA	KS-836	20A	N305	7959	T-BERD224	192782210	BRIAN K WELLIVER	1995	$ 11,849.00
1517395	CONVERTER, VIDEO SCAN	0MTV5	COMMUNICATIONS SPECIALTIES INC	KS-836	61	N305	CRA96121073	1274	192782210	BRIAN K WELLIVER	1996	$ 5,445.00
1524725	CONTROLLER	25306	GODDARD SPACE FLIGHT CENTER	KS-836	12	N305	4860776969	NONE	192782210	BRIAN K WELLIVER	1996	$ 14,060.00
1613573	CAMERA, DIGITAL, ZOOM	19139	EASTMAN KODAK CO	KS-836	01	N305	EKB70902406	DC120	192782210	BRIAN K WELLIVER	1997	$ 966.00
1660618	TESTER, NETWORK, W/DISPLAY	89536	FLUKE CORP	KS-836	1	N305	7908010	635-1	192782210	BRIAN K WELLIVER	2001	$ 3,219.00
1660695	DEMODULATOR	4S260	MICRODYNE COPR	KS-836	12	N305	509	1458D	192782210	BRIAN K WELLIVER	2001	$ 9,000.00
1660700	CAMERA, DIGITAL, COLOR	S4742	HITACHI DENSHI LTD	KS-836	12	N305	0160808	HV-D15U	192782210	BRIAN K WELLIVER	2001	$ 4,200.00
1661963	CAMERA, DIGITAL	S4997	HITACHI KOKI CO LTD	KS-836	41	N305	02Z1185	HV-D15	192782210	BRIAN K WELLIVER	2003	$ 3,933.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1662078	SWITCH	0EBA5	RIVERSTONE GROUP	KS-836	1	N305	030606641C0KR1	RS3000	192782210	BRIAN K WELLIVER	2003	$ 7,496.00
1662079	SWITCH	0EBA5	RIVERSTONE GROUP	KS-836	1	N305	030807561C0L	RS3000	192782210	BRIAN K WELLIVER	2003	$ 7,496.00
1662080	SWITCH	0EBA5	RIVERSTONE GROUP	KS-840	B213	N305	020959212G0KR2	RS3000	192782210	BRIAN K WELLIVER	2003	$ 7,496.00
1662118	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20F	N305	0351317	HV-D15	192782210	BRIAN K WELLIVER	2003	$ 2,663.00
1866147	DEMULTIPLEXER, FREQ, DIGITAL	52559	METRAPLEX CORP	KS-836	12	N305	245	DFD20-01-001	192782210	BRIAN K WELLIVER	1996	$ 76,000.00
1867823	COUNTDOWN DISPLAY, MASTER	32964	ODETICS INC F-GYYR PRODUCTS	KS-836	30	N305	37502139724	375-510	192782210	BRIAN K WELLIVER	1997	$ 7,920.00
1867824	COUNTDOWN DISPLAY, MASTER	32964	ODETICS INC F-GYYR PRODUCTS	KS-836	41	N305	37502129724	375-510	192782210	BRIAN K WELLIVER	1997	$ 7,920.00
1867826	COUNTDOWN DISPLAY, SLAVE	32964	ODETICS INC F-GYYR PRODUCTS	KS-836	13	N305	37502149724	375-500	192782210	BRIAN K WELLIVER	1997	$ 3,786.00
1868923	PROJECTOR, DESKTOP	45706	PROXIMA CORP	KS-836	11	N305	G7501787	DP5610	192782210	BRIAN K WELLIVER	1997	$ 6,844.00
1869188	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	11	N305	US74D120NB	C4555A	192782210	BRIAN K WELLIVER	1997	$ 1,140.00
1869611	BUILDING, PREFAB	47484	SAFETY STORAGE INC	KS-831	YARD	N305	NONE	NONE	192782210	BRIAN K WELLIVER	1988	$ 14,044.00
1869612	DEMODULATOR, MULTI MODE	32352	MICRODYNE INSTRUMENTS INC	KS-831	12	N305	443	1458D	192782210	BRIAN K WELLIVER	1997	$ 8,025.00
1869613	DEMODULATOR, MULTI MODE	32352	MICRODYNE INSTRUMENTS INC	KS-831	12	N305	444	1458D	192782210	BRIAN K WELLIVER	1997	$ 8,025.00
1869655	COUNTDOWN DISPLAY, MASTER	32964	ODETICS INC F-GYYR PRODUCTS	KS-836	61	N305	37502529819	375510REVC	192782210	BRIAN K WELLIVER	1998	$ 7,920.00
1869660	COPYING MACHINE	S4546	CANON INC	KS-840	N112	N305	NLM00280	CLC700L	192782210	BRIAN K WELLIVER	1998	$ 20,126.00
1869662	TRANSCEIVER, DIGITAL	0W5Z2	TELOS SYSTEMS	KS-836	LSST	N305	150XDG1128	60TS11	192782210	BRIAN K WELLIVER	1998	$ 2,067.00
1869663	TERMINAL, PCM, D/I MUX12	50717	COASTCOM	KS-836	20A	N305	12050	354-81022	192782210	BRIAN K WELLIVER	1998	$ 7,115.00
1869664	TERMINAL, PCM, D/I MUX12	50717	COASTCOM	KS-836	20A	N305	12049	354-81022	192782210	BRIAN K WELLIVER	1998	$ 7,115.00
1869665	MANLIFT, ELECTRIC	12361	GROVE MFG F-MANLIFT INC	KS-836	HIBAY	N305	11120	VM3248E	192782210	BRIAN K WELLIVER	1998	$ 38,500.00
1869668	CAMERA, COLOR, HI-RES	12644	PELCO SALES INC	KS-836	LSST	N305	100242	CC4700-2	192782210	BRIAN K WELLIVER	1998	$ 690.00
1869669	PAN & TILT	12644	PELCO SALES INC	KS-836	LSST	N305	3294 8H	PT780-USSL/PP	192782210	BRIAN K WELLIVER	1998	$ 2,240.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1869672	LENS, CAMERA, ZOOM	12644	PELCO SALES INC	KS-836	LSST	N305	794981	12ZV8X15CP	192782210	BRIAN K WELLIVER	1998	$ 978.00
1869677	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	12	N305	USBB014981	C4087A	192782210	BRIAN K WELLIVER	1998	$ 10,980.00
1869678	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	13	N305	USBB01548	C4087A	192782210	BRIAN K WELLIVER	1998	$ 10,980.00
1869679	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	20	N305	USBB018781	C4087A	192782210	BRIAN K WELLIVER	1998	$ 10,980.00
1869680	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	B209	N305	USCB015694	C4087A	192782210	BRIAN K WELLIVER	1998	$ 10,980.00
1869690	CHASSIS, MUX/DEMUX	081W5	APOGEE LABS	KS-836	LSST	N305	128	BC3400A	192782210	BRIAN K WELLIVER	1998	$ 28,350.00
1869691	CHASSIS, MUX/DEMUX	081W5	APOGEE LABS	KS-836	LSST	N305	129	BC3400A	192782210	BRIAN K WELLIVER	1998	$ 28,350.00
1869699	CAMERA, COLOR, CCD	12644	PELCO SALES INC	KS-1610	NONE	N305	309591	13221000	192782210	BRIAN K WELLIVER	1998	$ 2,771.00
1869700	CAMERA, COLOR, CCD	12644	PELCO SALES INC	KS-1610	NONE	N305	309606	13221000	192782210	BRIAN K WELLIVER	1998	$ 2,771.00
1869701	CAMERA, COLOR, CCD	12644	PELCO SALES INC	KS-1610	NONE	N305	305969	13221000	192782210	BRIAN K WELLIVER	1998	$ 2,771.00
1869702	CAMERA, COLOR, CCD	12644	PELCO SALES INC	KS-836	HALL	N305	309583	13221000	192782210	BRIAN K WELLIVER	1998	$ 2,771.00
1869703	PAN & TILT	12644	PELCO SALES INC	KS-1610	NONE	N305	58138K	PT570P	192782210	BRIAN K WELLIVER	1998	$ 1,033.00
1869704	TRAILER, FLATBED	79439	JACOBSEN MFG CO	KS-831	YARD	N305	1J9DE2H27XF015689	DFTB167	192782210	BRIAN K WELLIVER	1998	$ 8,601.00
1869706	DISPLAY UNIT, COLOR	7X430	SUN MICROSYSTEMS INC	KS-836	12	N305	9838KN2460	36513831	192782210	BRIAN K WELLIVER	1998	$ 5,000.00
1869709	GENERATOR, TIME CODE	52407	DATUM INC	KS-836	12	N305	1438	97ATCE	192782210	BRIAN K WELLIVER	1998	$ 4,060.00
1869711	ENCODER, VIDEO	0F2A3	ENERDYNE TECHNOLOGIES INC.	KS-836	LSST	N305	1520	ENC1000R5	192782210	BRIAN K WELLIVER	1998	$ 15,750.00
1869712	DECODER, VIDEO	0F2A3	ENERDYNE TECHNOLOGIES INC.	KS-836	LSST	N305	1521	DEC1000R5	192782210	BRIAN K WELLIVER	1998	$ 12,000.00
1869713	MULTIPLEXER	0N620	METRUM INSTRUMENTATION SERVICE	KS-836	12	N305	0101104AL98	CTS2191AL3	192782210	BRIAN K WELLIVER	1998	$ 65,861.00
1869714	MULTIPLEXER	0N620	METRUM INSTRUMENTATION SERVICE	KS-836	12	N305	0101105AL98	CTS2191AL3	192782210	BRIAN K WELLIVER	1998	$ 65,861.00
1869718	RECORDER-REPRODUCER	0N620	METRUM INSTRUMENTATION SERVICE	KS-836	12	N305	1001908BM98	MET64SCNA	192782210	BRIAN K WELLIVER	1998	$ 62,400.00
1869719	CONTROL UNIT	10110	SCIENTIFIC-ATLANTA INC	KS-811	NONE	N305	20613KL	3860	192782210	BRIAN K WELLIVER	1998	$ 22,422.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1869720	BANK, CELL PHONE	0A1X4	RELIABLE SYSTEM SERVICES CORP	KS-836	LSST	N305	001	CPB4	192782210	BRIAN K WELLIVER	1999	$ 13,884.00
1869731	MONITOR, TELEVISION, 55	S0319	MITSUBISHI ELECTRIC CORP	KS-840	B207	N305	117246	VS55601	192782210	BRIAN K WELLIVER	1999	$ 2,256.00
1869732	MONITOR, TELEVISION, 55	S0319	MITSUBISHI ELECTRIC CORP	KS-840	B207	N305	129925	VS55601	192782210	BRIAN K WELLIVER	1999	$ 2,256.00
1869739	COPYING MACHINE	S5175	PANASONIC	KS-840	B201	N305	GJWMB313745	FAA888	192782210	BRIAN K WELLIVER	1999	$ 20,677.00
1869741	PRINTER, ADP, COLOR	28480	HEWLETT-PACKARD CO	KS-840	B201	N305	JPDB016309	8500N	192782210	BRIAN K WELLIVER	2000	$ 6,152.00
1869742	PROJECTOR, DESKTOP, LCD	3T467	PROXIMA CORP	KS-836	23	N305	G9Z06888	9250	192782210	BRIAN K WELLIVER	2000	$ 6,499.00
1869743	COMPUTER, DIGITAL	08CW6	MICRO X-PRESS INC.	KS-836	47	N305	NONE	MBRAB108A	192782210	BRIAN K WELLIVER	2000	$ 1,870.00
1869744	COMPUTER, DIGITAL	08CW6	MICRO X-PRESS INC.	KS-836	47	N305	NONE	MBRAB108A	192782210	BRIAN K WELLIVER	2000	$ 1,870.00
1869745	COMPUTER, DIGITAL	08CW6	MICRO X-PRESS INC.	KS-836	47	N305	NONE	MBRAB108A	192782210	BRIAN K WELLIVER	2000	$ 1,870.00
1869746	COMPUTER, DIGITAL	08CW6	MICRO X-PRESS INC.	KS-836	23	N305	NONE	MBRAB108A	192782210	BRIAN K WELLIVER	2000	$ 1,870.00
1869753	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	207	N305	USGR055897	2100TN	192782210	BRIAN K WELLIVER	2000	$ 1,062.00
1869754	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	207	N305	JPHAB08605	2100TN	192782210	BRIAN K WELLIVER	2000	$ 4,013.00
1869758	COMPUTER, DIGITAL	0ALS7	NEBULA EECTRONICS	KS-836	207	N305	MM6630	3-600	192782210	BRIAN K WELLIVER	2000	$ 907.00
1869772	COPIER, DIGITAL	S5175	PANASONIC	KS-840	B102	N305	EABWA312719	FP-D600	192782210	BRIAN K WELLIVER	2000	$ 18,177.00
1869776	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	B106	N305	SG05F110DW	C6083A	192782210	BRIAN K WELLIVER	2000	$ 3,400.00
1869778	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	B106	N305	USGH236818	2100SE	192782210	BRIAN K WELLIVER	2000	$ 676.00
1869782	CAMERA, DIGITAL	56472	SONY CORP OF AMERICA	KS-840	C203	N305	36972	MVCCD1000	192782210	BRIAN K WELLIVER	2000	$ 1,347.00
1869783	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	B102	N305	JPMAA11450	4550DN	192782210	BRIAN K WELLIVER	2000	$ 3,517.00
1869785	RECORDER, VCR	S5175	PANASONIC	KS-836	20A	N305	K0TC00086	DS555	192782210	BRIAN K WELLIVER	2000	$ 3,647.00
1869786	RECORDER, VCR	S5175	PANASONIC	KS-836	20A	N305	L0TC00110	AG-1980	192782210	BRIAN K WELLIVER	2000	$ 1,250.00
1869787	RECORDER, VHS	S5175	PANASONIC	KS-836	20A	N305	LOTC00103	AG-1980	192782210	BRIAN K WELLIVER	2000	$ 1,250.00
1869788	RECORDER, VHS	S5175	PANASONIC	KS-836	20A	N305	LOTC00228	AG-1980	192782210	BRIAN K WELLIVER	2000	$ 1,250.00
1869789	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	B102	N305	USBC019171	8150DN	192782210	BRIAN K WELLIVER	2001	$ 5,375.00

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1869791	SHOE CLEANER, ELECTRIC	12746	LIBERTY INDUSTRIES INC	KS-839	04	N305	4386	2010SC	192782210	BRIAN K WELLIVER	2001	$ 5,538.00
1869793	PRINTER, ADP	33825	INTERMEC CORP	KS-839	WHSE	N305	10900100074	4420	192782210	BRIAN K WELLIVER	2001	$ 2,295.00
1869796	CHASSIS, MASTER IPS	0KCD3	FIBER OPTIONS INC	KS-840	B213	N305	9832SO1D-61585	9832MCU7	192782210	BRIAN K WELLIVER	2001	$ 36,595.00
1869797	CHASSIS, MASTER IPS	0KCD3	FIBER OPTIONS INC	KS-840	B213	N305	9832SO1D-61584	9832MCU7	192782210	BRIAN K WELLIVER	2001	$ 27,652.00
1869798	PRINTER, ADP	S5376	EPSON CORP HEAD OFFICE	KS-840	B213	N305	USBRC03428	LQ-2180	192782210	BRIAN K WELLIVER	2001	$ 540.00
1869799	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	1	N305	BDWY0017996	2200DTN	192782210	BRIAN K WELLIVER	2001	$ 1,360.00
1869800	SCOPEMETER	3D583	FLUKE CORP	KS-836	20A	N305	DM7840276	196	192782210	BRIAN K WELLIVER	2001	$ 2,508.00
1869802	TEST SET	61141	ACTERNA	KS-836	21	N305	AJHJ-Y0810016	6000A	192782210	BRIAN K WELLIVER	2001	$ 13,826.00
1869803	AMPLIFIER, CHASSIS	22198	EON INSTRUMENTATION INC	KS-836	21	N305	8812	H-132-6	192782210	BRIAN K WELLIVER	2001	$ 10,028.00
1869811	CHASSIS, MASTER IPS	0KCD3	FIBER OPTIONS INC	KS-836	20	N305	9832S01D-61582	9832MCU7	192782210	BRIAN K WELLIVER	2001	$ 41,330.00
1869812	CHASSIS, MASTER IPS	0KCD3	FIBER OPTIONS INC	KS-836	20	N305	9832S01D-61583	9832MCU7	192782210	BRIAN K WELLIVER	2001	$ 39,230.00
1869813	GENERATOR	56259	DATA CHRON INC	KS-1610	NONE	N305	107	3650 GPS	192782210	BRIAN K WELLIVER	2001	$ 5,665.00
1869823	TEST SET, DATA TRANSMISSION	58359	GENERAL DATA PRODUCTS INC	KS-836	12	N305	145	620	192782210	BRIAN K WELLIVER	2001	$ 14,000.00
1869826	POWER SUPPLY	081W5	APOGEE LABS	KS-836	LSST	N305	104	2073-802	192782210	BRIAN K WELLIVER	2001	$ 3,000.00
1869829	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-1555	204	N305	USBGL04330	2200DTN	192782210	BRIAN K WELLIVER	2001	$ 1,400.00
1869830	GENERATOR, TIME CODE	56259	DATA CHRON INC	KS-836	LSST	N305	779	3170	192782210	BRIAN K WELLIVER	2001	$ 6,335.00
1869831	GENERATOR, TIME CODE	56259	DATA CHRON INC	KS-836	LSST	N305	780	3170	192782210	BRIAN K WELLIVER	2001	$ 7,340.00
1869837	TRIAX MATRIX	6Y122	CYTEC CORP	KS-836	12	N305	123200	VDX32X32	192782210	BRIAN K WELLIVER	2001	$ 14,450.00
1869838	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-1628	N2	N305	CNDL022430	1200N	192782210	BRIAN K WELLIVER	2001	$ 580.00
1869845	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	A205	N305	SJPBTM06634	8150HN	192782210	BRIAN K WELLIVER	2001	$ 4,942.00
1869846	SWEEPER, WALK BEHIND	11571	AMERICAN LINCOLN DIV	KS-831	831	N305	307195	400-0453	192782210	BRIAN K WELLIVER	2001	$ 5,768.00
1869848	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	205	N305	SJPPKA16620	4550DN	192782210	BRIAN K WELLIVER	2001	$ 3,539.00

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1869850	CAMERA, DIGITAL	S5329	NIKON CORP	KS-1555	204	N305	3502379	5000	192782210	BRIAN K WELLIVER	2001	$ 1,175.00
1869851	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	205	N305	USBNF25582	4100DTN	192782210	BRIAN K WELLIVER	2001	$ 2,000.00
1869853	RECEIVER	64958	S I TECH INC	KS-836	20A	N305	BD-15085	2720C	192782210	BRIAN K WELLIVER	2001	$ 1,993.00
1869856	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-1555	204	N305	SG13G1100W	2250TN	192782210	BRIAN K WELLIVER	2001	$ 916.00
1869857	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	A202	N305	JPPCH18963	4550N	192782210	BRIAN K WELLIVER	2001	$ 2,250.00
1869858	ANTENNA, MICROWAVE 8'	07380	ANDREW CALIFORNIA CORP	KS-811	TOWER	N305	110122	D8E-3	192782210	BRIAN K WELLIVER	2001	$ 5,190.00
1869867	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	205	N305	020012004	256D4-GPX	192782210	BRIAN K WELLIVER	2001	$ 1,323.00
1869874	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	205	N305	020011615	256D4-GPX	192782210	BRIAN K WELLIVER	2001	$ 1,323.00
1869884	COMPUTER SYSTEM, DIGITAL	56472	SONY CORP OF AMERICA	KS-836	01	N305	3000100	PCG-GR250P	192782210	BRIAN K WELLIVER	2002	$ 1,553.00
1869885	COMPUTER SYSTEM, DIGITAL	56472	SONY CORP OF AMERICA	KS-836	01	N305	3000101	PCG-GR250P	192782210	BRIAN K WELLIVER	2002	$ 1,553.00
1869886	COMPUTER SYSTEM, DIGITAL	56472	SONY CORP OF AMERICA	KS-836	01	N305	3000102	PCG-GR250P	192782210	BRIAN K WELLIVER	2002	$ 1,553.00
1869887	COMPUTER SYSTEM, DIGITAL	56472	SONY CORP OF AMERICA	KS-836	01	N305	3000103	PCG-GR250P	192782210	BRIAN K WELLIVER	2002	$ 1,553.00
1869888	DUPLICATOR	09TN0	ESSENTIAL DATA	KS-840	C110	N305	C076386	SA32941A	192782210	BRIAN K WELLIVER	2002	$ 1,095.00
1869895	COMPUTER SYSTEM, DIGITAL	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	21	N305	52068085PU	6100	192782210	BRIAN K WELLIVER	2002	$ 1,865.00
1869896	COMPUTER SYSTEM, DIGITAL	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	01	N305	52071100PU	6100	192782210	BRIAN K WELLIVER	2002	$ 1,865.00
1869897	COMPUTER SYSTEM, DIGITAL	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	20A	N305	52110353PU	6100	192782210	BRIAN K WELLIVER	2002	$ 1,865.00
1869899	PANEL, DISTRIBUTION	6A200	TECHNICAL MICRONICS CONTROL	KS-839	08	N305	011	MDP-0202	192782210	BRIAN K WELLIVER	2002	$ 16,656.00
1869900	PANEL, DISTRIBUTION	6A200	TECHNICAL MICRONICS CONTROL	KS-839	08	N305	012	MDP-0202	192782210	BRIAN K WELLIVER	2002	$ 16,656.00
1869901	PANEL, DISTRIBUTION	6A200	TECHNICAL MICRONICS CONTROL	KS-839	08	N305	010	MDP-0202	192782210	BRIAN K WELLIVER	2002	$ 16,656.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1869902	ODU, LOW BAND	0ADY2	DIGITAL MICROWAVE CORP	KS-839	NONE	N305	07A1SP023910353P	A00212070001	192782210	BRIAN K WELLIVER	2002	$ 38,222.00
1869903	ODU, LOW BAND	0ADY2	DIGITAL MICROWAVE CORP	KS-839	NONE	N305	07A1SP023910354P	A00212070001	192782210	BRIAN K WELLIVER	2002	$ 38,222.00
1869904	IDU, HIGH BAND	0ADY2	DIGITAL MICROWAVE CORP	KS-839	NONE	N305	3UA1SS023071541P	A00301021004	192782210	BRIAN K WELLIVER	2002	$ 6,720.00
1869905	IDU, HIGH BAND	0ADY2	DIGITAL MICROWAVE CORP	KS-839	NONE	N305	3UA1SS023071537P	A00301021004	192782210	BRIAN K WELLIVER	2002	$ 6,720.00
1869906	SWITCH, DATA ACQUISITION	1NY70	AGILENT TECHNOLOGIES INC	KS-839	07	N305	MY41015059	34970A	192782210	BRIAN K WELLIVER	2003	$ 1,153.00
1869907	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	LSST	N305	1T2302011001	LSK-2GP4	192782210	BRIAN K WELLIVER	2003	$ 1,800.00
1869908	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	LSST	N305	1T2302012001	LSK-2GP4	192782210	BRIAN K WELLIVER	2003	$ 1,800.00
1869909	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	LSST	N305	1T2302013001	LSK-2GP4	192782210	BRIAN K WELLIVER	2003	$ 1,650.00
1869910	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	20A	N305	1T2303007001	LSK-2G4P4	192782210	BRIAN K WELLIVER	2003	$ 1,545.00
1869911	NITROGEN CONTROL SYSTEM	66054	TERRA UNIVERSAL INC	KS-836	04	N305	7900CC28821107258	7900CC28821020	192782210	BRIAN K WELLIVER	2003	$ 13,020.00
1869916	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	65	N305	CNBCC26122	2300DTN	192782210	BRIAN K WELLIVER	2003	$ 1,205.00
1869918	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	65	N305	CNBCC26128	2300DTN	192782210	BRIAN K WELLIVER	2003	$ 1,205.00
1869919	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	20A	N305	AN2305006001	LSK	192782210	BRIAN K WELLIVER	2003	$ 1,550.00
1870618	CAMCORDER	S0482	SONY CORP	KS-836	11	N305	1009619	CCD-TR930	192782210	BRIAN K WELLIVER	1997	$ 840.00
1871252	RECEIVER, VIDEO, AUDIO	97133	HARMAN KARDON INC	KS-836	11	N305	INI01317994	AVR10	192782210	BRIAN K WELLIVER	1997	$ 800.00
1871349	SEMITRAILER, VAN, EQUIPMENT	7S852	TRAILCO EQUIPMENT CORP	KS-836	HIBAY	N305	44X8X7'8'	RTG448TPE8	192782210	BRIAN K WELLIVER	1997	$ 39,788.00
1872766	BATTERY MONITOR, DC	31795	POWERWARE CORP F-EXIDE ELECTR	KS-836	NONE	N305	EQ183003	SA	192782210	BRIAN K WELLIVER	1998	$ 5,097.00
1872767	BATTERY MONITOR, DC	31795	POWERWARE CORP F-EXIDE ELECTR	KS-1605	NONE	N305	EQ183001	SA	192782210	BRIAN K WELLIVER	1998	$ 5,097.00
1977513	RECORDER, THERMAL	62614	WESTERN GRAPHTEC INC	KS-836	12	N305	2197020	DMS1000	192782210	BRIAN K WELLIVER	1998	$ 19,430.00
1979589	COMPUTER, DIGITAL	0G3K8	GATEWAY COMPANIES INC	KS-836	12	N305	0010792659	LP MINI TOWER	192782210	BRIAN K WELLIVER	1998	$ 2,037.00
1979757	TEST SET, TRANSMISSION	57188	METRO EQUIPMENT CORP	KS-836	LSST	N305	08980103	100R-4	192782210	BRIAN K WELLIVER	1998	$ 1,675.00
1981628	DISPLAY UNIT, COLOR	1G7M7	SCEPTRE TECHNOLOGIES INC	KS-836	12	N305	9078NA02J00260	D73A	192782210	BRIAN K WELLIVER	1999	$ 560.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1981721	ENCLOSURE, VERT, ELECTRONIC	51398	MUPAC CORP OF MUTRON CORP	KS-836	12	N305	89015	509ASLL21FC-100	192782210	BRIAN K WELLIVER	1999	$ 5,966.00
1981722	ENCLOSURE, VERT, ELECTRONIC	51398	MUPAC CORP OF MUTRON CORP	KS-836	12	N305	89014	509ASLL21FC-100	192782210	BRIAN K WELLIVER	1999	$ 5,966.00
2018452	CAMERA	HITAH	HITACHI LTD	KS-840	B207	N305	9050314	HVD15	192782210	BRIAN K WELLIVER	1999	$ 4,200.00
2018457	CAMERA	HITAH	HITACHI LTD	KS-836	12	N305	9050315	HVD15	192782210	BRIAN K WELLIVER	1999	$ 4,200.00
2018807	RADIO FREQUENCY TUNER	1PXJ6	L3 COMMUNICATIONS CORP	KS-836	12	N305	367	1415E	192782210	BRIAN K WELLIVER	2000	$ 7,000.00
2018808	RADIO FREQUENCY TUNER	1PXJ6	L3 COMMUNICATIONS CORP	KS-836	12	N305	369	1415E	192782210	BRIAN K WELLIVER	2000	$ 7,000.00
2018909	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-840	C209	N305	USGR060014	C4172A	192782210	BRIAN K WELLIVER	2000	$ 1,135.00
2020540	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-8510	RLCC	N305	6927CKG60800	DESKPRO 6450	192782210	BRIAN K WELLIVER	1999	$ 1,218.00
2020588	SWITCH, SUPERSTACK II	64034	3COM CORP	KS-836	11	N305	7ZNV2450678	3300	192782210	BRIAN K WELLIVER	1999	$ 1,575.00
2020589	SWITCH, SUPERSTACK II	64034	3COM CORP	KS-836	11	N305	7ZNV2488298	3300	192782210	BRIAN K WELLIVER	1999	$ 1,575.00
2020592	SWITCH, SUPERSTACK II	64034	3COM CORP	KS-836	11	N305	7ZNV2488098	3300	192782210	BRIAN K WELLIVER	1999	$ 1,575.00
2020643	COMPUTER SYSTEM, DIGITAL	0G3K8	GATEWAY COMPANIES INC	KS-836	20A	N305	0014961860	SOLO9150	192782210	BRIAN K WELLIVER	1999	$ 2,785.00
2021572	ANALYZER, SPECTRUM	28480	HEWLETT-PACKARD CO	KS-836	21	N305	3846A10655	8563E	192782210	BRIAN K WELLIVER	1999	$ 35,997.00
2021573	ANALYZER, SPECTRUM	28480	HEWLETT-PACKARD CO	KS-836	21	N305	3846A10654	8563E	192782210	BRIAN K WELLIVER	1999	$ 35,997.00
2022139	MAINFRAME, 16 CHANNEL	0YMH1	BROADBAND COMMUNICATIONS PROD	KS-836	12	N305	97089757	DV6016ES	192782210	BRIAN K WELLIVER	1997	$ 1,502.00
2023585	SYNCHRONIZER, BIT	8F920	ACROAMATICS SYSTEMS INC	KS-836	12	N305	173	2430V	192782210	BRIAN K WELLIVER	2000	$ 9,000.00
2024684	SWITCH, SUPERSTACK II	64034	3COM CORP	KS-836	11	N305	KMBS4F89E38	3C16986A	192782210	BRIAN K WELLIVER	2001	$ 1,299.00
2024860	DUMULTIPLEXER, DIGITAL	1PK60	HERLEY INDUSTRIES INC	KS-836	12	N305	339	DFD1601001	192782210	BRIAN K WELLIVER	1999	$ 78,362.00
2025092	RECORDER	METUM	METRUM	KS-836	12	N305	1011B01	64	192782210	BRIAN K WELLIVER	2001	$ 65,280.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2025403	RECORDER	METRS	METRUM INFORMATION STORAGE	KS-836	12	N305	1001646AM96	MET64SCN4	192782210	BRIAN K WELLIVER	1996	$ 153,625.00
2026102	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	20D	N305	U120FHGZB088	ENG/P933/2DE	192782210	BRIAN K WELLIVER	2001	$ 1,219.00
2026896	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	LVDC1	N305	V128FHGZA194	ENS/P933/20	192782210	BRIAN K WELLIVER	2001	$ 1,070.00
2026898	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	LVDC1	N305	V128FHGZA203	ENS/P933/20	192782210	BRIAN K WELLIVER	2001	$ 1,070.00
2026901	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	LVDC1	N305	V128FHGZA195	ENS/P933/20	192782210	BRIAN K WELLIVER	2001	$ 1,070.00
2027098	ROUTER	0GX96	CISCO SYSTEMS INC	KS-836	20A	N305	JMX0536K702	2651	192782210	BRIAN K WELLIVER	2001	$ 2,937.00
2027313	PAN AND TILT	S4742	HITACHI DENSHI LTD	KS-836	12	N305	17788	PT-100	192782210	BRIAN K WELLIVER	2001	$ 2,508.00
2028446	SWITCH, ATM	0GX96	CISCO SYSTEMS INC	KS-836	20	N305	68022408	LS-1010	192782210	BRIAN K WELLIVER	2002	$ 43,923.00
2028447	SWITCH, ATM	0GX96	CISCO SYSTEMS INC	KS-836	20	N305	68022398	LS-1010	192782210	BRIAN K WELLIVER	2002	$ 43,923.00
2028597	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	209KT00003	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028598	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	209KT00005	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028599	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	209KT00004	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028600	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	209KT00007	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028601	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	209KT00001	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028602	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	209KT00008	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028603	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	210KT00024	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028604	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	210KT00030	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028608	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-836	20	N305	210KT00019	MV-40PA15B	192782210	BRIAN K WELLIVER	2002	$ 3,995.00
2028640	COMPUTER, DIGITAL	0S363	ADVANCED DIGITAL SYSTEMS INC	KS-836	20A	N305	AN2305006002	LSK	192782210	BRIAN K WELLIVER	2003	$ 1,550.00
2028641	ANALYZER, VECTOR NETWORK	1LQK8	AGILENT TECHNOLOGIES INC	KS-836	21	N305	SG42000101	8719ET	192782210	BRIAN K WELLIVER	2003	$ 50,903.00
2028646	PRINTER SYSTEM	17623	XEROX CORP	KS-840	B112	N305	8GT-022819	8850DS	192782210	BRIAN K WELLIVER	2003	$ 22,468.00
2028647	COMPUTER, INDUSTRIAL	1SGT5	ULYSSIX TECH INC	KS-836	12	N305	NONE	IPC-615BP-00XBPCI	192782210	BRIAN K WELLIVER	2004	$ 2,499.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2028648	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	01	N305	BCCW-8361	2800	192782210	BRIAN K WELLIVER	2004	$ 9,465.00
2028649	RECEIVER, TELEMENTRY	32352	MICRODYNE INSTRUMENTS INC	KS-836	12	N305	903	1400-MR	192782210	BRIAN K WELLIVER	1990	$ 50,000.00
2028650	RECEIVER, TELEMENTRY	32352	MICRODYNE INSTRUMENTS INC	KS-836	12	N305	901	1400-MR	192782210	BRIAN K WELLIVER	1990	$ 50,000.00
2028651	RECEIVER, TELEMENTRY	32352	MICRODYNE INSTRUMENTS INC	KS-836	12	N305	902	1400-MR	192782210	BRIAN K WELLIVER	1990	$ 50,000.00
2028652	RECEIVER, TELEMENTRY	32352	MICRODYNE INSTRUMENTS INC	KS-836	12	N305	904	1400-MR	192782210	BRIAN K WELLIVER	1990	$ 50,000.00
2028653	TEST SET	0MR02	SAGE INSTRUMENTS	KS-836	12	N305	00842	935AT	192782210	BRIAN K WELLIVER	2005	$ 14,995.00
2028654	TEST SET	0MR02	SAGE INSTRUMENTS	KS-836	12	N305	00843	935AT	192782210	BRIAN K WELLIVER	2005	$ 14,995.00
2028655	OSCILLOSCOPE, DIGITAL	80009	TEKTRONIX INC	KS-836	12	N305	B025885	TDS3052B	192782210	BRIAN K WELLIVER	2006	$ 8,273.00
2028656	OSCILLOSCOPE, DIGITAL	80009	TEKTRONIX INC	KS-836	12	N305	B025890	TDS3052B	192782210	BRIAN K WELLIVER	2006	$ 8,273.00
2028657	SIGNAL GENERATOR, RF	1LQK8	AGILENT TECHNOLOGIES INC	KS-836	20	N305	SG43350115	E4432B	192782210	BRIAN K WELLIVER	2006	$ 15,664.00
2028658	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C102	N305	24913115893	PP15L	192782210	BRIAN K WELLIVER	2006	$ 2,100.00
2028659	DOCKING STATION	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C102	N305	CN-0T7135	PR01X	192782210	BRIAN K WELLIVER	2006	$ 553.00
2028660	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C102A	N305	29557116757	J5574A02	192782210	BRIAN K WELLIVER	2006	$ 2,626.00
2028661	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C105	N305	8715181717	J5574A02	192782210	BRIAN K WELLIVER	2006	$ 2,653.00
2028662	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	A102	N305	JS7CS91	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,728.00
2028663	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	202	N305	DS7CS91	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,728.00
2028664	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C114	N305	5T7CS91	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,728.00
2028665	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	A102	N305	BT7CS91	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,728.00
2028666	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C110	N305	7086896389	D810	192782210	BRIAN K WELLIVER	2006	$ 2,316.00
2028667	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C110	N305	28794253573	D810	192782210	BRIAN K WELLIVER	2006	$ 2,316.00
2028668	SYNCRONIZER	1SGT5	ULYSSIX TECH INC	KS-836	12	N305	ME101	ACP-4060BP-00X	192782210	BRIAN K WELLIVER	2006	$ 41,961.00
2028669	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-1628	N2	N305	HR3B0B1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 1,431.00
2028670	MONITOR, WAVE FORM	80009	TEKTRONIX INC	KS-836	20A	N305	B021579	WFM90D	192782210	BRIAN K WELLIVER	2006	$ 5,881.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2028671	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-839	1	N305	BVY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028672	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-839	1	N305	6VY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028673	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	1	N305	FTY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028674	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-831	1	N305	3VY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028675	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C11	N305	DVY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028676	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-1555	204	N305	8VY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028677	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B115	N305	CVY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028678	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C109	N305	JTY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028679	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C113	N305	9VY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028680	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21	N305	CTY8NB1	GX620	192782210	BRIAN K WELLIVER	2006	$ 1,463.00
2028681	GENERATOR, SIGNAL	50439	HEWLETT-PACKARD CO COLORADO DV	KS-811	#	N305	SG43350121	E4432B	192782210	BRIAN K WELLIVER	2006	$ 22,729.00
2028682	TRAILER, BOX, 44FT	ZW280	HAULMARK TRAILERS	KS-836	HIBAY	N305	16HG544307A024032	GRF85X44WR4	192782210	BRIAN K WELLIVER	2006	$ 21,037.00
2028683	MANLIFT, 60FT, SELF PROPELLED	59497	GENIE INDUSTRIES	KS-836	HIBAY	N305	S60714879	S60	192782210	BRIAN K WELLIVER	2006	$ 92,410.00
2028684	TRAILER, 40FT, DRY CARGO	14234	GREAT DANE TRAILERS INC	KS-831	#	N305	1GRAA80237B708281	7711TDSA	192782210	BRIAN K WELLIVER	2006	$ 50,207.00
2028685	FORKLIFT, 8000 LB	11083	CATERPILLAR TRACTOR CO	KS-831	#	N305	AT29C00966	GP40K	192782210	BRIAN K WELLIVER	2006	$ 32,795.00
2028686	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21B	N305	8JRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028687	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-831	#	N305	BHRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028688	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-831	#	N305	2JRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028689	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-831	#	N305	FHRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028690	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21A	N305	3HRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028691	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-831	#	N305	6JRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028692	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-831	#	N305	8HRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2028693	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21B	N305	6HRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028694	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21B	N305	4HRCBC1	OPTIPLEX 745	192782210	BRIAN K WELLIVER	2007	$ 1,692.00
2028695	FORK LIFT, 15,500LB	78640	CATERPILLAR INDUSTRIAL INC	KS-831	#	N305	T20C-63239	DP70	192782210	BRIAN K WELLIVER	2006	$ 53,418.00
2028696	COMPUTER, LAPTOP	28480	HEWLETT-PACKARD CO	KS-836	01	N305	CNU7100GLX	RB554UT	192782210	BRIAN K WELLIVER	2007	$ 1,569.00
2028697	COMPUTER, LAPTOP	28480	HEWLETT-PACKARD CO	KS-836	01	N305	CNU7100GQ7	RB554UT	192782210	BRIAN K WELLIVER	2007	$ 1,569.00
2028698	COMPUTER, LAPTOP	28480	HEWLETT-PACKARD CO	KS-836	20A	N305	CNU70906P3	RB554UT	192782210	BRIAN K WELLIVER	2007	$ 1,569.00
2028699	OSCILLOSCOPE, DIGITAL	80009	TEKTRONIX INC	KS-836	12	N305	DP04034C011718	DP04034	192782210	BRIAN K WELLIVER	2007	$ 7,946.00
2028700	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-840	C101	N305	JPSC72V00C	5550-DTN	192782210	BRIAN K WELLIVER	2007	$ 4,155.00
2028701	SCANNER, FLATBED	28480	HEWLETT-PACKARD CO	KS-840	C111	N305	CN68TT7228	7650	192782210	BRIAN K WELLIVER	2007	$ 560.00
2028702	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-1628	N3	N305	0HN3414864375P 3494	D830	192782210	BRIAN K WELLIVER	2007	$ 1,841.00
2028703	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	01	N305	JPSC7480CD	5550 DTN	192782210	BRIAN K WELLIVER	2007	$ 3,843.00
2028704	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	A102A	N305	43BSHD1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 834.00
2028705	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	02	N305	53BSHD1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 834.00
2028706	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C110	N305	788-0346	PP04X	192782210	BRIAN K WELLIVER	2007	$ 1,451.00
2028707	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C110	N305	0788-0333	PP04X	192782210	BRIAN K WELLIVER	2007	$ 1,451.00
2028708	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C110	N305	788-0705	PP04X	192782210	BRIAN K WELLIVER	2007	$ 1,451.00
2028709	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	A102B	N305	78T-3580	D830	192782210	BRIAN K WELLIVER	2007	$ 2,159.00
2028710	COUNTER, PARTICLE	0YAB1	MET ONE, INC	KS-839	07	N305	071001007	3415	192782210	BRIAN K WELLIVER	2007	$ 8,518.00
2028711	COUNTER, PARTICLE	0YAB1	MET ONE, INC	KS-839	07	N305	071011009	3415	192782210	BRIAN K WELLIVER	2007	$ 8,518.00
2028712	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	01	N305	GRZ3NF1	DCSM	192782210	BRIAN K WELLIVER	2008	$ 1,857.00
2028713	SERVER, PRIMARY	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	47	N305	BHFKHF1	ECMO1	192782210	BRIAN K WELLIVER	2008	$ 11,720.00
2028714	SERVER, PRIMARY	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C102	N305	CHFKHF1	ECMO1	192782210	BRIAN K WELLIVER	2008	$ 11,720.00
2028715	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	47	N305	DWZPDF1	PP05XA	192782210	BRIAN K WELLIVER	2008	$ 3,395.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2028716	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	C102	N305	9WZPDF1	PP05XA	192782210	BRIAN K WELLIVER	2008	$ 3,395.00
2028717	FORKLIFT, 6500LB	TOYTS	TOYOTA TSUSHO CORP	KS-839	WHSE	N305	12419	8FGU32	192782210	BRIAN K WELLIVER	2008	$ 29,636.00
2028718	FORKLIFT, 5000LB	TOYTS	TOYOTA TSUSHO CORP	KS-831	#	N305	71078	7FBCU25	192782210	BRIAN K WELLIVER	2008	$ 26,801.00
2028719	WRAPPER, PALLET	1URK6	COMPLETE PACKAGING & SHIPPING	KS-839	WHSE	N305	NONE	P712E387	192782210	BRIAN K WELLIVER	2008	$ 9,569.00
2028720	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	47	N305	10118978065	PP05XA	192782210	BRIAN K WELLIVER	2008	$ 2,160.00
2028721	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21A	N305	4PRD3H1	DCSM	192782210	BRIAN K WELLIVER	2008	$ 1,127.00
2028722	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	2	N305	3PRD3H1	DCSM	192782210	BRIAN K WELLIVER	2008	$ 1,127.00
2028723	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	N2	N305	2PRD3H1	DCSM	192782210	BRIAN K WELLIVER	1008	$ 1,127.00
2028724	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-1628	N3	N305	C0LZ5H1	D830	192782210	BRIAN K WELLIVER	2008	$ 1,646.00
2028725	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-1628	N3	N305	B0LZ5H1	D830	192782210	BRIAN K WELLIVER	2008	$ 1,646.00
2028726	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-836	207	N305	CNDY128047	P4015X	192782210	BRIAN K WELLIVER	2008	$ 1,556.00
2028727	MANLIFT, 15' ELECTRIC	59497	GENIE INDUSTRIES	KS-831	BAY	N305	GR08-13153	GR-15	192782210	BRIAN K WELLIVER	2008	$ 12,538.00
2030037	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1678	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030038	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1772	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030039	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1688	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030040	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1643	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030041	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1694	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030042	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1696	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030043	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1744	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030044	PROJECTOR	S3994	EIKI INDUSTRIAL CO	KS-836	20	N305	G26A1665	LC-X100L	192782210	BRIAN K WELLIVER	2002	$ 5,781.00
2030116	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-836	1	N305	FX1SW11	DHM	192782210	BRIAN K WELLIVER	2002	$ 809.00
2030121	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-836	1	N305	9C9SW11	DHM	192782210	BRIAN K WELLIVER	2002	$ 1,044.00

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2030635	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	12	N305	6X29KN8ZG02W	470033-806	192782210	BRIAN K WELLIVER	2002	$ 845.00
2030644	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	#	N305	6X29KN8ZG015	470033-806	192782210	BRIAN K WELLIVER	2002	$ 845.00
2030661	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	20A	N305	V238KN9ZA866	470034-607	192782210	BRIAN K WELLIVER	2002	$ 827.00
2030674	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	LVDC1	N305	V238KN9ZA863	470034-607	192782210	BRIAN K WELLIVER	2002	$ 827.00
2030677	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-836	1	N305	V238KN9ZA851	470034-607	192782210	BRIAN K WELLIVER	2002	$ 827.00
2122628	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-836	20	N305	6WB0111	DHM	192782210	BRIAN K WELLIVER	2001	$ 957.00
2125181	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-836	13	N305	FWPNZ11	DHM	192782210	BRIAN K WELLIVER	2002	$ 933.00
2160090	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	HIBAY	N305	87Y1551	D800	192782210	BRIAN K WELLIVER	2004	$ 2,413.00
2160673	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	1	N305	C10QP21	DMM	192782210	BRIAN K WELLIVER	2003	$ 1,049.00
2160683	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	1	N305	520QP21	DMM	192782210	BRIAN K WELLIVER	2003	$ 1,049.00
2160725	ANALYZER, COMMUNICATIONS	61141	ACTERNA	KS-836	21	N305	AJCMK1900002	MC6000	192782210	BRIAN K WELLIVER	2003	$ 11,754.00
2212712	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	204T3B1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,022.00
2212713	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	304T3B1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,022.00
2212715	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	604T3B1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,022.00
2212717	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	904T3B1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,022.00
2212724	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	JZ3T3B1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,022.00
2212970	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	7SGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212971	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	7RGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212972	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	5RGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212973	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	HQGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212974	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	3SGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212975	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	9TGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00

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2212977	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	FRGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212978	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	DTGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212979	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	3VGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212980	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	BRGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212986	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	B6HCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212987	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	G7HCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212991	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	J4HCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2212992	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	H5HCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213002	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	GMGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213004	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	FPGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213005	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	1GGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213006	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	7KGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213007	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	CGGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213008	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	9JGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213009	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	JKGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213010	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	7NGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213017	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	6LGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213019	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	FVGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213021	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	GYGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213024	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	2WGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213025	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	BYGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213034	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	59GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213035	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	D6GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00

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2213036	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	25GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213037	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	B7GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213038	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	44GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213039	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	CBGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213040	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	85GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213041	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	CCGBCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213042	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	G3GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213047	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	3CGCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213048	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	C8GCHB1	DCNE	192782210	BRIAN K WELLIVER	2006	$ 952.00
2213050	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	58N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213051	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	18N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213052	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	J6N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213053	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	H7N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213054	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	B7N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213055	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	3TN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213057	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	28N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213058	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	G6N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213059	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	87N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213060	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	67N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213061	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	F7N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213062	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	JGM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213063	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	1GN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213064	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	DFM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2213065	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	1HM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213066	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	DGM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213067	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	9FM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213068	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	HGM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213069	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	5GM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213071	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	NGM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213072	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	3GM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213073	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	2HM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213074	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	HFM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213075	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	7GM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213076	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	CGM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213077	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	8GM4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213078	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	G9N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213079	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	49N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213080	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	BBN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213081	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	CBN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213082	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	F8N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213085	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	1BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213086	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	F9N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213087	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	H9N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213088	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	3BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213089	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	6BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213090	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	DBN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00

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2213091	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	69N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213092	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	GBN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213093	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	89N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213094	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	B9N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213095	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	4BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213096	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	8BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213097	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	D9N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213098	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	5BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213099	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	19N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213100	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	7BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213101	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	79N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213102	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	C8N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213103	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	J8N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213104	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	H8N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213105	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	2BN4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213106	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	59N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213107	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	39N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213108	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	88N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213109	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	LVDC2	N305	J9N4HB1	DCSM	192782210	BRIAN K WELLIVER	2006	$ 1,026.00
2213446	DATA ACQUISITION SYSTEM	1LZX9	DEWETRON AMERICA INC	KS-836	12	N305	AT-17060053	DEWE-901	192782210	BRIAN K WELLIVER	2006	$ 35,325.00
2213447	DATA ACQUISITION SYSTEM	1LZX9	DEWETRON AMERICA INC	KS-836	12	N305	AT-17060054	DEWE-901	192782210	BRIAN K WELLIVER	2006	$ 35,325.00

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2213448	DATA ACQUISITION SYSTEM	1LZX9	DEWETRON AMERICA INC	KS-836	12	N305	AT-17060055	DEWE-901	192782210	BRIAN K WELLIVER	2006	$ 35,325.00
2213517	SYNCHRONIZER	58359	GENERAL DATA PRODUCTS INC	KS-836	12	N305	109	266	192782210	BRIAN K WELLIVER	2006	$ 47,000.00
2213607	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	599FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213608	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	689FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213612	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	D99FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213614	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	G89FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213619	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	B79FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213620	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	C79FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213623	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	G79FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213625	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	3B9FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213626	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	5B9FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213642	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	FC9FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213643	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	GB9FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213644	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	HC9FSC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213739	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	6VVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213741	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	5SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213742	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	BTVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213747	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	CTVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213748	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	2SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213749	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	4SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213750	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	GRVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213751	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	7TVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00

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2213752	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	DTVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213753	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	9RVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213754	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	1SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213755	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	HRVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213756	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	6SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213757	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	5TVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213758	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	2TVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213759	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	3SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213760	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	20C	N305	7SVXXC1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 1,225.00
2213804	CAMERA, DIGITAL	05157	COHU INC ELECTR DV F-KIN TEL	KS-811	#	N305	456661	3960	192782210	BRIAN K WELLIVER	2007	$ 3,875.00
2214110	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	DYRJHD1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 825.00
2214129	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	202	N305	1ZRJHD1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 825.00
2214134	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	21A	N305	6ZRJHD1	DCSM	192782210	BRIAN K WELLIVER	2007	$ 825.00
2214318	ROUTER, INTEGRATED	0GX96	CISCO SYSTEMS INC	KS-836	12	N305	FTX1138A1V3	3845	192782210	BRIAN K WELLIVER	2007	$ 37,179.00
2214463	TELEVISION, RECEIVER	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	31	N305	AM362111364	42HL167	192782210	BRIAN K WELLIVER	2007	$ 1,378.00
2214464	TELEVISION, RECEIVER	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	31	N305	AM362111365	42HL167	192782210	BRIAN K WELLIVER	2007	$ 1,378.00
2214465	TELEVISION, RECEIVER	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	31	N305	AM362111366	42HL167	192782210	BRIAN K WELLIVER	2007	$ 1,378.00
2214466	TELEVISION, RECEIVER	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	31	N305	AM362111367	42HL167	192782210	BRIAN K WELLIVER	2007	$ 1,378.00
2214467	TELEVISION, RECEIVER	0DV96	TOSHIBA AMERICAN INFO SYSTEMS	KS-836	31	N305	AM362113167	42HL167	192782210	BRIAN K WELLIVER	2007	$ 1,378.00
2229242	SWITCH	1XA67	NEW ENGLAND ENGINEERING	KS-836	12	N305	003	CSU-100	192782210	BRIAN K WELLIVER	2007	$ 8,300.00
2229244	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	H8PPZD1	VOSTRO 1500	192782210	BRIAN K WELLIVER	2007	$ 1,000.00
2229589	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	8R63DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229590	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	5R63DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2229591	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	2R63DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229592	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	4R63DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229593	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	1R63DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229888	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	DVN3DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229889	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	2VN3DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229894	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	FVN3DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2229897	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	5VN3DG1	DCTA	192782210	BRIAN K WELLIVER	2008	$ 1,197.00
2507224	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	23ZWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507231	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	D2ZWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507232	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	G2ZWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507234	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	20DWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507235	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	30DWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507236	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	40DWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507237	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	50DWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507239	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	70DWPB1	EMU	192782210	BRIAN K WELLIVER	2006	$ 5,300.00
2507289	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	D6CZVB1	EMM	192782210	BRIAN K WELLIVER	2006	$ 19,847.00
2507290	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	F6CZVB1	EMM	192782210	BRIAN K WELLIVER	2006	$ 19,847.00
2507340	MULTIPLEXER, KEYSET T1	8C319	COMPUNETIX INC	KS-836	20A	N305	2006W1Y36001	00-112--1324-01	192782210	BRIAN K WELLIVER	2006	$ 4,734.00
2507342	MULTIPLEXER, KEYSET T1	8C319	COMPUNETIX INC	KS-836	61 CONEX	N305	2006W1Y36003	00-112--1324-01	192782210	BRIAN K WELLIVER	2006	$ 4,734.00
2507598	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	56NG6D1	EMU01	192782210	BRIAN K WELLIVER	2007	$ 7,350.00
2507599	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	76NG6D1	EMU01	192782210	BRIAN K WELLIVER	2007	$ 7,350.00
3019666	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20	N305	0521552	HV-D15	192782210	BRIAN K WELLIVER	2004	$ 5,680.00
3019667	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20	N305	0521550	HV-D15	192782210	BRIAN K WELLIVER	2004	$ 5,680.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3019668	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20	N305	0521554	HV-D15	192782210	BRIAN K WELLIVER	2004	$ 5,680.00
3019669	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20	N305	0521553	HV-D15	192782210	BRIAN K WELLIVER	2004	$ 5,680.00
3019670	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20	N305	0521551	HV-D15	192782210	BRIAN K WELLIVER	2004	$ 5,680.00
3019671	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-836	20	N305	0521555	HV-D15	192782210	BRIAN K WELLIVER	2004	$ 5,680.00
3019833	COMPUTER, DIGITAL	8C319	COMPUNETIX INC	KS-836	20A	N305	SC312005-3	MAT	192782210	BRIAN K WELLIVER	2003	$ 4,945.00
3019834	COMPUTER, DIGITAL	8C319	COMPUNETIX INC	KS-836	20A	N305	SC312005-2	MAT	192782210	BRIAN K WELLIVER	2003	$ 4,945.00
3020215	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	JZ79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020216	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	7Z79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020217	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	CX79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020218	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	BX79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020219	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	8X79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020220	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	3Z79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020221	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	4Z79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020222	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	1X79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020223	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	3Y79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020224	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	7Y79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020227	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	BZ79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020228	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	4Y79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020229	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	FW79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020230	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	GW79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020231	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	5Z79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020232	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	JW79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020233	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	6X79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3020234	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	DX79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020235	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	JX79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020236	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-840	B204	N305	BW79D51	PP08L	192782210	BRIAN K WELLIVER	2004	$ 1,872.00
3020273	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	CYGHC51	DHM	192782210	BRIAN K WELLIVER	2004	$ 1,601.00
3020285	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	CXGHC51	DHM	192782210	BRIAN K WELLIVER	2004	$ 1,601.00
3020287	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	11	N305	JWGHC51	DHM	192782210	BRIAN K WELLIVER	2004	$ 1,601.00
3020289	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	12	N305	2XGHC51	DHM	192782210	BRIAN K WELLIVER	2004	$ 1,601.00
3020290	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	11	N305	CWGHC51	DHM	192782210	BRIAN K WELLIVER	2004	$ 1,601.00
3020291	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	13	N305	7WGHC51	DHM	192782210	BRIAN K WELLIVER	2004	$ 1,601.00
3020505	SWITCH	0GX96	CISCO SYSTEMS INC	KS-836	13	N305	CAT0844X0D4	3750	192782210	BRIAN K WELLIVER	2004	$ 6,025.00
3020506	SWITCH	0GX96	CISCO SYSTEMS INC	KS-836	13	N305	CAT0844N11N	3750	192782210	BRIAN K WELLIVER	2004	$ 6,025.00
3020507	SWITCH	0GX96	CISCO SYSTEMS INC	KS-836	13	N305	CAT0844X06V	3750	192782210	BRIAN K WELLIVER	2004	$ 6,025.00
3020529	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C20	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020530	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C11	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020531	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480BZY	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020532	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C21	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020536	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1D	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020539	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C0F	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020548	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C2L	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020549	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1V	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020557	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C2J	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020564	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1R	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020572	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1T	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3020575	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C2T	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020576	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	20	N305	2UA4480C2R	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020579	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1L	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020580	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1G	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020581	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C15	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020588	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C16	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020589	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	20G	N305	2UA4480C1F	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020596	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C2D	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020600	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C0X	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020601	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2AU4480C18	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020602	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2AU4480C27	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020605	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C2F	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020606	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1W	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020609	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1H	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020611	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C19	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020613	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1N	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020614	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C1Z	DC5000	192782210	BRIAN K WELLIVER	2004	$ 931.00
3020615	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C2V	DC5000	192782210	BRIAN K WELLIVER	2004	$ 1,310.00
3020622	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C0H	DC5000	192782210	BRIAN K WELLIVER	2004	$ 1,310.00
3020623	COMPUTER, DIGITAL	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA4480C24	DC5000	192782210	BRIAN K WELLIVER	2004	$ 1,310.00
3020675	COMPUTER, LAPTOP	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA503WZG	DE544AV	192782210	BRIAN K WELLIVER	2005	$ 1,861.00
3020676	COMPUTER, LAPTOP	28480	HEWLETT-PACKARD CO	KS-836	11	N305	2UA503WZB	DE544AV	192782210	BRIAN K WELLIVER	2005	$ 1,861.00
3059759	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	MEZANINE	N305	BWKP581	DHM	192782210	BRIAN K WELLIVER	2005	$ 971.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3059769	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-836	MEZANINE	N305	CN0C0646466335 7451PL	2001FP	192782210	BRIAN K WELLIVER	2005	$ 790.00
3059994	RECEIVER, DUAL CHANNEL	24735	SEMCO INSTRUMENTS INC	KS-836	12	N305	6047-001	RC600A-2M	192782210	BRIAN K WELLIVER	2006	$ 36,070.00
3059995	RECEIVER, DUAL CHANNEL	24735	SEMCO INSTRUMENTS INC	KS-836	12	N305	6047-0002	RC400-2M	192782210	BRIAN K WELLIVER	2006	$ 27,253.00
3060116	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-1628	N2	N305	3PLJJ41	GX270	192782210	BRIAN K WELLIVER	2004	$ 1,766.00
3063948	RECORDER	1LZX9	DEWETRON AMERICA INC	KS-836	12	N305	1706033	901	192782210	BRIAN K WELLIVER	2006	$ 26,856.00
Overall Result												$ 5,584,342.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1978399	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-M7355	3124A	N419	USMB207384	C4118A	144641440	JERRI L DUNN	1998	$ 1,138.00
2028372	RECEIVER	S0482	SONY CORP	KS-M7355	2140	N419	9834315	KP053HS30	144641440	JERRI L DUNN	2002	$ 2,099.00
2030145	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-66330	APOLLO	N419	JPBLL65262	C4267A	144641440	JERRI L DUNN	2002	$ 2,805.00
2191039	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3124A	N419	J29Q171	D800	144641440	JERRI L DUNN	2005	$ 1,849.00
2191080	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2175K	N419	7XYSG41	D800	144641440	JERRI L DUNN	2004	$ 2,480.00
2212900	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3125C	N419	BML 7NB1	D820	144641440	JERRI L DUNN	2006	$ 2,048.00
2212902	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3125E	N419	3PL 7NB1	D820	144641440	JERRI L DUNN	2006	$ 2,048.00
2213471	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1091B	N419	1ZNB9C1	PP04X	144641440	JERRI L DUNN	2006	$ 2,209.00
2213481	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3125D	N419	52XG9C1	PP04X	144641440	JERRI L DUNN	2006	$ 2,209.00
2213933	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3125A	N419	4JJLHD1	PP04X	144641440	JERRI L DUNN	2007	$ 1,455.00
2213937	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3125F	N419	1JJLHD1	PP04X	144641440	JERRI L DUNN	2007	$ 1,455.00
2213938	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1189B	N419	3JJLHD1	PP04X	144641440	JERRI L DUNN	2007	$ 1,455.00
2213941	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1189G	N419	DJJLHD1	PP04X	144641440	JERRI L DUNN	2007	$ 1,455.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2213943	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3125B	N419	8JJLHD1	PP04X	144641440	JERRI L DUNN	2007	$ 1,455.00
2214097	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3124	N419	JPNJB06856	C8547A	144641440	JERRI L DUNN	2007	$ 6,901.00
2214120	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1189H	N419	11SJHD1	DCSM	144641440	JERRI L DUNN	2007	$ 825.00
2214122	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1091C	N419	5ZRJHD1	DCSM	144641440	JERRI L DUNN	2007	$ 825.00
3019511	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1091A	N419	CN05Y232716 1838QAA0B	DHM	144641440	JERRI L DUNN	2003	$ 615.00
3059691	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3124A	N419	567FH71	D610	144641440	JERRI L DUNN	2005	$ 1,371.00
3059693	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3124A	N419	267FH71	D610	144641440	JERRI L DUNN	2005	$ 1,371.00
3060018	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1091A	N419	90X8S91	PP15L	144641440	JERRI L DUNN	2006	$ 2,320.00
Overall Result												$ 40,388.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1978422	PRINTER, ADP, LASERJET	HEWLE	HEWLETT PACKARD	KS-M7355	3016F	N421	USNC130519	C4121A	828977932	DIANE M GRAY	1998	$ 1,660.00
2161419	COMPUTER SYSTEM, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3012B	N421	B12QH31	LATTIDE D800	828977932	DIANE M GRAY	2003	$ 2,929.00
2191033	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2181B	N421	C5QJG61	D800	828977932	DIANE M GRAY	2005	$ 3,038.00
2191065	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3064	N421	H149541	D800	828977932	DIANE M GRAY	2004	$ 2,531.00
2191096	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2191E	N421	46N9S71	GX280	828977932	DIANE M GRAY	2004	$ 1,595.00
2191105	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3173B	N421	G5N9S71	GX280	828977932	DIANE M GRAY	2004	$ 1,595.00
2191106	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3010C	N421	84N9S71	GX280	828977932	DIANE M GRAY	2004	$ 1,595.00
2191109	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3111E	N421	8QQBH71	GX280	828977932	DIANE M GRAY	2005	$ 1,364.00
2191110	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3066B	N421	5QQBH71	GX280	828977932	DIANE M GRAY	2005	$ 1,364.00
2212888	DISPLAY UNIT, COLOR	0T2T3	ACER AMERICA CORP	KS-M7355	3064H	N421	62599513841	AAL2416 W	828977932	DIANE M GRAY	2006	$ 750.00
2212901	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2004F	N421	8ML 7NB1	D820	828977932	DIANE M GRAY	2006	$ 2,048.00
2213149	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3111B	N421	40H1PB1	DCTA	828977932	DIANE M GRAY	2006	$ 3,732.00
2213473	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2191H	N421	7PCN9C1	DCSM	828977932	DIANE M GRAY	2006	$ 1,692.00
2213478	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1185D	N421	22XG9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,209.00
2213479	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1185F	N421	32XG9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,209.00
2213482	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1189G	N421	62XG9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,209.00
2213486	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2181	N421	C2XG9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,209.00
2213489	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114D	N421	G2XG9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,209.00
2213491	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3014F	N421	FS9H9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,855.00
2213494	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3012D	N421	1T9H9C1	PP04X	828977932	DIANE M GRAY	2006	$ 2,855.00
2213541	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N421	4JQSFC1	PP04X	828977932	DIANE M GRAY	2007	$ 2,734.00
2213945	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3006A	N421	FPFLHD1	PP04X	828977932	DIANE M GRAY	2007	$ 2,104.00
2213946	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3016F	N421	JPFLHD1	PP04X	828977932	DIANE M GRAY	2007	$ 2,104.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2213947	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3013E	N421	4BZXHD1	DCSM	828977932	DIANE M GRAY	2007	$ 1,276.00
2213949	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2191B	N421	8PYFHD1	DCSM	828977932	DIANE M GRAY	2007	$ 1,159.00
2213951	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2191A	N421	7PYFHD1	DCSM	828977932	DIANE M GRAY	2007	$ 1,159.00
2214104	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3111C	N421	FYRJHD1	DCSM	828977932	DIANE M GRAY	2007	$ 825.00
2214124	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3113E	N421	20SJHD1	DCSM	828977932	DIANE M GRAY	2007	$ 825.00
2214126	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123C	N421	70SJHD1	DCSM	828977932	DIANE M GRAY	2007	$ 825.00
2229386	COMPUTER, DIGITAL	7U050	INTEL CORP FIELD SALES OFFICE	KS-OFFSITE	116	N421	NSN	XEON	828977932	DIANE M GRAY	2007	$ 1,200.00
2229387	CAMERA, DIGITAL	3UVK8	123 SECURITY	KS-OFFSITE	116	N421	H448324	KPC-301	828977932	DIANE M GRAY	2007	$ 400.00
2229388	CAMERA, DIGITAL	3UVK8	123 SECURITY	KS-OFFSITE	116	N421	H448316	KPC-301	828977932	DIANE M GRAY	2007	$ 400.00
2229389	CAMERA, DIGITAL	3UVK8	123 SECURITY	KS-OFFSITE	116	N421	H448335	KPC-301	828977932	DIANE M GRAY	2007	$ 400.00
3019385	COMPUTER SYSTEM, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	#	N421	B92QH31	PP02X	828977932	DIANE M GRAY	2003	$ 2,390.00
3019387	COMPUTER SYSTEM, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3155	N421	692QH31	PP02X	828977932	DIANE M GRAY	2003	$ 2,390.00
3059692	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3091A	N421	967FH71	D610	828977932	DIANE M GRAY	2005	$ 1,371.00
3060004	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3113D	N421	4YCWR91	DCSM	828977932	DIANE M GRAY	2006	$ 2,163.00
3060009	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3120A	N421	32FWR91	DCSM	828977932	DIANE M GRAY	2006	$ 1,800.00
3060010	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123C	N421	42FWR91	DCSM	828977932	DIANE M GRAY	2006	$ 1,800.00
3060017	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2096	N421	50X8S91	PP15L	828977932	DIANE M GRAY	2006	$ 2,320.00
3060035	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3009C	N421	BKRMW91	DCSM	828977932	DIANE M GRAY	2006	$ 2,163.00
Overall Result												$ 74,456.00

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1978397	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-60680	1240	N423	USMB237358	C4118A	825950630	DIANE M CUNNINGHAM	1998	$ 1,138.00
2018381	CPU,LAPTOP	DELLC	DELL COMPUTER CORP	KS-60680	1201F	N423	VDW9H	PPL	825950630	DIANE M CUNNINGHAM	1999	$ 3,042.00
2028611	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1056	N423	F98F121	DHM	825950630	DIANE M CUNNINGHAM	2002	$ 1,000.00
2030122	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-60680	1230	N423	3C9SW11	DHM	825950630	DIANE M CUNNINGHAM	2002	$ 1,044.00
2191074	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1105	N423	6DFM441	GX270	825950630	DIANE M CUNNINGHAM	2004	$ 1,989.00
2191135	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-60680	1225	N423	MY5802C09B	DESIGN JET 90	825950630	DIANE M CUNNINGHAM	2006	$ 918.00
2212906	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N423	7NL 7NB1	D820	825950630	DIANE M CUNNINGHAM	2006	$ 2,048.00
2212911	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1201	N423	F471NB1	GX620	825950630	DIANE M CUNNINGHAM	2006	$ 1,463.00
2212913	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1031	N423	1571NB1	GX620	825950630	DIANE M CUNNINGHAM	2006	$ 1,463.00
2212914	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1056A	N423	8571NB1	GX620	825950630	DIANE M CUNNINGHAM	2006	$ 1,463.00
2212915	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2002	N423	5571NB1	GX620	825950630	DIANE M CUNNINGHAM	2006	$ 1,463.00
2213205	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1012	N423	F9HR6C1	XPS	825950630	DIANE M CUNNINGHAM	2006	$ 2,895.00
2213267	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-60680	1201	N423	JPDL67M00L	Q3723A	825950630	DIANE M CUNNINGHAM	2006	$ 3,485.00
2214005	PRINTER, ADP	S5846	SEIKO EPSON CORP	KS-60680	1201	N423	GLS0026625	K132A	825950630	DIANE M CUNNINGHAM	2007	$ 5,256.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2214098	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	1201	N423	JPNJN07115	C8547A	825950630	DIANE M CUNNINGHAM	2007	$ 6,901.00
2214103	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3034B	N423	GZRJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2214109	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1230	N423	DZRJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2214115	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1230	N423	BZRJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2214116	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201E	N423	G0SJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2214117	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1230	N423	CYRJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2214119	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1230	N423	8ZRJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2214138	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1220J	N423	HZRJHD1	DCSM	825950630	DIANE M CUNNINGHAM	2007	$ 825.00
2229253	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201E	N423	6419BD1	INSPIRON 1721	825950630	DIANE M CUNNINGHAM	2007	$ 800.00
2229420	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N423	4QMVKF1	PP04X	825950630	DIANE M CUNNINGHAM	2008	$ 2,062.00
2229421	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N423	6QMVKF1	PP04X	825950630	DIANE M CUNNINGHAM	2008	$ 2,062.00
2229531	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201B	N423	GGJN7G1	PP04X	825950630	DIANE M CUNNINGHAM	2008	$ 1,602.00

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2229910	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1220A	N423	2Y5JFG1	PP04X	825950630	DIANE M CUNNINGHAM	2008	$ 1,851.00
2506357	COMPUTER, PERSONAL	S0482	SONY CORP	KS-60680	1201N	N423	J001TAS4	PLG-1J-1L	825950630	DIANE M CUNNINGHAM	2006	$ 1,790.00
2506379	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201Q	N423	CN05Y232716183 8QAA08	DHM	825950630	DIANE M CUNNINGHAM	2003	$ 615.00
2507449	CAMERA, DIGITAL	S4546	CANON INC	KS-60680	1201	N423	3022262467	A540	825950630	DIANE M CUNNINGHAM	2007	$ 175.00
3019509	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050L	N423	CN05Y232716183 8QAA0D	DHM	825950630	DIANE M CUNNINGHAM	2003	$ 615.00
3059680	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201O	N423	76N9S71	GX280	825950630	DIANE M CUNNINGHAM	2005	$ 1,595.00
3059681	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201K	N423	F4N9S71	GX280	825950630	DIANE M CUNNINGHAM	2005	$ 1,595.00
3059682	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201G	N423	H4N9S71	GX280	825950630	DIANE M CUNNINGHAM	2005	$ 1,595.00
3059683	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1140	N423	16N9S71	GX280	825950630	DIANE M CUNNINGHAM	2005	$ 1,595.00
3059696	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201D	N423	QHJBQ71	D800	825950630	DIANE M CUNNINGHAM	2005	$ 2,099.00
3059699	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-60680	1202	N423	CNBGD39368	2300DTN	825950630	DIANE M CUNNINGHAM	2004	$ 1,165.00
3060132	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1225	N423	38F2851	GX270	825950630	DIANE M CUNNINGHAM	2004	$ 1,766.00
3060133	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201N	N423	78F2851	GX270	825950630	DIANE M CUNNINGHAM	2004	$ 1,837.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3060135	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1202	N423	GWJ2851	GX270	825950630	DIANE M CUNNINGHAM	2004	$ 1,837.00
Overall Result												$ 67,999.00

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1978398	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-M7355	3056D	N422	USMB237502	C4118A	169628535	LAURA H BRUMM	1998	$ 1,138.00
2030144	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	2170	N422	JPBLL64984	C4267A	169628535	LAURA H BRUMM	2002	$ 2,805.00
2191031	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3056B	N422	95QJG61	D800	169628535	LAURA H BRUMM	2005	$ 3,038.00
2191035	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3056C	N422	55QJG61	D800	169628535	LAURA H BRUMM	2005	$ 3,038.00
2191041	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3197	N422	USBXM14154	4350DTN	169628535	LAURA H BRUMM	2004	$ 1,953.00
2191042	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	1183	N422	CNBXB22689	4350DTN	169628535	LAURA H BRUMM	2004	$ 1,595.00
2191043	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3056	N422	CNBXG01795	4350DTN	169628535	LAURA H BRUMM	2004	$ 1,595.00
2191058	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3115B	N422	C149541	D800	169628535	LAURA H BRUMM	2004	$ 2,531.00
2191069	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3006D	N422	B9FM441	GX270	169628535	LAURA H BRUMM	2004	$ 1,989.00
2191079	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3011B	N422	1XYSG41	D800	169628535	LAURA H BRUMM	2004	$ 2,480.00
2191093	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3120C	N422	G6N9S71	GX280	169628535	LAURA H BRUMM	2004	$ 1,595.00
2191103	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3052F	N422	97N9S71	GX280	169628535	LAURA H BRUMM	2004	$ 1,595.00
2191104	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3133A	N422	47N9S71	GX280	169628535	LAURA H BRUMM	2004	$ 1,595.00
2191112	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3135E	N422	2QQBH71	GX280	169628535	LAURA H BRUMM	2005	$ 1,364.00
2191242	PRINTER, ADP	26921	XEROX CORP	KS-M7355	3177	N422	SRRW602429	PHASER 7750	169628535	LAURA H BRUMM	2006	$ 7,220.00
2212834	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3006D	N422	HQZ8KB1	DCD0	169628535	LAURA H BRUMM	2006	$ 27,698.00
2212897	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2088C	N422	5ML 7NB1	D820	169628535	LAURA H BRUMM	2006	$ 2,048.00
2212898	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	FIT	N422	9NL 7NB1	D820	169628535	LAURA H BRUMM	2006	$ 2,048.00
2212904	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3133C	N422	2PL 7NB1	D820	169628535	LAURA H BRUMM	2006	$ 2,048.00
2212905	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1185C	N422	CNL 7NB1	D820	169628535	LAURA H BRUMM	2006	$ 2,048.00
2213128	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3010E	N422	FSDJQB1	DCTA	169628535	LAURA H BRUMM	2006	$ 2,207.00
2213153	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3014D	N422	D4KYQB1	INSPIRON 9400	169628535	LAURA H BRUMM	2006	$ 2,534.00
2213475	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3113A	N422	DPCN9C1	DCSM	169628535	LAURA H BRUMM	2006	$ 1,692.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2213480	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3197B	N422	42XG9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,209.00
2213483	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3121B	N422	82XG9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,209.00
2213485	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1185A	N422	B2XG9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,209.00
2213487	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3133D	N422	D2XG9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,209.00
2213488	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3135B	N422	F2XG9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,209.00
2213490	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3011B	N422	CS9H9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,855.00
2213492	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3050A	N422	GS9H9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,855.00
2213493	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3010A	N422	JS9H9C1	PP04X	169628535	LAURA H BRUMM	2006	$ 2,855.00
2213932	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3048A	N422	GHJLHD1	PP04X	169628535	LAURA H BRUMM	2007	$ 1,455.00
2213939	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3035E	N422	2JJLHD1	PP04X	169628535	LAURA H BRUMM	2007	$ 1,455.00
2213940	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114A	N422	7JJLHD1	PP04X	169628535	LAURA H BRUMM	2007	$ 1,455.00
2213944	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3034F	N422	GPFLHD1	PP04X	169628535	LAURA H BRUMM	2007	$ 2,104.00
2213953	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3033F	N422	BPYFHD1	DCSM	169628535	LAURA H BRUMM	2007	$ 1,159.00
2214133	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3008F	N422	50SJHD1	DCSM	169628535	LAURA H BRUMM	2007	$ 825.00
2229240	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3037A	N422	FWCK2F1	PRECISION 390	169628535	LAURA H BRUMM	2007	$ 1,200.00
2229808	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3009B	N422	80LZ5H1	LATITUDE D830	169628535	LAURA H BRUMM	2008	$ 1,881.00
2229905	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N422	H1D7CG1	PP04X	169628535	LAURA H BRUMM	2008	$ 1,852.00
2236873	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3016A	N422	9S535H1	PP09S	169628535	LAURA H BRUMM	2008	$ 1,848.00
3019504	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2187B	N422	CN05Y2327161 838QAA05	DHM	169628535	LAURA H BRUMM	2003	$ 615.00
3019505	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3167C	N422	CN05Y2327161 838QAA03	DHM	169628535	LAURA H BRUMM	2003	$ 615.00
3059685	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3167C	N422	71L8K81	GX270	169628535	LAURA H BRUMM	2005	$ 1,845.00
3059697	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3035C	N422	9HJBQ71	D800	169628535	LAURA H BRUMM	2005	$ 2,099.00
3060005	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3032A	N422	52FWR91	DCSM	169628535	LAURA H BRUMM	2006	$ 1,800.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3060007	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3034C	N422	B2FWR91	DCSM	169628535	LAURA H BRUMM	2006	$ 1,800.00
3060015	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3197C	N422	30S8591	PP15L	169628535	LAURA H BRUMM	2006	$ 2,320.00
3060019	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3115B	N422	40X8S91	PP15L	169628535	LAURA H BRUMM	2006	$ 2,320.00
3060141	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3120B	N422	18F2851	GX270	169628535	LAURA H BRUMM	2004	$ 1,837.00
3060144	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3163	N422	68F2851	GX270	169628535	LAURA H BRUMM	2004	$ 1,837.00
Overall Result												$ 129,786.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
11786	TEST SET, FIBER OPTIC	80009	TEKTRONIX INC	KS-60640	A1SF2	N424	B047241	TFS2020	452758320	RICHARD C HEFELFINGER	1993	$ 7,830.00
14384	INSERTER, VIDEOTIME	52407	DATUM INC	KS-60680	1020	N424	1894	9550-861	452758320	RICHARD C HEFELFINGER	1990	$ 4,836.00
14385	INSERTER, VIDEOTIME	52407	DATUM INC	KS-60680	1021	N424	1893	9550-861	452758320	RICHARD C HEFELFINGER	1990	$ 4,836.00
14386	INSERTER, VIDEOTIME	52407	DATUM INC	KS-60680	1020	N424	1891	9550-861	452758320	RICHARD C HEFELFINGER	1990	$ 4,836.00
14387	INSERTER, VIDEOTIME	52407	DATUM INC	KS-60640	A7SF4	N424	1892	9550-861	452758320	RICHARD C HEFELFINGER	1990	$ 4,836.00
14388	INSERTER, VIDEOTIME	52407	DATUM INC	KS-60680	1020	N424	1890	9550-861	452758320	RICHARD C HEFELFINGER	1990	$ 4,836.00
46155	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-60680	1112	N424	USDK032122	5SI	452758320	RICHARD C HEFELFINGER	1997	$ 6,368.00
46203	GENERATOR, SIGNAL PLATFORM	8S696	TEKTRONIX	KS-60680	1020	N424	B011006	TG2000	452758320	RICHARD C HEFELFINGER	1998	$ 13,616.00
46216	GENERATOR, SIGNAL	HEWLE	HEWLETT PACKARD	KS-60680	1040	N424	3623A03892	8648C	452758320	RICHARD C HEFELFINGER	1997	$ 8,512.00
46217	SYNCHRONIZER, DIGITAL BIT	094Q2	L-3 COMMUNICATIONS TELEMETRY &	KS-NOC	#	N424	26272	DBS430	452758320	RICHARD C HEFELFINGER	1998	$ 8,635.00
46273	CAMERA SYSTEM	62786	HITACHI AMERICA LTD	KS-60680	ASTRO	N424	NONE	YJ18	452758320	RICHARD C HEFELFINGER	1998	$ 15,335.00
46274	CAMERA SYSTEM	62786	HITACHI AMERICA LTD	KS-60680	1214	N424	NONE	YJ18	452758320	RICHARD C HEFELFINGER	1998	$ 15,335.00
46275	CAMERA SYSTEM	62786	HITACHI AMERICA LTD	KS-60680	1201E	N424	NONE	YJ18	452758320	RICHARD C HEFELFINGER	1998	$ 15,335.00
46291	RADIO, PORTABLE UHF	04713	MOTOROLA INC	KS-60680	1105	N424	620AZL1890	H09RDC9PW5N	452758320	RICHARD C HEFELFINGER	1999	$ 1,781.00
46292	RADIO, PORTABLE UHF	04713	MOTOROLA INC	KS-60680	1105	N424	620AZL1891	H09RDC9PW5N	452758320	RICHARD C HEFELFINGER	1999	$ 1,781.00
46294	RADIO, PORTABLE UHF	04713	MOTOROLA INC	KS-60680	1105	N424	620AZL1892	H09RDC9PW5N	452758320	RICHARD C HEFELFINGER	1999	$ 1,781.00
46315	TIME CODE GENERATOR	ODETC	ODETICS INC	KS-60640	LSST2	N424	28500689945	285-368	452758320	RICHARD C HEFELFINGER	1999	$ 5,371.00
165705	CAMERA SET, TELEVISION	S0482	SONY CORP	KS-60640	LKR16	N424	16038	DXC-3000	452758320	RICHARD C HEFELFINGER	1987	$ 5,170.00
251826	CAMERA, TELEVISION	05157	COHU INC ELECTR DV F-KIN TEL	KS-M7355	O&C	N424	135771	8740-5	452758320	RICHARD C HEFELFINGER	1986	$ 3,850.00
251828	CAMERA, TELEVISION	05157	COHU INC ELECTR DV F-KIN TEL	KS-60680	1410	N424	135779	8740-5	452758320	RICHARD C HEFELFINGER	1986	$ 3,850.00

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251829	CAMERA, TELEVISION	05157	COHU INC ELECTR DV F-KIN TEL	KS-60640	B1SF4	N424	135770	8740-5	452758320	RICHARD C HEFELFINGER	1986	$ 3,850.00
251989	CAMERA, VIDEO MOTION	95306	RCA CORP PICTURE TUBE DIV	KS-60680	1470	N424	266119	TC2022N8	452758320	RICHARD C HEFELFINGER	1985	$ 710.00
251998	MONITOR, WAVEFORM	80009	TEKTRONIX INC	KS-60680	1020	N424	B104660	1480R	452758320	RICHARD C HEFELFINGER	1985	$ 5,600.00
252000	MONITOR, WAVEFORM	80009	TEKTRONIX INC	KS-60640	B2SF2	N424	B094328	1480C	452758320	RICHARD C HEFELFINGER	1985	$ 6,050.00
253265	CAMERA, TELEVISION	05157	COHU INC ELECTR DV F-KIN TEL	KS-60640	B1SF4	N424	135748	8740-5	452758320	RICHARD C HEFELFINGER	1986	$ 3,850.00
253270	CAMERA, TELEVISION	05157	COHU INC ELECTR DV F-KIN TEL	KS-60680	1410	N424	135762	8740-5	452758320	RICHARD C HEFELFINGER	1986	$ 3,850.00
253271	CAMERA, TELEVISION	05157	COHU INC ELECTR DV F-KIN TEL	KS-60640	B1SF4	N424	135769	8740-5	452758320	RICHARD C HEFELFINGER	1986	$ 3,850.00
417185	GENERATOR, SIGNAL	28480	HEWLETT-PACKARD CO	KS-60640	B3SF3	N424	2337A22769	8640B	452758320	RICHARD C HEFELFINGER	1984	$ 10,295.00
606984	TRUCK, FORKLIFT, 2000LB	12603	CLARK EQUIPMENT CO	KS-60640	WHSE	N424	67919	EC40C	452758320	RICHARD C HEFELFINGER	1983	$ 9,739.00
652624	SYNCHRONIZER	06141	FAIRCHILD WESTON SYSTEMS	KS-60680	1108	N424	1256	720-02	452758320	RICHARD C HEFELFINGER	1983	$ 8,503.00
689178	PLATFORM	04939	MARTIN MARIETTA CORP	KS-1731	BAY	N424	002	GT519222	452758320	RICHARD C HEFELFINGER	1975	$ 6,223.00
747787	RECORDER	62614	WESTERN GRAPHTEC INC	KS-60640	12SF3	N424	4020149	WR3101-8	452758320	RICHARD C HEFELFINGER	1984	$ 9,367.00
748805	REFLECTOMETER, TIME DOMAIN	80009	TEKTRONIX INC	KS-60640	B1SF2	N424	R115789	1502	452758320	RICHARD C HEFELFINGER	1985	$ 5,800.00
749475	GENERATOR, SIGNAL	14493	HEWLETT-PACKARD CO MFG DIV	KS-60680	1040	N424	2509A01104	8656B	452758320	RICHARD C HEFELFINGER	1985	$ 7,350.00
868395	MONITOR	26723	RCA CORP RCA RECORDS	KS-60680	1202	N424	913327409	F27100AK	452758320	RICHARD C HEFELFINGER	1989	$ 699.00
868568	RECEIVER, AUDIO/VIDEO	22908	PIONEER CO	KS-60680	1020	N424	JE392077085	VSX-9300S	452758320	RICHARD C HEFELFINGER	1989	$ 795.00
870306	SYNCHRONIZER, VIDEO	58616	MICROTIME INC	KS-60680	1020	N424	360077	S234	452758320	RICHARD C HEFELFINGER	1989	$ 7,680.00
870307	SYNCHRONIZER, VIDEO	58616	MICROTIME INC	KS-60680	1020	N424	360076	S234	452758320	RICHARD C HEFELFINGER	1989	$ 7,680.00

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1000615	ANALYZER, SPECTRUM	28480	HEWLETT-PACKARD CO	KS-60640	A1SF3	N424	3027A01047	8590B	452758320	RICHARD C HEFELFINGER	1990	$ 10,140.00
1028206	OSCILLOSCOPE	28480	HEWLETT-PACKARD CO	KS-60640	A2SF4	N424	2934A03103	54502A	452758320	RICHARD C HEFELFINGER	1990	$ 5,786.00
1031492	OSCILLOSCOPE	80009	TEKTRONIX INC	KS-60680	1020	N424	B021955	2246A	452758320	RICHARD C HEFELFINGER	1990	$ 7,234.00
1031610	OSCILLOSCOPE	80009	TEKTRONIX INC	KS-60640	B1SF1	N424	B055372	2465B	452758320	RICHARD C HEFELFINGER	1990	$ 7,284.00
1031921	PRINTER	61141	ACTERNA	KS-60680	1020	N424	905418	PR-40A	452758320	RICHARD C HEFELFINGER	1990	$ 895.00
1031961	ANALYZER, PROTOCOL	28480	HEWLETT-PACKARD CO	KS-60640	B2SF3	N424	2945A06906	4952A	452758320	RICHARD C HEFELFINGER	1990	$ 6,133.00
1031978	TESTER, CABLE	80009	TEKTRONIX INC	KS-66330	1016	N424	B035834	1502B	452758320	RICHARD C HEFELFINGER	1990	$ 7,500.00
1032237	VIDEO SMD INSPECTION SYSTEM	64544	BENCHMARK INDUSTRIES INC.	KS-66330	APIT	N424	1190	SMD1000	452758320	RICHARD C HEFELFINGER	1990	$ 5,595.00
1032550	ANALYZER, SPECTRUM	56286	HEWLETT-PACKARD CO ANDOVER DIV	KS-60680	1040	N424	3005A00712	3588A	452758320	RICHARD C HEFELFINGER	1991	$ 17,861.00
1032673	RECORDER, VIDEO CASSETTE	66557	JVC CO OF AMERICA	KS-66330	107	N424	116X0633	HRS6700U	452758320	RICHARD C HEFELFINGER	1991	$ 951.00
1032776	RECORDER, VHS	66557	JVC CO OF AMERICA	KS-60640	COOL	N424	08510868	BR-S411U	452758320	RICHARD C HEFELFINGER	1991	$ 2,661.00
1033509	RECORDER, SIGNAL DATA	28009	METRUM INFORMATION STORAGE	KS-60680	1050	N424	0100321AL90	97	452758320	RICHARD C HEFELFINGER	1990	$ 94,700.00
1033510	RECORDER, SIGNAL DATA	28009	METRUM INFORMATION STORAGE	KS-60680	1050	N424	0100322AM90	97	452758320	RICHARD C HEFELFINGER	1990	$ 94,700.00
1040796	RECEIVER, TELEVISION	S0482	SONY CORP	KS-60680	1120A	N424	2015320	PVM13420	452758320	RICHARD C HEFELFINGER	1991	$ 883.00
1121893	COUNTER, MICROWAVE FREQUENCY	60259	HEWLETT PACKARD CO LAKE	KS-60680	1040	N424	3049A03363	HP5350B	452758320	RICHARD C HEFELFINGER	1991	$ 6,795.00
1122206	RECORDER, VIDEO	66557	JVC CO OF AMERICA	KS-60640	A3SF2	N424	136N5916	HQ-S6700U	452758320	RICHARD C HEFELFINGER	1991	$ 694.00
1122211	QUAD FRAMESTORE	0N885	DIGITAL PROCESSING SYSTEMS	KS-60680	1020	N424	91918004	DPS-245	452758320	RICHARD C HEFELFINGER	1991	$ 6,320.00
1122212	QUAD FRAMESTORE	0N885	DIGITAL PROCESSING SYSTEMS	KS-60680	1020	N424	91918001	DPS-245	452758320	RICHARD C HEFELFINGER	1991	$ 6,320.00
1122213	QUAD FRAMESTORE	0N885	DIGITAL PROCESSING SYSTEMS	KS-60640	B4SF4	N424	91918003	DPS-245	452758320	RICHARD C HEFELFINGER	1991	$ 6,320.00

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1122214	QUAD FRAMESTORE	0N885	DIGITAL PROCESSING SYSTEMS	KS-60680	1020	N424	92957004	DPS-245	452758320	RICHARD C HEFELFINGER	1991	$ 6,320.00
1122411	MONITOR, WAVEFORM	80009	TEKTRONIX INC	KS-60680	1020	N424	B107688	1485R	452758320	RICHARD C HEFELFINGER	1992	$ 7,721.00
1122862	MEASUREMENT SET, VIDEO	80009	TEKTRONIX INC	KS-60640	B1SF2	N424	B031077	VM700A	452758320	RICHARD C HEFELFINGER	1992	$ 19,500.00
1122879	CAMERA	62786	HITACHI AMERICA LTD	KS-60680	1201N	N424	20Z0702	Z-ONE-BU	452758320	RICHARD C HEFELFINGER	1992	$ 9,318.00
1122880	CAMERA	62786	HITACHI AMERICA LTD	KS-85125	OB	N424	20Z0699	Z-ONE-BU	452758320	RICHARD C HEFELFINGER	1992	$ 9,318.00
1122881	CAMERA	62786	HITACHI AMERICA LTD	KS-60680	1150	N424	2061196	HV-C10	452758320	RICHARD C HEFELFINGER	1992	$ 4,040.00
1122956	ANALYZER, SPECTRUM	STARS	STANFORD RESEARCH SYSTEMS INC	KS-60680	1201N	N424	14442	SR760	452758320	RICHARD C HEFELFINGER	1992	$ 5,073.00
1126903	OSCILLOSCOPE	80009	TEKTRONIX INC	KS-60640	B1SF1	N424	B023643	TDS540	452758320	RICHARD C HEFELFINGER	1992	$ 15,058.00
1128539	MULTIPLEXER/DEMULTIPLEXER	32760	GRASS VALLEY GROUP INC THE	KS-60680	1030	N424	160	87	452758320	RICHARD C HEFELFINGER	1991	$ 14,175.00
1132519	MULTIMETER	28480	HEWLETT-PACKARD CO	KS-60640	B2SF3	N424	2946G02086	8153A	452758320	RICHARD C HEFELFINGER	1992	$ 10,447.00
1132810	TEST SET, TRANSMISSION	38507	CONSULTRONICS LTD	KS-60640	B1SF2	N424	AT0992F1990	AUTO-TIMS	452758320	RICHARD C HEFELFINGER	1992	$ 9,171.00
1144945	CAMERA, VIDEO	23338	WAVETEK SAN DIEGO INC	KS-60640	A1SF4	N424	1493063	C1-1865	452758320	RICHARD C HEFELFINGER	1992	$ 640.00
1145497	PRINTER, LASERJET	28480	HEWLETT-PACKARD CO	KS-60680	1202	N424	USFC065851	C2037A	452758320	RICHARD C HEFELFINGER	1994	$ 1,320.00
1376149	OSCILLOSCOPE	80009	TEKTRONIX INC	KS-66330	APOLO	N424	B023976	TDS540	452758320	RICHARD C HEFELFINGER	1993	$ 13,623.00
1377273	DIGITIZING SCOPE	28480	HEWLETT-PACKARD CO	KS-60640	COOL	N424	US34510241	54504A	452758320	RICHARD C HEFELFINGER	1995	$ 7,020.00
1378128	MULTIPLEXER, DIGITAL FREQUENCY	52559	METRAPLEX CORP	KS-60680	1040	N424	202	DFD-20-01-001	452758320	RICHARD C HEFELFINGER	1996	$ 80,000.00
1378971	MULTIPLEXER	50717	COASTCOM	KS-60680	1020	N424	6733	D/IMUXIII	452758320	RICHARD C HEFELFINGER	1994	$ 8,106.00
1378972	MULTIPLEXER	50717	COASTCOM	KS-60680	1020	N424	6730	D/IMUXIII	452758320	RICHARD C HEFELFINGER	1994	$ 8,106.00
1378973	MULTIPLEXER	50717	COASTCOM	KS-60680	1020	N424	6732	D/IMUXIII	452758320	RICHARD C HEFELFINGER	1994	$ 8,106.00
1378974	MULTIPLEXER	50717	COASTCOM	KS-60680	1020	N424	6735	D/IMUXIII	452758320	RICHARD C HEFELFINGER	1994	$ 8,106.00
1379000	ANALYZER, PCM	61141	ACTERNA	KS-NOC	#	N424	6955	T BERD 224	452758320	RICHARD C HEFELFINGER	1994	$ 11,848.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1379875	RACK	8C319	COMPUNETIX INC	KS-60680	1020	N424	9416812241	2ES17H48	452758320	RICHARD C HEFELFINGER	1995	$ 370,000.00
1379876	RACK	8C319	COMPUNETIX INC	KS-60680	1020	N424	9424524838	2ES17H48	452758320	RICHARD C HEFELFINGER	1995	$ 92,000.00
1379878	COMMUNICATION SYSTEM	8C319	COMPUNETIX INC	KS-60680	1020	N424	95WU795007	NONE	452758320	RICHARD C HEFELFINGER	1995	$ 5,000.00
1379879	COMMUNICATION SYSTEM	8C319	COMPUNETIX INC	KS-60680	1020	N424	95WU795010	NONE	452758320	RICHARD C HEFELFINGER	1995	$ 5,000.00
1392386	RECORDER-REPRODUCER, VIDEO	66557	JVC CO OF AMERICA	KS-60680	1202	N424	11030946	HRS5200U	452758320	RICHARD C HEFELFINGER	1995	$ 574.00
1392389	RECORDER-REPRODUCER, VIDEO	66557	JVC CO OF AMERICA	KS-60680	1230	N424	11030937	HRS5200U	452758320	RICHARD C HEFELFINGER	1995	$ 574.00
1393664	CHASSIS, MAINFRAME OTDR	51275	NETTEST NORTH AMERICA INC	KS-60640	COOL	N424	96010050	TD3000A486	452758320	RICHARD C HEFELFINGER	1996	$ 14,700.00
1393665	MODULE, OPTICAL	51275	NETTEST NORTH AMERICA INC	KS-60640	COOL	N424	96020123	TD362	452758320	RICHARD C HEFELFINGER	1996	$ 10,030.00
1394392	SYNCHRONIZER, DIGITAL BIT	15895	LORAL DATA SYSTEMS/CONIC DIV	KS-60680	1040	N424	26202	DBS430	452758320	RICHARD C HEFELFINGER	1996	$ 8,635.00
1394393	SYNCHRONIZER, DIGITAL BIT	15895	LORAL DATA SYSTEMS/CONIC DIV	KS-60680	1040	N424	26201	DBS430	452758320	RICHARD C HEFELFINGER	1996	$ 8,635.00
1505746	TEST SET, FIREBERD 6000	61141	ACTERNA	KS-60680	1020	N424	18775	MC6000	452758320	RICHARD C HEFELFINGER	1996	$ 12,744.00
1505747	ANALYZER, COMMUNICATIONS	61141	ACTERNA	KS-60680	1112	N424	18783	MC6000	452758320	RICHARD C HEFELFINGER	1996	$ 12,744.00
1507174	RECEIVER, TELEMETRY BAND	MICYE	MICRODYNE CORP	KS-60640	D3SF3	N424	720	1400MRA	452758320	RICHARD C HEFELFINGER	1996	$ 29,044.00
1507396	MULTIPLEXER, DIGITAL FREQUENCY	52559	METRAPLEX CORP	KS-60680	1050	N424	233	DFD-20-01-001	452758320	RICHARD C HEFELFINGER	1996	$ 76,000.00
1507487	SYNCHRONIZER, DIGITAL BIT	9U244	LOCKHEED MARTIN CONIC	KS-60680	1040	N424	26238	DBS430	452758320	RICHARD C HEFELFINGER	1996	$ 10,555.00
1507488	SYNCHRONIZER, DIGITAL BIT	9U244	LOCKHEED MARTIN CONIC	KS-60680	1040	N424	26239	DBS430	452758320	RICHARD C HEFELFINGER	1996	$ 10,555.00
1508300	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-60680	1040	N424	USNC004627	4000TN	452758320	RICHARD C HEFELFINGER	1997	$ 1,607.00
1517394	CONVERTER, VIDEO SCAN	0MTV5	COMMUNICATIONS SPECIALTIES INC	KS-60680	1201E	N424	CRA96081014	1274	452758320	RICHARD C HEFELFINGER	1996	$ 5,445.00
1517667	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-60680	1201Q	N424	USKB088506	C3916A	452758320	RICHARD C HEFELFINGER	1996	$ 1,324.00

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1517727	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-60680	2002	N424	USKB058883	C3917A	452758320	RICHARD C HEFELFINGER	1996	$ 1,798.00
1613694	MAINFRAME, 16 CHANNEL	0YMH1	BROADBAND COMMUNICATIONS PROD	KS-60680	1025	N424	97062876	DV6016ES	452758320	RICHARD C HEFELFINGER	1997	$ 1,502.00
1653868	DEMODULATOR	30245	MICRODYNE CORP	KS-60640	D3SF3	N424	506	1458-D	452758320	RICHARD C HEFELFINGER	2000	$ 8,828.00
1653924	MODULE, DUAL	OKOLO	GN NETTEST (NEW YORK), INC.	KS-60640	B2SF3	N424	2001-0648	TD-385	452758320	RICHARD C HEFELFINGER	2001	$ 9,202.00
1653930	CAMERA, DIGITAL	S0482	SONY CORP	KS-60680	1225	N424	1365941	MDSCF707	452758320	RICHARD C HEFELFINGER	2002	$ 970.00
1661855	DISPLAY UNIT, COLOR	67775	MARSHALL ELECTRONICS INC	KS-60680	1020	N424	0355907187	V-R44P	452758320	RICHARD C HEFELFINGER	2002	$ 1,254.00
1661857	DISPLAY UNIT, COLOR	67775	MARSHALL ELECTRONICS INC	KS-60680	1020	N424	0451907187	V-R44P	452758320	RICHARD C HEFELFINGER	2002	$ 1,254.00
1662119	CAMERA, DIGITAL, VIDEO	S4013	HITACHI MFG CO	KS-60640	LKR16	N424	0351327	HV-D15	452758320	RICHARD C HEFELFINGER	2003	$ 2,663.00
1662120	CAMERA, DIGITAL, VIDEO	S4013	HITACHI MFG CO	KS-60640	LKR16	N424	0351318	HV-D15	452758320	RICHARD C HEFELFINGER	2003	$ 2,663.00
1662124	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-60640	LKR16	N424	02Z0222	HV-D5W	452758320	RICHARD C HEFELFINGER	2003	$ 10,200.00
1662126	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-60640	LKR16	N424	0370266	HV-D5W	452758320	RICHARD C HEFELFINGER	2003	$ 1,335.00
1662128	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-60640	LKR16	N424	0351303	HV-D15	452758320	RICHARD C HEFELFINGER	2003	$ 843.00
1662129	CAMERA, DIGITAL	S4013	HITACHI MFG CO	KS-60680	1040	N424	0351305	HV-D15	452758320	RICHARD C HEFELFINGER	2003	$ 843.00
1662166	TRANSMITTER, VIDEO INPUTS	0YWW4	TELECAST FIBER SYSTEMS INC	KS-60680	1025	N424	25402	DBTX-SL-1-0DB	452758320	RICHARD C HEFELFINGER	2003	$ 6,818.00
1813920	CONVERTER, DIGITAL TO ANALOG	ALLSI	ALLIED SIGNAL, INC.	KS-KWAJALE	#	N424	01	BPSK15300310	452758320	RICHARD C HEFELFINGER	1997	$ 41,354.00
1866740	RECORDER	METRU	METRUM INFORMATION STORAGE	KS-60680	1040	N424	1001746AH97	64	452758320	RICHARD C HEFELFINGER	1997	$ 68,000.00
1869150	DISPLAY UNIT,COLOR	05645	RECORTEC INC	KS-60680	1040	N424	716RA000J00029	S767	452758320	RICHARD C HEFELFINGER	1997	$ 796.00
1869717	RECORDER-REPRODUCER	0N620	METRUM INSTRUMENTATION SERVICE	KS-60680	1040	N424	1001907BM98	MET64SCNA	452758320	RICHARD C HEFELFINGER	1998	$ 62,400.00
1871277	RECORDER, VIDEO CASSETTE	S3691	MATSUSHITA ELECTRIC	KS-60640	A3SF2	N424	17TC00246	AG1980P	452758320	RICHARD C HEFELFINGER	1997	$ 1,389.00

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1871279	RECORDER, VIDEO CASSETTE	S3691	MATSUSHITA ELECTRIC	KS-60640	A3SF2	N424	H7TC00270	AG1980P	452758320	RICHARD C HEFELFINGER	1997	$ 1,389.00
1871280	RECORDER, VIDEO CASSETTE	S3691	MATSUSHITA ELECTRIC	KS-60640	A3SF2	N424	17TC00457	AG1980P	452758320	RICHARD C HEFELFINGER	1997	$ 1,389.00
1871282	RECORDER, VIDEO CASSETTE	S3691	MATSUSHITA ELECTRIC	KS-60680	2002	N424	17TC00279	AG1980P	452758320	RICHARD C HEFELFINGER	1997	$ 1,389.00
1871487	SYNCHRONIZER, DIGITAL BIT	64854	L3 COMMUNICATIONS CORP TELMTRY	KS-60680	1040	N424	26264	DBS430C	452758320	RICHARD C HEFELFINGER	1997	$ 10,358.00
1872600	SYNCHRONIZER, DIGITAL BIT	094Q2	L-3 COMMUNICATIONS TELEMETRY &	KS-60680	1050	N424	Z6271	DBS430	452758320	RICHARD C HEFELFINGER	1998	$ 8,635.00
1977500	COMPUTER, DIGITAL	58839	APPLE COMPUTER INC	KS-60680	2002	N424	XB825354CY4	M3979	452758320	RICHARD C HEFELFINGER	1998	$ 1,905.00
1977554	ROUTER, MULTIPROTOCOL	0GX96	CISCO SYSTEMS INC	KS-60640	C2SF2	N424	45592290	4500M	452758320	RICHARD C HEFELFINGER	1998	$ 11,949.00
1977558	ROUTER, MULTIPROTOCOL	0GX96	CISCO SYSTEMS INC	KS-60640	COOL	N424	45592399	4500M	452758320	RICHARD C HEFELFINGER	1998	$ 10,188.00
1977560	ROUTER, MULTIPROTOCOL	0GX96	CISCO SYSTEMS INC	KS-60680	1025	N424	45593401	4500M	452758320	RICHARD C HEFELFINGER	1998	$ 10,188.00
1977929	RECEIVER, TELEMETRY BAND	MICYE	MICRODYNE CORP	KS-60640	D3SF3	N424	866	1400RMA	452758320	RICHARD C HEFELFINGER	1998	$ 29,665.00
1978030	SYNCHRONIZER, DIGITAL BIT	64854	L3 COMMUNICATIONS CORP TELMTRY	KS-60680	1040	N424	90013	MBS720	452758320	RICHARD C HEFELFINGER	1998	$ 8,621.00
1978651	OSCILLOSCOPE	8S696	TEKTRONIX	KS-66330	1022	N424	B010125	TDS654C	452758320	RICHARD C HEFELFINGER	1998	$ 16,255.00
1978792	ANALYZER, SPECTRUM	51190	AEROFLEX WICHITA, INC.	KS-60640	COOL	N424	81200081	2398	452758320	RICHARD C HEFELFINGER	1999	$ 6,495.00
1978857	RECORDER	METRU	METRUM INFORMATION STORAGE	KS-60680	1040	N424	1001934BC99	MET64SCNA	452758320	RICHARD C HEFELFINGER	1999	$ 153,625.00
1979008	CPU,RACK MOUNTED	1P9N8	RACKMASTER SYS. INC.	KS-60680	1040	N424	NONE	RMS6156B	452758320	RICHARD C HEFELFINGER	1999	$ 2,495.00
1979112	DSU/CSU	39748	ADC FIBERMUX CORP	KS-60680	2000	N424	0210634237	72761	452758320	RICHARD C HEFELFINGER	1999	$ 1,709.00
1979113	DSU/CSU	39748	ADC FIBERMUX CORP	KS-60640	D2SF2	N424	0210515717	72761	452758320	RICHARD C HEFELFINGER	1999	$ 1,709.00
1979217	CPU,LAPTOP	DELLC	DELL COMPUTER CORP	KS-60680	1020	N424	WMVH2	PPL	452758320	RICHARD C HEFELFINGER	1999	$ 3,295.00

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1979218	ANALYZER, PROTOCOL	1CZG6	RADCOM EQUIPMENT CO.	KS-60680	1030	N424	8198	PRISMLITE	452758320	RICHARD C HEFELFINGER	1999	$ 73,332.00
1979599	MULTIPLEXER, DIGITAL FREQENCY	52559	METRAPLEX CORP	KS-60680	1040	N424	287	DFM1601001	452758320	RICHARD C HEFELFINGER	1998	$ 33,725.00
1982133	CHASSIS	0GX96	CISCO SYSTEMS INC	KS-60680	1112	N424	68015878	LS1010	452758320	RICHARD C HEFELFINGER	1999	$ 35,920.00
2018313	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1140	N424	THSS000218TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018314	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1140	N424	THSS000219TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018315	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1130	N424	THSS000214TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018316	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1140	N424	TGSS000125TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018317	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1120	N424	THSS000274TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018318	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1130	N424	THSS000275TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018319	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1120	N424	THSS000276TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018322	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	1130	N424	THSS000228TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018324	PLASMA DISPLAY, 40	22908	PIONEER CO	KS-60680	2020	N424	THSS000230TQ	PDPV402	452758320	RICHARD C HEFELFINGER	1999	$ 5,780.00
2018360	RECORDER, VIDEO CASSETTE	S0482	SONY CORP	KS-60680	1120	N424	S010845070A	R1000	452758320	RICHARD C HEFELFINGER	1999	$ 890.00
2018361	RECORDER, VIDEO CASSETTE	S0482	SONY CORP	KS-60680	1140	N424	S010845075F	R1000	452758320	RICHARD C HEFELFINGER	1999	$ 890.00
2018362	RECORDER, VIDEO CASSETTE	S0482	SONY CORP	KS-60680	1130	N424	S010845176H	R1000	452758320	RICHARD C HEFELFINGER	1999	$ 890.00
2018371	PROJECTOR	SANYY	SANYO	KS-60680	1120	N424	G9801499D	PLC9000NL	452758320	RICHARD C HEFELFINGER	1999	$ 8,180.00
2018372	PROJECTOR	SANYY	SANYO	KS-60680	1130	N424	G98014904	PLC9000NL	452758320	RICHARD C HEFELFINGER	1999	$ 8,180.00
2018373	PROJECTOR	SANYY	SANYO	KS-60680	1120A	N424	G98015095	PLC9000NL	452758320	RICHARD C HEFELFINGER	1999	$ 8,180.00
2018374	PROJECTOR	SANYY	SANYO	KS-60680	1130	N424	G98014858	PLC9000NL	452758320	RICHARD C HEFELFINGER	1999	$ 8,180.00
2018375	PROJECTOR	SANYY	SANYO	KS-60680	1140	N424	G9801502+	PLC9000NL	452758320	RICHARD C HEFELFINGER	1999	$ 8,180.00
2018376	PROJECTOR	SANYY	SANYO	KS-60680	1140	N424	G9801503%	PLC9000NL	452758320	RICHARD C HEFELFINGER	1999	$ 8,180.00
2018405	SIGNAL CONDITIONER	APGEE	APOGEE CORP	KS-66330	LSST2	N424	182	2073	452758320	RICHARD C HEFELFINGER	1999	$ 7,200.00

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2018406	SIGNAL CONDITIONER	APGEE	APOGEE CORP	KS-60680	1020	N424	183	2073	452758320	RICHARD C HEFELFINGER	1999	$ 7,200.00
2018407	ANALYZER,LAN	89536	FLUKE CORP	KS-60680	2000	N424	7419030	683	452758320	RICHARD C HEFELFINGER	1999	$ 9,975.00
2018408	CELL PHONE BANK	0C7Y5	RELIABLE COMMUNICATIONS INC	KS-66330	LSST2	N424	NA	CPB4	452758320	RICHARD C HEFELFINGER	1999	$ 13,884.00
2018453	CAMERA	HITAH	HITACHI LTD	KS-60680	1120	N424	9050319	HVD15	452758320	RICHARD C HEFELFINGER	1999	$ 4,200.00
2018454	CAMERA	HITAH	HITACHI LTD	KS-60680	1130	N424	9050320	HVD15	452758320	RICHARD C HEFELFINGER	1999	$ 4,200.00
2018455	CAMERA	HITAH	HITACHI LTD	KS-60680	1130	N424	9050321	HVD15	452758320	RICHARD C HEFELFINGER	1999	$ 4,200.00
2018456	CAMERA	HITAH	HITACHI LTD	KS-60680	1140	N424	9050323	HVD15	452758320	RICHARD C HEFELFINGER	1999	$ 4,200.00
2018458	CAMERA	HITAH	HITACHI LTD	KS-60680	1120	N424	9050322	HVD15	452758320	RICHARD C HEFELFINGER	1999	$ 4,200.00
2018460	CAMERA	HITAH	HITACHI LTD	KS-60680	1104	N424	9050318	HVD15	452758320	RICHARD C HEFELFINGER	1999	$ 4,200.00
2018476	CAMERA	0GUB8	PELCO	KS-66330	LSST2	N424	NA	CC4700	452758320	RICHARD C HEFELFINGER	1999	$ 501.00
2018477	CAMERA	0GUB8	PELCO	KS-66330	LSST2	N424	NA	CC4700	452758320	RICHARD C HEFELFINGER	1999	$ 501.00
2018478	CAMERA SERVER	0GUB8	PELCO	KS-66330	LSST2	N424	0932	MX4000SVR	452758320	RICHARD C HEFELFINGER	1999	$ 1,095.00
2018481	CAMERA SERVER	0GUB8	PELCO	KS-66330	LSST2	N424	0948	MX4000SVR	452758320	RICHARD C HEFELFINGER	1999	$ 1,095.00
2018491	RECORDER, VIDEO CASSETTE	S0482	SONY CORP	KS-60680	1020	N424	S010836801C	EV-C200	452758320	RICHARD C HEFELFINGER	1999	$ 855.00
2018598	DISPLAY UNIT, COLOR	0S3C6	BOLAND COMMUNICATION	KS-66330	LSST2	N424	2722	1730	452758320	RICHARD C HEFELFINGER	1999	$ 4,165.00
2018609	UPS	55455	LIEBERT CORP	KS-60680	2030	N424	N12838F	AP341	452758320	RICHARD C HEFELFINGER	1999	$ 31,050.00
2018611	MULTIPLEXER	081W5	APOGEE LABS	KS-60680	1020	N424	160	3400A	452758320	RICHARD C HEFELFINGER	1999	$ 43,700.00
2018612	MULTIPLEXER	081W5	APOGEE LABS	KS-60640	A6SF3	N424	162	3400A	452758320	RICHARD C HEFELFINGER	1999	$ 43,700.00
2018613	MULTIPLEXER	081W5	APOGEE LABS	KS-66330	LSST2	N424	161	3400A	452758320	RICHARD C HEFELFINGER	1999	$ 43,700.00
2018637	MODEM, FIBER OPTIC INTERFACE	CANOG	CANOGA-PERKINS F-CANOGA DATA	KS-66330	LSST2	N424	19991146247	2245	452758320	RICHARD C HEFELFINGER	1999	$ 3,923.00
2018638	MODEM, FIBER OPTIC INTERFACE	CANOG	CANOGA-PERKINS F-CANOGA DATA	KS-60680	1020	N424	19991146250	2245	452758320	RICHARD C HEFELFINGER	1999	$ 3,923.00

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2018639	MODEM, FIBER OPTIC INTERFACE	CANOG	CANOGA-PERKINS F-CANOGA DATA	KS-60640	LKR20	N424	19991146248	2245	452758320	RICHARD C HEFELFINGER	1999	$ 3,923.00
2018712	RECEIVER, TELEMETRY BAND	30245	MICRODYNE CORP	KS-60680	1040	N424	975	1400MRA	452758320	RICHARD C HEFELFINGER	2000	$ 33,282.00
2018717	CPU, LAPTOP	DELLC	DELL COMPUTER CORP	KS-60680	1201C	N424	VQLKM	P2	452758320	RICHARD C HEFELFINGER	2000	$ 3,065.00
2018721	PRINTER, LASER	HEWLE	HEWLETT PACKARD	KS-60680	1105	N424	USFM000667	2100M	452758320	RICHARD C HEFELFINGER	2000	$ 790.00
2018722	PRINTER, LASER	HEWLE	HEWLETT PACKARD	KS-60680	2002	N424	USFM000622	2100M	452758320	RICHARD C HEFELFINGER	2000	$ 790.00
2018727	CPU	DELLC	DELL COMPUTER CORP	KS-60680	2002	N424	GPYI2	5A	452758320	RICHARD C HEFELFINGER	2000	$ 1,975.00
2018730	TRAILER, 44'	1M050	CLASSIC MFG INC.	KS-66330	APOLL	N424	10W-PAER3-8-YW029131	RTG448TPE8	452758320	RICHARD C HEFELFINGER	1999	$ 46,451.00
2018740	MILLING MACHINE	08607	BRIDGEPORT MACHINES	KS-66330	APIT	N424	EZ1CH4925	TZ1	452758320	RICHARD C HEFELFINGER	2000	$ 27,025.00
2018805	CPU, RACK MOUNTED	COMDR	COMPUTER DIRECT	KS-66330	LSST2	N424	001	P3-500	452758320	RICHARD C HEFELFINGER	2000	$ 2,678.00
2018806	CPU, RACK MOUNTED	COMDR	COMPUTER DIRECT	KS-66330	LSST2	N424	002	P3-500	452758320	RICHARD C HEFELFINGER	2000	$ 2,678.00
2018915	CPU, RACKMOUNT	66955	CUSTOM COMPUTER PRODUCTS CORP	KS-60640	A1SF3	N424	120318	550E	452758320	RICHARD C HEFELFINGER	2000	$ 1,067.00
2018917	CPU, RACKMOUNT	66955	CUSTOM COMPUTER PRODUCTS CORP	KS-60680	1020	N424	120312	550E	452758320	RICHARD C HEFELFINGER	2000	$ 1,067.00
2018985	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60640	A3SF2	N424	DOTC00244	AG1980P	452758320	RICHARD C HEFELFINGER	2000	$ 1,222.00
2018986	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60680	1020	N424	DOTC00589	AG1980P	452758320	RICHARD C HEFELFINGER	2000	$ 1,222.00
2018987	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60640	A3SF2	N424	DOTC00247	AG1980P	452758320	RICHARD C HEFELFINGER	2000	$ 1,222.00
2018988	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60680	1020	N424	DOTC00587	AG1980P	452758320	RICHARD C HEFELFINGER	2000	$ 1,222.00
2019017	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-60680	1056	N424	USAH000825	C4087A	452758320	RICHARD C HEFELFINGER	2000	$ 2,922.00
2019089	SPECTRUM ANALYZER	51190	AEROFLEX WICHITA, INC.	KS-60680	1201Q	N424	60213	IFR2398	452758320	RICHARD C HEFELFINGER	2000	$ 6,556.00
2019095	CAMERA ASSEMBLY	61485	HITACHI DENSHI AMERICA LTD	KS-60680	1201N	N424	0030514	Z3000W	452758320	RICHARD C HEFELFINGER	2000	$ 14,571.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2019114	BIT SYNCHRONIZER	METUM	METRUM	KS-60680	1040	N424	3000080CH00	16823701-002	452758320	RICHARD C HEFELFINGER	2000	$ 50,700.00
2019116	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-60680	1040	N424	USCC155587	C4252A	452758320	RICHARD C HEFELFINGER	2000	$ 1,247.00
2019255	MULTIPLEXER	081W5	APOGEE LABS	KS-60680	1040	N424	102	MITC-4010	452758320	RICHARD C HEFELFINGER	2000	$ 16,300.00
2019309	SIGNAL GENERATOR	INYH3	AGILENT TECHNOLOGIES INC	KS-60680	1040	N424	3847A05167	HP8648C	452758320	RICHARD C HEFELFINGER	2000	$ 8,667.00
2020474	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1140	N424	6927CKG60553	DESKPRO 6450	452758320	RICHARD C HEFELFINGER	1999	$ 1,218.00
2020492	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1201K	N424	6927CKG60297	DESKPRO 6450	452758320	RICHARD C HEFELFINGER	1999	$ 1,218.00
2020513	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1120	N424	6927CKG60415	DESKPRO 6450	452758320	RICHARD C HEFELFINGER	1999	$ 1,218.00
2020533	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1108	N424	6927CKG60562	DESKPRO 6450	452758320	RICHARD C HEFELFINGER	1999	$ 1,218.00
2020645	COMPUTER SYSTEM, DIGITAL	0G3K8	GATEWAY COMPANIES INC	KS-60680	1201F	N424	0014961837	SOLO9150	452758320	RICHARD C HEFELFINGER	1999	$ 2,785.00
2020654	COMPUTER SYSTEM, DIGITAL	0G3K8	GATEWAY COMPANIES INC	KS-60680	2002	N424	0014961847	SOLO9150	452758320	RICHARD C HEFELFINGER	1999	$ 2,785.00
2021053	DISPLAY UNIT, PLASMA	51037	ZENITH ELECTRONICS CORP	KS-66330	COOL	N424	311157260018	P40V24	452758320	RICHARD C HEFELFINGER	2003	$ 4,125.00
2021347	MULTIPLEXER	0F627	DIGITAL LINK CORP	KS-60680	1020	N424	1249092258464	DL3800	452758320	RICHARD C HEFELFINGER	1999	$ 5,050.00
2021348	MULTIPLEXER	0F627	DIGITAL LINK CORP	KS-60640	D1SF3	N424	1249092258204	DL3800	452758320	RICHARD C HEFELFINGER	1999	$ 5,050.00
2021349	MULTIPLEXER	0F627	DIGITAL LINK CORP	KS-60640	D1SF3	N424	1249092258469	DL3800	452758320	RICHARD C HEFELFINGER	1999	$ 5,050.00
2021805	COMPUTER, DIGITAL	0XU54	TECHNOLAND INC	KS-60680	1040	N424	NONE	NONE	452758320	RICHARD C HEFELFINGER	1999	$ 2,020.00
2021806	COMPUTER, DIGITAL	0XU54	TECHNOLAND INC	KS-60640	COOL	N424	NONE	NONE	452758320	RICHARD C HEFELFINGER	1999	$ 2,020.00
2021807	COMPUTER, DIGITAL	0XU54	TECHNOLAND INC	KS-60680	2008	N424	NONE	NONE	452758320	RICHARD C HEFELFINGER	1999	$ 2,020.00
2021899	CHASSIS, RECEIVER	4S260	MICRODYNE COPR	KS-60640	D3SF3	N424	972	1400-MRA	452758320	RICHARD C HEFELFINGER	1999	$ 32,633.00

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2021902	DISPLAY UNIT, COLOR	08PD1	WEN TECHNOLOGY CORP	KS-60680	1108	N424	900016019	WRM-19T	452758320	RICHARD C HEFELFINGER	2000	$ 1,196.00
2024644	CHASSIS	1E3B2	METRUM-DATATAPE INC	KS-60680	1040	N424	3000082CM00	16823701002	452758320	RICHARD C HEFELFINGER	2000	$ 50,487.00
2024861	DUMULTIPLEXER, DIGITAL	1PK60	HERLEY INDUSTRIES INC	KS-60680	1040	N424	340	DFD1601001	452758320	RICHARD C HEFELFINGER	1999	$ 78,362.00
2025202	RECEIVER	1PXJ6	L3 COMMUNICATIONS CORP	KS-60640	B2SF3	N424	112	DR-2000	452758320	RICHARD C HEFELFINGER	2001	$ 41,000.00
2025205	PRINTER, LASERJET	HEWPA	HEWLETT PACKARD	KS-60680	1020	N424	USBNF24943	C8051A	452758320	RICHARD C HEFELFINGER	2001	$ 1,799.00
2025217	PROGRAMMER	54193	DATA I/O CORP	KS-60680	1201N	N424	S11023182	S-110	452758320	RICHARD C HEFELFINGER	2001	$ 5,575.00
2025223	MULTIPLEXER, DIGITAL	52559	METRAPLEX CORP	KS-60680	1040	N424	341	DFM-24-01-001	452758320	RICHARD C HEFELFINGER	2001	$ 44,345.00
2025231	SIMULATOR	58095	TELEMETRY COMMUNICATIONS CORP	KS-60680	1040	N424	005	2760V	452758320	RICHARD C HEFELFINGER	2001	$ 14,950.00
2025232	DISPLAY UNIT	58095	TELEMETRY COMMUNICATIONS CORP	KS-60680	1040	N424	121220038	172B	452758320	RICHARD C HEFELFINGER	2001	$ 3,375.00
2025251	PROCESSOR	ACROA	ACROMATICS INC	KS-60680	1040	N424	N/A	2220V-105241	452758320	RICHARD C HEFELFINGER	2001	$ 44,208.00
2025282	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60680	1020	N424	H1TC00350	AG1980P	452758320	RICHARD C HEFELFINGER	2001	$ 1,250.00
2025283	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60640	A3SF2	N424	H1TC00179	AG1980P	452758320	RICHARD C HEFELFINGER	2001	$ 1,250.00
2025284	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60640	A3SF2	N424	H1TC00270	AG1980P	452758320	RICHARD C HEFELFINGER	2001	$ 1,250.00
2025285	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60680	2002	N424	H1TC00271	AG1980P	452758320	RICHARD C HEFELFINGER	2001	$ 1,250.00
2025286	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60680	2002	N424	H1TC00073	AG1980P	452758320	RICHARD C HEFELFINGER	2001	$ 1,250.00
2025287	RECORDER, VIDEO CASSETTE	S5175	PANASONIC	KS-60640	A3SF2	N424	H1TC00355	AG1980P	452758320	RICHARD C HEFELFINGER	2001	$ 1,250.00
2025288	DEMODULATOR	40580	BSI	KS-60680	1040	N424	1023317	SYRINX-PCI	452758320	RICHARD C HEFELFINGER	2001	$ 24,485.00
2025317	TELEVISION, PLASMA	22908	PIONEER CO	KS-60680	1221	N424	AGSS100680TQ	PDP-V402	452758320	RICHARD C HEFELFINGER	2001	$ 7,250.00
2025349	DISCRIMINATOR	1PK60	HERLEY INDUSTRIES INC	KS-60680	1040	N424	335	DTD	452758320	RICHARD C HEFELFINGER	2001	$ 26,500.00

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2025391	ANALYZER, NETWORK	1NY70	AGILENT TECHNOLOGIES INC	KS-60680	1040	N424	US41442627	8714ET	452758320	RICHARD C HEFELFINGER	2002	$ 16,472.00
2025405	MULTIPLEXER/DEMULTIPLEXER 16	09042	ARMOR ELECTRONICS INC	KS-60680	1040	N424	0101066AH97	CTS2191TL3	452758320	RICHARD C HEFELFINGER	1997	$ 72,926.00
2025406	MULTIPLEXER/DEMULTIPLEXER 16	09042	ARMOR ELECTRONICS INC	KS-60680	1040	N424	010111BC99	CTS2191TL3	452758320	RICHARD C HEFELFINGER	1999	$ 72,926.00
2025407	MULTIPLEXER/DEMULTIPLEXER 16	09042	ARMOR ELECTRONICS INC	KS-60680	1040	N424	010134AM96	CTS2191TL3	452758320	RICHARD C HEFELFINGER	1996	$ 72,926.00
2025408	MULTIPLEXER/DEMULTIPLEXER 16	09042	ARMOR ELECTRONICS INC	KS-60680	1040	N424	010135AM96	CTS2191TL3	452758320	RICHARD C HEFELFINGER	1996	$ 72,926.00
2025414	CAMERA SYSTEM	62786	HITACHI AMERICA LTD	KS-60680	TWR	N424	0220144	HV-D5W	452758320	RICHARD C HEFELFINGER	2002	$ 41,043.00
2025435	CHASIS, TOUCH SCREEN	1E3B2	METRUM-DATATAPE INC	KS-60680	1040	N424	3000108DF02	16823701-002	452758320	RICHARD C HEFELFINGER	2002	$ 50,225.00
2026079	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-60680	1230	N424	USBGB20472	C7063A	452758320	RICHARD C HEFELFINGER	2001	$ 1,560.00
2026115	COMPUTER, DIGITAL	04TP1	ALLMEDIA ELECTRONICS INC	KS-60680	1040	N424	8949	AP-540TY	452758320	RICHARD C HEFELFINGER	2001	$ 2,295.00
2026148	SWITCH, ATM PROCESSOR	0GX96	CISCO SYSTEMS INC	KS-60680	1020	N424	68020463	L10-ASP-C-FCPFQ	452758320	RICHARD C HEFELFINGER	2001	$ 12,060.00
2027175	RECORDER, PLAYER	S0482	SONY CORP	KS-60680	1020	N424	13827	UVW-1400A	452758320	RICHARD C HEFELFINGER	2001	$ 6,960.00
2027279	DEMULTIPLEXING SYS, 12 CHANNEL	1PMK5	TRACEWELL SYSTEMS, INC	KS-60680	1050	N424	120W7.03-01	DEMUX 12	452758320	RICHARD C HEFELFINGER	2003	$ 59,250.00
2027280	DEMULTIPLEXING SYS, 12 CHANNEL	1PMK5	TRACEWELL SYSTEMS, INC	KS-NOC	#	N424	120W7-03-02	DEMUX 12	452758320	RICHARD C HEFELFINGER	2003	$ 59,250.00
2027281	DEMULTIPLEXING SYS, 12 CHANNEL	1PMK5	TRACEWELL SYSTEMS, INC	KS-60680	1050	N424	120W7-03-03	DEMUX 12	452758320	RICHARD C HEFELFINGER	2003	$ 59,250.00
2027289	SWITCHER, ROUTING	0MJ96	PESA SWITCHING SYSTEMS INC	KS-60680	1025	N424	652018L03250000	TIGER	452758320	RICHARD C HEFELFINGER	2002	$ 132,432.00
2027529	COMPUTER, DIGITAL	58839	APPLE COMPUTER INC	KS-60680	1020	N424	XB1480AVKSK	M8493	452758320	RICHARD C HEFELFINGER	2001	$ 2,550.00
2027530	DISPLAY UNIT, COLOR	58839	APPLE COMPUTER INC	KS-60680	1030	N424	CY1440EMJU8	M8058ZM	452758320	RICHARD C HEFELFINGER	2001	$ 1,849.00
2028606	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-60680	1150	N424	210KT00018	MV-40PA15B	452758320	RICHARD C HEFELFINGER	2002	$ 3,995.00

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2028607	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-60680	MAIN	N424	210KT00021	MV-40PA15B	452758320	RICHARD C HEFELFINGER	2002	$ 3,995.00
2028609	DISPLAY UNIT, COLOR, 40	0WBG2	LG ELECTRONICS USA INC	KS-60680	1150	N424	210KT00038	MV-40PA15B	452758320	RICHARD C HEFELFINGER	2002	$ 3,995.00
2029976	DISPLAY UNIT, COLOR	1R9X7	NEC-MITSUBISHI ELECTRONICS	KS-60680	1230	N424	1X00367CU	LCD1850X-BX	452758320	RICHARD C HEFELFINGER	2001	$ 2,159.00
2030634	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1108	N424	6X29KN8ZG03B	470033-806	452758320	RICHARD C HEFELFINGER	2002	$ 845.00
2030642	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1040	N424	6X29KN8ZG06L	470033-806	452758320	RICHARD C HEFELFINGER	2002	$ 845.00
2030646	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1050	N424	6X29KN8ZG02S	470033-806	452758320	RICHARD C HEFELFINGER	2002	$ 845.00
2030647	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1056	N424	6X29KN8ZG037	470033-806	452758320	RICHARD C HEFELFINGER	2002	$ 845.00
2030662	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1056A	N424	V238KN9ZA876	470034-607	452758320	RICHARD C HEFELFINGER	2002	$ 827.00
2030663	COMPUTER, DIGITAL	65685	COMPAQ COMPUTER CORP	KS-60680	1201M	N424	V238KN9ZA872	470034-607	452758320	RICHARD C HEFELFINGER	2002	$ 827.00
2160364	DEMULTIPLEXING SYS, 10 CHANNEL	1PMK5	TRACEWELL SYSTEMS, INC	KS-NOC	#	N424	210W7-03-0	DEMUX 10	452758320	RICHARD C HEFELFINGER	2003	$ 45,750.00
2160372	ROUTER	0GX96	CISCO SYSTEMS INC	KS-60640	ASTRO	N424	JMX0637LPWU	3640	452758320	RICHARD C HEFELFINGER	2002	$ 12,711.00
2160373	ROUTER	0GX96	CISCO SYSTEMS INC	KS-60640	C2SF2	N424	JMX0637LPWT	3640	452758320	RICHARD C HEFELFINGER	2002	$ 12,711.00
2160466	RACK, ANALOG VIDEO	0MJ96	PESA SWITCHING SYSTEMS INC	KS-60680	1020	N424	2002U02370222	819065-20020	452758320	RICHARD C HEFELFINGER	2002	$ 132,432.00
2160475	DISPLAY UNIT, COLOR	S5769	NEC CORP	KS-60650	1181	N424	2900674CA	LCD2010X-BK	452758320	RICHARD C HEFELFINGER	2002	$ 2,565.00
2160476	DISPLAY UNIT, COLOR	S5769	NEC CORP	KS-60680	1108	N424	2900431CA	LCD2010X-BK	452758320	RICHARD C HEFELFINGER	2002	$ 2,565.00
2160726	ANALYZER, COMMUNICATIONS	61141	ACTERNA	KS-60680	1040	N424	AJCMK1900001	MC6000	452758320	RICHARD C HEFELFINGER	2003	$ 11,754.00
2160922	SWITCH, VIDEO, MAINFRAME	0MJ96	PESA SWITCHING SYSTEMS INC	KS-60680	1221	N424	2002W03320251	144X44	452758320	RICHARD C HEFELFINGER	2003	$ 68,570.00

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2160935	RECORDER, DVD	S0494	PIONEER ELECTRONIC CORPORATION	KS-60680	1020	N424	CGTT000338CC	PRV-LX1	452758320	RICHARD C HEFELFINGER	2003	$ 4,000.00
2160936	RECORDER, DVD	S0494	PIONEER ELECTRONIC CORPORATION	KS-60640	B9SF2	N424	CGTT000361CC	PRV-LX1	452758320	RICHARD C HEFELFINGER	2003	$ 4,000.00
2212740	ANALYZER, TEST SYSTEM	02598	AEROFLEX LABORATORIES INC	KS-60680	1050	N424	710001041	FB100A	452758320	RICHARD C HEFELFINGER	2006	$ 19,995.00
2212825	COMPUTER, DIGITAL	6X005	AVTEC SYSTEMS INC	KS-60680	1040	N424	20635	PTP-2003	452758320	RICHARD C HEFELFINGER	2006	$ 14,808.00
2212976	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	JTGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212982	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	BSGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212983	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	4TGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212984	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	JSGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212985	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	5VGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212988	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	49HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212989	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	94HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212990	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	C9HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00

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2212993	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	75HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212994	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	38HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212995	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	27HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212997	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	4BHCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212998	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	F8HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2212999	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	J9HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213000	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	46HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213001	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	77HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213003	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	HJGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213011	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	2PGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213012	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	CHGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2213013	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	3JGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213014	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	HLGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213015	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	5MGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213016	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	2HGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213018	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	GWGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213020	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	8ZGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213022	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	8XGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213023	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	JZGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213027	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	GXGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213028	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	2YGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213029	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	5XGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2213030	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	60HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213031	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	G01HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213032	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	5WGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213033	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	51HCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213043	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	1BGCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213044	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	27GCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213045	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	C4GCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213046	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	28GCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213049	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	36GCHB1	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 952.00
2213056	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	38N4HB1	DCSM	452758320	RICHARD C HEFELFINGER	2006	$ 1,026.00
2213070	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	9GM4HB1	DCSM	452758320	RICHARD C HEFELFINGER	2006	$ 1,026.00

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2213083	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	99N4HB1	DCSM	452758320	RICHARD C HEFELFINGER	2006	$ 1,026.00
2213154	RECORDER-REPRODUCER, VIDEO	S5175	PANASONIC	KS-60680	1020	N424	DOTC00537	AG1980	452758320	RICHARD C HEFELFINGER	2000	$ 1,222.00
2213161	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	39QBQB1	PP20L	452758320	RICHARD C HEFELFINGER	2006	$ 2,325.00
2213162	SWITCH, MATRIX	31563	MU-DEL ELECTRONICS INC	KS-60680	1050	N424	501301	4MDMS-2224-8NB	452758320	RICHARD C HEFELFINGER	2006	$ 29,275.00
2213284	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1181	N424	4DXPWB1	DCD0	452758320	RICHARD C HEFELFINGER	2006	$ 1,920.00
2213285	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1181	N424	8DXPWB1	DCD0	452758320	RICHARD C HEFELFINGER	2006	$ 1,920.00
2213529	COMPUTER, DIGITAL	4AA27	ACME PORTABLE MACHINES INC	KS-60680	1050	N424	AAP06D0062	ACME II	452758320	RICHARD C HEFELFINGER	2006	$ 20,500.00
2213533	TELEVISION, HD 37	4HFF9	SYNTAX-BRILLIAN CORP	KS-60680	1201	N424	VDLD6A040348	OLEVIA 237 S11	452758320	RICHARD C HEFELFINGER	2006	$ 800.00
2213534	TELEVISION, HD 37	4HFF9	SYNTAX-BRILLIAN CORP	KS-60680	1201	N424	VDLD6A040351	OLEVIA 237 S11	452758320	RICHARD C HEFELFINGER	2006	$ 800.00
2213535	TELEVISION, HD 37	4HFF9	SYNTAX-BRILLIAN CORP	KS-60680	1201	N424	VDLD6A040323	OLEVIA 237 S11	452758320	RICHARD C HEFELFINGER	2006	$ 800.00
2213536	TELEVISION, HD 37	4HFF9	SYNTAX-BRILLIAN CORP	KS-60680	1040	N424	VDLD6A040353	OLEVIA 237 S11	452758320	RICHARD C HEFELFINGER	2006	$ 800.00
2213547	RECEIVER	24735	SEMCO INSTRUMENTS INC	KS-60680	1040	N424	7057-0001	RC400-2S	452758320	RICHARD C HEFELFINGER	2007	$ 44,000.00
2213553	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	355RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213554	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	G45RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00

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2213555	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	255RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213556	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	155RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213557	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	D55RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213558	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	J45RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213559	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	755RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213560	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1020	N424	B55RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213561	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	855RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213562	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N424	C55RKC1	DCDO	452758320	RICHARD C HEFELFINGER	2007	$ 2,436.00
2213650	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1156	N424	FGK6TC1	PP05XA	452758320	RICHARD C HEFELFINGER	2007	$ 2,620.00
2213797	COMPUTER, DIGITAL	4AA27	ACME PORTABLE MACHINES INC	KS-60680	1050	N424	AAP06F0109	ACME 2	452758320	RICHARD C HEFELFINGER	2006	$ 20,500.00
2213805	COMPUTER, LAPTOP	S5175	PANASONIC	KS-NOC	#	N424	TDKSA24842	CF-30	452758320	RICHARD C HEFELFINGER	2007	$ 3,675.00
2213806	COMPUTER, LAPTOP	S5175	PANASONIC	KS-60680	1201	N424	TDKSA24711	CF-30	452758320	RICHARD C HEFELFINGER	2007	$ 3,675.00
2213807	COMPUTER, LAPTOP	S5175	PANASONIC	KS-60680	1201	N424	TDKSA24840	CF-30	452758320	RICHARD C HEFELFINGER	2007	$ 3,675.00

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2214146	ANALYZER, COMMUNICATIONS	61141	ACTERNA	KS-60680	1020	N424	AJHJJ3670437	FB6000A	452758320	RICHARD C HEFELFINGER	2007	$ 8,766.00
2214147	ANALYZER, COMMUNICATIONS	61141	ACTERNA	KS-60680	1020	N424	AJHJJ3670441	FB6000A	452758320	RICHARD C HEFELFINGER	2007	$ 8,766.00
2214397	TELEVISION, RECEIVER	45870	SYNTAX INC	KS-60680	1201	N424	VDLK73190559	OLEVIA 237 511	452758320	RICHARD C HEFELFINGER	2007	$ 699.00
2214398	TELEVISION, RECEIVER	45870	SYNTAX INC	KS-60680	1201	N424	VDLK73190509	OLEVIA 237 511	452758320	RICHARD C HEFELFINGER	2007	$ 699.00
2214468	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1020	N424	J8PDBF1	DCTA	452758320	RICHARD C HEFELFINGER	2007	$ 2,162.00
2217568	CAMERA, DIGITAL	S0482	SONY CORP	KS-60680	1201E	N424	102839	SNC-RZ50N	452758320	RICHARD C HEFELFINGER	2007	$ 1,825.00
2229241	SWITCH	1XA67	NEW ENGLAND ENGINEERING	KS-60680	1050	N424	001	CSU-100	452758320	RICHARD C HEFELFINGER	2007	$ 8,300.00
2229243	SWITCH	1XA67	NEW ENGLAND ENGINEERING	KS-60680	1050	N424	002	CSU-100	452758320	RICHARD C HEFELFINGER	2007	$ 8,300.00
2229245	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	D8PPZD1	VOSTRO 1500	452758320	RICHARD C HEFELFINGER	2007	$ 1,000.00
2229246	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	58PPZD1	VOSTRO 1500	452758320	RICHARD C HEFELFINGER	2007	$ 1,000.00
2229247	SWITCH	4T7S6	INFO RESOURC MATRIX	KS-60680	1050	N424	514701	4MDMS100 042	452758320	RICHARD C HEFELFINGER	2007	$ 8,990.00
2229248	SWITCH	4T7S6	INFO RESOURC MATRIX	KS-60680	1050	N424	514702	4MDMS100 042	452758320	RICHARD C HEFELFINGER	2007	$ 8,990.00
2229249	SWITCH	4T7S6	INFO RESOURC MATRIX	KS-60680	1050	N424	514703	4MDMS100 042	452758320	RICHARD C HEFELFINGER	2007	$ 8,990.00
2229250	SWITCH	4T7S6	INFO RESOURC MATRIX	KS-60680	1050	N424	514704	4MDMS100 042	452758320	RICHARD C HEFELFINGER	2007	$ 8,990.00
2229251	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	B419BD1	INSPIRON 1721	452758320	RICHARD C HEFELFINGER	2007	$ 800.00
2229252	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	H319BD1	INSPIRON 1721	452758320	RICHARD C HEFELFINGER	2007	$ 800.00

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2229254	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	3419BD1	INSPIRON 1721	452758320	RICHARD C HEFELFINGER	2007	$ 800.00
2229375	ANTENNA, SUB SYSTEM	0GCM7	C-SYSTEMS, INC	KS-60680	WHSE	N424	NSN	NMN	452758320	RICHARD C HEFELFINGER	2007	$ 44,700.00
2229376	RECEIVER, C-BAND	0GCM7	C-SYSTEMS, INC	KS-60680	WHSE	N424	NSN	80W	452758320	RICHARD C HEFELFINGER	2007	$ 28,700.00
2229377	RECEIVER, KU-BAND	0GCM7	C-SYSTEMS, INC	KS-60680	WHSE	N424	NSN	NMN	452758320	RICHARD C HEFELFINGER	2007	$ 35,295.00
2229378	CONVERTER, UP-DOWN	0GCM7	C-SYSTEMS, INC	KS-NOC	#	N424	217	2017	452758320	RICHARD C HEFELFINGER	2007	$ 6,000.00
2229379	ANALYZER, SPECTRUM	OT1F7	ANRITSU COMPANY	KS-60680	1050	N424	623146	MS2711D	452758320	RICHARD C HEFELFINGER	2007	$ 9,400.00
2229380	RECEIVER, GPS	0H9N4	MAGELLAN SYSTEMS CORP	KS-60680	1050	N424	011217004770 6	EXPORIST 210	452758320	RICHARD C HEFELFINGER	2007	$ 900.00
2229417	SWITCH	PICKE	PICKERING	KS-60680	1050	N424	L281035	60-711-901	452758320	RICHARD C HEFELFINGER	2008	$ 12,000.00
2229418	COMPUTER, PDA	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1050	N424	HS39YF1	60-711-901	452758320	RICHARD C HEFELFINGER	2008	$ 12,000.00
2229419	BIT SYNCHRONIZER	52599	DELTA DATA SYSTEMS CORP	KS-60680	1050	N424	110	270	452758320	RICHARD C HEFELFINGER	2008	$ 28,400.00
2229463	TELEVISION, RECEIVER	S4117	SHARP CORP	KS-60680	1201	N424	711928685	LC-20D42U	452758320	RICHARD C HEFELFINGER	2007	$ 549.00
2229464	TELEVISION, RECEIVER	S4117	SHARP CORP	KS-60680	1201	N424	711928408	LC-20D42U	452758320	RICHARD C HEFELFINGER	2007	$ 549.00
2229465	TELEVISION, RECEIVER	S4117	SHARP CORP	KS-60680	1201	N424	711929009	LC-20D42U	452758320	RICHARD C HEFELFINGER	2007	$ 549.00
2229466	TELEVISION, RECEIVER	S4117	SHARP CORP	KS-60680	1201	N424	711927664	LC-20D42U	452758320	RICHARD C HEFELFINGER	2007	$ 549.00
2229783	MODEM	K5528	RADYNE LTD	KS-60680	1050	N424	16156	DMB20	452758320	RICHARD C HEFELFINGER	2008	$ 5,630.00
2229784	MODEM	K5528	RADYNE LTD	KS-60680	1050	N424	16155	DMB20	452758320	RICHARD C HEFELFINGER	2008	$ 5,630.00
2229785	CONVERTER, DOWN	1FDL7	CROSSBOW TECHNOLOGY	KS-60680	1050	N424	307	2017	452758320	RICHARD C HEFELFINGER	2008	$ 4,145.00
2229786	CONVERTER, DOWN	1FDL7	CROSSBOW TECHNOLOGY	KS-60680	1050	N424	306	2017	452758320	RICHARD C HEFELFINGER	2008	$ 4,145.00
2229945	COMPUTER, DIGITAL	1KZ68	CHASSIS PLANS LLC	KS-60680	1040	N424	9162-062008-1001	1B-50742-10-00	452758320	RICHARD C HEFELFINGER	2008	$ 2,288.00
2229974	AMPLIFIER, OUTDOOR C-BAND	8J319	COMTECH	KS-60680	1201	N424	072290684	HPODC102	452758320	RICHARD C HEFELFINGER	2008	$ 26,720.00

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2506019	SERVER	30874	INTERNATIONAL BUSINESS MACHINE	KS-60680	1040	N424	KQBRR8X	88631RU	452758320	RICHARD C HEFELFINGER	2005	$ 14,348.00
2506127	CONVERTER, UP	1RN38	COMTECH EF DATA CORP	KS-NOC	KIRTL	N424	062211890	UT4514	452758320	RICHARD C HEFELFINGER	2006	$ 11,500.00
2506128	CONVERTER, UP	1RN38	COMTECH EF DATA CORP	KS-NOC	KIRTL	N424	062211880	UT4514	452758320	RICHARD C HEFELFINGER	2006	$ 11,500.00
2506400	DECODER, TIME OF DAY	62767	KODE/A DIV ODETICS F-MOXON	KS-60680	137	N424	441663	285-318	452758320	RICHARD C HEFELFINGER	1986	$ 5,670.00
2506401	MONITOR	53714	LEADER INSTRUMENTS CORP	KS-60640	B2SF3	N424	3021091	LB05860	452758320	RICHARD C HEFELFINGER	1984	$ 1,743.00
2506412	PRINTER	61141	ACTERNA	KS-60680	1020	N424	905711	PR-40A	452758320	RICHARD C HEFELFINGER	1990	$ 895.00
2506417	MULTIVIEWER	0LS84	ZANDAR CORP	KS-60680	1020	N424	B0715C50	DX4	452758320	RICHARD C HEFELFINGER	2007	$ 2,640.00
2506418	MULTIVIEWER	0LS84	ZANDAR CORP	KS-60680	1020	N424	B0715C46	DX4	452758320	RICHARD C HEFELFINGER	2007	$ 2,640.00
2507225	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	43ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507226	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	62ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507227	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	63ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507228	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	83ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507229	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	92ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507230	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	C3ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2507233	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	J2ZWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507238	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1116	N424	60DWPB1	EMU	452758320	RICHARD C HEFELFINGER	2006	$ 5,300.00
2507367	ENCODER	1Q710	VBRICK SYSTEMS INC	KS-60680	1101	N424	021120600283	9140-4300-0003	452758320	RICHARD C HEFELFINGER	2006	$ 5,130.00
2507368	ENCODER	1Q710	VBRICK SYSTEMS INC	KS-60680	1101	N424	01120600284	9140-4300-0003	452758320	RICHARD C HEFELFINGER	2006	$ 5,130.00
2507369	ENCODER	1Q710	VBRICK SYSTEMS INC	KS-60680	1101	N424	01120600285	9140-4300-0003	452758320	RICHARD C HEFELFINGER	2006	$ 5,130.00
2507370	DECODER	1Q710	VBRICK SYSTEMS INC	KS-60680	1101	N424	01120600294	9140-5300-0003	452758320	RICHARD C HEFELFINGER	2006	$ 3,526.00
2507371	DECODER	1Q710	VBRICK SYSTEMS INC	KS-60680	1101	N424	01120600295	9140-5300-0003	452758320	RICHARD C HEFELFINGER	2006	$ 3,526.00
2507372	DECODER	1Q710	VBRICK SYSTEMS INC	KS-60680	1101	N424	01120600296	9140-5300-0003	452758320	RICHARD C HEFELFINGER	2006	$ 3,526.00
2543835	RECORDER, TELEMETRY, DIGITAL	0SFK2	WIDE BAND SYSTEMS INC	KS-60680	1108	N424	0119	DRS3300ER 144GB2008 A8	452758320	RICHARD C HEFELFINGER	2008	$ 69,500.00
2543836	RECORDER, TELEMETRY, DIGITAL	0SFK2	WIDE BAND SYSTEMS INC	KS-60680	1108	N424	0121	DRS3300ER 144GB2008 A8	452758320	RICHARD C HEFELFINGER	2008	$ 69,500.00
3019435	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1108	N424	55WCJ31	WHL	452758320	RICHARD C HEFELFINGER	2003	$ 1,473.00
3019436	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1040	N424	MX07R477483 2339A047N	1800FP	452758320	RICHARD C HEFELFINGER	2003	$ 675.00
3019437	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1040	N424	MX07R477483 2339A0476	1800FP	452758320	RICHARD C HEFELFINGER	2003	$ 675.00
3019539	ANALYZER, SPECTRUM	02598	AEROFLEX LABORATORIES INC	KS-60680	1230	N424	103062080	2399A	452758320	RICHARD C HEFELFINGER	2003	$ 10,908.00
3019835	COMPUTER, DIGITAL	8C319	COMPUNETIX INC	KS-60680	1020	N424	SC312005-1	MAT	452758320	RICHARD C HEFELFINGER	2003	$ 4,945.00
3019836	COMPUTER, DIGITAL	8C319	COMPUNETIX INC	KS-60680	1020	N424	SC310316	MAT	452758320	RICHARD C HEFELFINGER	2003	$ 4,945.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3019839	TESTER, BIT ERROR RATE	61141	ACTERNA	KS-NOC	#	N424	10964	FB6000	452758320	RICHARD C HEFELFINGER	1990	$ 8,003.00
3019840	TESTER, BIT ERROR RATE	61141	ACTERNA	KS-M7355	4239	N424	10894	FB6000	452758320	RICHARD C HEFELFINGER	1990	$ 8,003.00
3020225	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1056A	N424	5Y79D51	PP08L	452758320	RICHARD C HEFELFINGER	2004	$ 1,872.00
3020226	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1140	N424	3089D51	PP08L	452758320	RICHARD C HEFELFINGER	2004	$ 1,872.00
3020695	COMPUTER, LAPTOP	28480	HEWLETT-PACKARD CO	KS-60680	1230	N424	2UA5030WZR	DE544AV	452758320	RICHARD C HEFELFINGER	2005	$ 931.00
3059631	GENERATOR, SIGNAL	1RPN6	TESTMART	KS-60640	B2SF2	N424	2030021708	2031	452758320	RICHARD C HEFELFINGER	2004	$ 13,730.00
3059632	TRANSMITTER	0YWW4	TELECAST FIBER SYSTEMS INC	KS-60640	A1SF1	N424	29740	DIAMONDB ACK II	452758320	RICHARD C HEFELFINGER	2004	$ 8,900.00
3059633	RECEIVER	0YWW4	TELECAST FIBER SYSTEMS INC	KS-60640	A1SF1	N424	29817	DIAMONDB ACK II	452758320	RICHARD C HEFELFINGER	2004	$ 5,500.00
3059634	RECEIVER	0YWW4	TELECAST FIBER SYSTEMS INC	KS-60680	1020	N424	29818	DIAMONDB ACK II	452758320	RICHARD C HEFELFINGER	2004	$ 5,500.00
3059635	RECORDER, DISK	14028	SYPRIS DATA SYSTEMS	KS-60680	1040	N424	8000089AD04	80	452758320	RICHARD C HEFELFINGER	2004	$ 31,122.00
3059636	RECORDER, DISK	14028	SYPRIS DATA SYSTEMS	KS-60680	1040	N424	8000090AD04	80	452758320	RICHARD C HEFELFINGER	2004	$ 31,122.00
3059637	RECORDER, DISK	14028	SYPRIS DATA SYSTEMS	KS-60680	1040	N424	8000106AG04	80	452758320	RICHARD C HEFELFINGER	2004	$ 48,897.00
3059638	COMPUTER, DIGITAL	4AA27	ACME PORTABLE MACHINES INC	KS-60680	1040	N424	ACM307853	ACME II	452758320	RICHARD C HEFELFINGER	2005	$ 9,750.00
3059639	RECEIVER	24735	SEMCO INSTRUMENTS INC	KS-60680	1050	N424	60060001	RC-400	452758320	RICHARD C HEFELFINGER	2005	$ 51,409.00
3059640	RECEIVER	24735	SEMCO INSTRUMENTS INC	KS-60680	1040	N424	60160001	RC-400	452758320	RICHARD C HEFELFINGER	2005	$ 51,409.00
3059652	TANSMITTER	0YWW4	TELECAST FIBER SYSTEMS INC	KS-CX40	RACK	N424	29768	DIAMONDB ACK II	452758320	RICHARD C HEFELFINGER	2004	$ 7,600.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3059712	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	3FLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059713	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	4FLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059714	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	59LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059715	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	29LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059716	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	9DLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059717	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	C9LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059718	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	B9LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059719	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	79LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059720	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	HDLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059721	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	4BLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059722	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	FDLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3059723	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	1FLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059724	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	6BLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059725	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	CDLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059726	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	CBLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059727	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	H9LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059728	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	7BLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059729	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	5CLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059730	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	88LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059731	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	2CLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059732	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	48LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059733	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	4CLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3059734	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201B	N424	78LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059735	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	F8LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059736	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	G8LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059737	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	B8LR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059738	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	8CLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059739	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	BCLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059740	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1108	N424	8FLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059741	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	9FLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059742	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	2DLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059743	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	1DLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059744	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	4DLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3059745	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	6GLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059746	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	4GLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059747	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	5FLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059748	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	JFLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059749	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	5GLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059750	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	FCLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059751	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	FBLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059752	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	JCLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059753	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	GBLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059754	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	GFLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059755	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	FFLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3059756	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	7DLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059757	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	5DLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059758	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	BFLR581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 991.00
3059760	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	BVKP581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 971.00
3059762	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	JVKP581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 971.00
3059763	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	4WKP581	DHM	452758320	RICHARD C HEFELFINGER	2005	$ 971.00
3059773	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	CN0606464663357451GL	2001FP	452758320	RICHARD C HEFELFINGER	2005	$ 790.00
3059777	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2008	N424	CN0646466335 7540NL	2001FP	452758320	RICHARD C HEFELFINGER	2005	$ 790.00
3059896	DISPLAY UNIT, COLOR	3N3B5	SYNTAX, INC	KS-60680	1201	N424	VDLK15300849	LT37HVS	452758320	RICHARD C HEFELFINGER	2005	$ 1,445.00
3059986	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1111	N424	61S5R91	DCNE	452758320	RICHARD C HEFELFINGER	2006	$ 1,050.00
3063949	RECORDER	1LZX9	DEWETRON AMERICA INC	KS-60680	1040	N424	17060032	901	452758320	RICHARD C HEFELFINGER	2006	$ 26,856.00
3063950	RECORDER	1LZX9	DEWETRON AMERICA INC	KS-60680	1040	N424	17060034	901	452758320	RICHARD C HEFELFINGER	2006	$ 26,856.00
3063952	SWITCH	31563	MU-DEL ELECTRONICS INC	KS-60680	1040	N424	499101	4MDMS1000	452758320	RICHARD C HEFELFINGER	2006	$ 5,600.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
Overall Result												$ 5,384,904.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3019507	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	HBRO	N439	CN05Y2327161838QA025	DHM	748933853	ALLEN C DANIELS	2003	$ 615.00
3060020	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	HBRO	N439	60X8S91	PP15L	748933853	ALLEN C DANIELS	2006	$ 2,320.00
3060117	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	HBRO	N439	1QLJJ41	GX270	748933853	ALLEN C DANIELS	2004	$ 1,766.00
3060119	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-NOC	HBRO	N439	CQLJJ41	GX270	748933853	ALLEN C DANIELS	2004	$ 1,766.00
Overall Result												$ 6,467.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
1978196	DOCK STATION, LAPTOP	DELLC	DELL COMPUTER CORP	KS-66330	APOLO	N459	D9FNC	310-4554	466315112	DAVID G REIGADA	1998	$ 649.00
2018244	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-60650	1026H	N459	SUSDM005189	C4171A	466315112	DAVID G REIGADA	1999	$ 777.00
2018698	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-M7355	3136G	N459	USGR011436	C4172A	466315112	DAVID G REIGADA	2000	$ 1,238.00
2030119	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-60650	1026G	N459	3Y1SW11	DHM	466315112	DAVID G REIGADA	2002	$ 809.00
2030120	COMPUTER, DIGITAL	DELLC	DELL COMPUTER CORP	KS-60650	1026C	N459	7C9SW11	DHM	466315112	DAVID G REIGADA	2002	$ 1,044.00
2030147	PRINTER, ADP	26921	XEROX CORP	KS-60650	1026H	N459	LGM402277	PHASER 7700	466315112	DAVID G REIGADA	2002	$ 6,770.00
2160375	SERVER	30874	INTERNATIONAL BUSINESS MACHINE	KS-M7355	4239	N459	78GYRF2	8686-4RX	466315112	DAVID G REIGADA	2002	$ 12,174.00
2160376	SERVER	30874	INTERNATIONAL BUSINESS MACHINE	KS-M71522	109	N459	78GYRK5	8686-4RX	466315112	DAVID G REIGADA	2002	$ 12,174.00
2160641	COMPUTER SYSTEM, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	J3ZSG21	DHM	466315112	DAVID G REIGADA	2003	$ 1,326.00
2160677	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	H10QP21	DMM	466315112	DAVID G REIGADA	2003	$ 1,049.00
2161415	COMPUTER SYSTEM, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	BG2ZF31	PP02X	466315112	DAVID G REIGADA	2003	$ 2,389.00
2191036	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	#	N459	689XJ71	GX280	466315112	DAVID G REIGADA	2005	$ 1,364.00
2191038	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026	N459	47WS071	GX280	466315112	DAVID G REIGADA	2005	$ 1,364.00
2191040	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	APOLO	N459	B79YW61	GX280	466315112	DAVID G REIGADA	2005	$ 1,713.00
2191081	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	3XYSG41	D800	466315112	DAVID G REIGADA	2004	$ 2,480.00
2191082	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123A	N459	4XYSG41	D800	466315112	DAVID G REIGADA	2004	$ 2,480.00
2191091	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2088A	N459	58N9S71	GX280	466315112	DAVID G REIGADA	2004	$ 1,595.00
2191094	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2041	N459	C5N9S71	GX280	466315112	DAVID G REIGADA	2004	$ 1,595.00
2191097	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3147E	N459	17N9S71	GX280	466315112	DAVID G REIGADA	2004	$ 1,595.00
2191099	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	APOLO	N459	H7N9S71	GX280	466315112	DAVID G REIGADA	2004	$ 1,595.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2191101	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	APOLO	N459	18N9S71	GX280	466315112	DAVID G REIGADA	2004	$ 1,595.00
2191113	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	APOLLO	N459	JPQBH71	GX280	466315112	DAVID G REIGADA	2005	$ 1,364.00
2212896	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123A	N459	DML 7NB1	D820	466315112	DAVID G REIGADA	2006	$ 2,048.00
2212903	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026G	N459	8NL 7NB1	D820	466315112	DAVID G REIGADA	2006	$ 2,048.00
2212907	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3035E	N459	4571NB1	GX620	466315112	DAVID G REIGADA	2006	$ 1,463.00
2212909	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026F	N459	J471NB1	GX620	466315112	DAVID G REIGADA	2006	$ 1,463.00
2213152	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026J	N459	G4KYQB1	INSPIRON 9400	466315112	DAVID G REIGADA	2006	$ 2,534.00
2213158	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026K	N459	907XVB1	D820	466315112	DAVID G REIGADA	2006	$ 2,048.00
2213484	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1031	N459	92XG9C1	PP04X	466315112	DAVID G REIGADA	2006	$ 2,209.00
2213495	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123C	N459	3T9H9C1	PP04X	466315112	DAVID G REIGADA	2006	$ 2,855.00
2213597	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3109B	N459	7JF4QC1	PP04X	466315112	DAVID G REIGADA	2007	$ 2,178.00
2213675	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026A	N459	D1RGVC1	PP04X	466315112	DAVID G REIGADA	2007	$ 2,152.00
2213676	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026F	N459	F1RGVC1	PP04X	466315112	DAVID G REIGADA	2007	$ 2,152.00
2213929	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026	N459	HHJLHD1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,455.00
2213930	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123A	N459	FHJLHD1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,455.00
2213931	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026A	N459	CJJLHD1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,455.00
2213934	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3016A	N459	6JJLHD1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,455.00
2213942	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	BJJLHD1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,455.00
2213948	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	C9ZXHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 1,276.00
2213950	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026E	N459	GPYFHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 1,159.00
2214106	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026B	N459	C0SJHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 825.00
2214107	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	B0SJHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 825.00
2214111	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123C	N459	9YRJHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 825.00

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2214123	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	7ZRJHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 825.00
2214127	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	6YRJHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 825.00
2214135	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2041A	N459	JZRJHD1	DCSM	466315112	DAVID G REIGADA	2007	$ 825.00
2214246	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3149	N459	JPSC76B04T	Q3715A	466315112	DAVID G REIGADA	2007	$ 2,795.00
2214386	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	H1YB0F1	PP05XA	466315112	DAVID G REIGADA	2007	$ 2,962.00
2214389	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026B	N459	JCY50F1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,842.00
2214390	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026A	N459	HCY50F1	PP04X	466315112	DAVID G REIGADA	2007	$ 1,842.00
2229807	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3011E	N459	90LZ5H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,881.00
2229909	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3136	N459	JPSC81J0J2	Q3715A	466315112	DAVID G REIGADA	2008	$ 2,646.00
2229911	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3135A	N459	4Y5JFG1	PP04X	466315112	DAVID G REIGADA	2008	$ 1,851.00
2230029	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	JC843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230030	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	7D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230031	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	JD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230032	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	FD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230033	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	BD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230034	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	3D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230035	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	HD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230036	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	5D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230037	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	CD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230038	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	2D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230039	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	8D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230040	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	6D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230041	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	DD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00

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2230042	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	4D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230043	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	GD843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230044	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	9D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2230045	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	1D843H1	DCSM	466315112	DAVID G REIGADA	2008	$ 920.00
2236865	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3149	N459	JPRL86805J	Q3723A	466315112	DAVID G REIGADA	2008	$ 3,348.00
2236866	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3048	N459	JPDL879023	Q3723A	466315112	DAVID G REIGADA	2008	$ 5,490.00
2236867	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	HRWS3H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,482.00
2236868	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	JRWS3H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,482.00
2236869	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	1SWS3H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,482.00
2236870	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	2SWS3H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,482.00
2236871	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	3SWS3H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,482.00
2236872	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	4SWS3H1	LATITUDE D830	466315112	DAVID G REIGADA	2008	$ 1,482.00
2236874	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026	N459	CS535H1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,848.00
2236875	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	DS535H1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,848.00
2236876	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	8S535H1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,848.00
2236877	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	6S535H1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,848.00
2236878	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	D4MH5H1	DCSM	466315112	DAVID G REIGADA	2008	$ 1,520.00
2236879	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	H4MH5H1	DCSM	466315112	DAVID G REIGADA	2008	$ 1,520.00
2236880	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	B4MH5H1	DCSM	466315112	DAVID G REIGADA	2008	$ 1,520.00
2236881	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	G4MH5H1	DCSM	466315112	DAVID G REIGADA	2008	$ 1,520.00
2236882	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	25MH5H1	DCSM	466315112	DAVID G REIGADA	2008	$ 1,520.00
2236883	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	J4MH5H1	DCSM	466315112	DAVID G REIGADA	2008	$ 1,520.00
2236954	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	8ZNBGH1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,927.00

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2236955	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	CZNBGH1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,927.00
2236956	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N459	BZNBGH1	PP09S	466315112	DAVID G REIGADA	2008	$ 1,927.00
2506156	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3023A	N459	40RFW91	PP05XB1	466315112	DAVID G REIGADA	2006	$ 3,526.00
2506311	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1040	N459	F10QP21	GX260	466315112	DAVID G REIGADA	2003	$ 1,049.00
2507294	SERVER	28480	HEWLETT-PACKARD CO	KS-M7355	4239	N459	USE639NFA0	DL360-G5	466315112	DAVID G REIGADA	2006	$ 6,076.00
2507295	SERVER	28480	HEWLETT-PACKARD CO	KS-M7355	4239	N459	USE639NFA1	DL360-G5	466315112	DAVID G REIGADA	2006	$ 6,076.00
2507499	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	6YQNTC1	EMM	466315112	DAVID G REIGADA	2007	$ 15,960.00
2507500	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	9YQNTC1	EMM	466315112	DAVID G REIGADA	2007	$ 15,960.00
2507513	SERVER	30874	INTERNATIONAL BUSINESS MACHINE	KS-M7355	4239	N459	KQBDYD9	7979MC1	466315112	DAVID G REIGADA	2007	$ 6,810.00
2543810	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N459	DX0RXG1	D430	466315112	DAVID G REIGADA	2008	$ 1,863.00
2543811	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N459	CX0RXG1	D430	466315112	DAVID G REIGADA	2008	$ 1,863.00
2543812	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	INTRANSIT	#	N459	9X0RXG1	D430	466315112	DAVID G REIGADA	2008	$ 1,863.00
3019497	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	APOLLO	N459	G7LHL31	DHM	466315112	DAVID G REIGADA	2003	$ 1,222.00
3019500	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	2023	N459	57LHL31	DHM	466315112	DAVID G REIGADA	2003	$ 1,222.00
3019502	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3066D	N459	CN05Y2327161838QA011	DHM	466315112	DAVID G REIGADA	2003	$ 615.00
3019512	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	WHSE	N459	CN05Y2327161838PAAHD	DHM	466315112	DAVID G REIGADA	2003	$ 615.00
3019513	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	CN05Y2327161838PAANJ	DHM	466315112	DAVID G REIGADA	2003	$ 615.00
3020476	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N459	6T0G061	EML11604	466315112	DAVID G REIGADA	2004	$ 15,996.00
3059987	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-66330	APOLO	N459	CNGN165053	Q1862	466315112	DAVID G REIGADA	2006	$ 2,370.00
3060013	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026E	N459	8C0YR91	PP05XB	466315112	DAVID G REIGADA	2006	$ 3,526.00
3060014	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114C	N459	BC0YR91	PP05XB	466315112	DAVID G REIGADA	2006	$ 3,526.00
3060016	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	2000	N459	20X8S91	PP15L	466315112	DAVID G REIGADA	2006	$ 2,320.00

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3060121	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	1026K	N459	4PLJJ41	GX270	466315112	DAVID G REIGADA	2004	$ 1,766.00
3060148	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-66330	APOLO	N459	6882851	GX270	466315112	DAVID G REIGADA	2004	$ 1,837.00
3060149	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3123C	N459	84F2851	GX270	466315112	DAVID G REIGADA	2004	$ 1,837.00
3063957	CPU, PENTIUM	DELLC	DELL COMPUTER CORP	KS-66330	APOLLO	N459	134KX	MMP	466315112	DAVID G REIGADA	1999	$ 1,392.00
3063962	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3037	N459	JPDL69T04D	9050DN	466315112	DAVID G REIGADA	2006	$ 3,441.00
3063963	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7355	3127	N459	JPDL69T04P	9050DN	466315112	DAVID G REIGADA	2006	$ 3,441.00
Overall Result												$ 275,218.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2229501	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114A	N460	3QNHYG1	DCD0	558022231	DAVID F RUN	2008	$ 16,292.00
2229507	SERVER	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	4239	N460	D0BH1G1	EMM	558022231	DAVID F RUN	2008	$ 31,685.00
2229615	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3014A	N460	3QZ0TF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229616	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114E	N460	JPZ0TF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229617	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3006F	N460	4QZ0TF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229618	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3011F	N460	5QZ0TF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229619	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3109C	N460	2QZ0TF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229620	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3109D	N460	1QZ0TF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229621	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3109A	N460	CYPZSF1	PP18L	558022231	DAVID F RUN	2007	$ 2,112.00
2229622	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3013D	N460	HYPZSF1	PP18L	558022231	DAVID F RUN	2007	$ 2,112.00
2229623	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3008D	N460	3ZPZSF1	PP18L	558022231	DAVID F RUN	2007	$ 2,112.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2229624	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3010B	N460	5ZPZSE1	PP18L	558022231	DAVID F RUN	2007	$ 2,112.00
2229625	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3012A	N460	6ZPZSE1	PP18L	558022231	DAVID F RUN	2007	$ 2,112.00
2229626	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3014B	N460	4C3SSF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229627	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3015B	N460	5C3SSF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229628	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3113B	N460	6C3SSF1	PP04X	558022231	DAVID F RUN	2007	$ 2,230.00
2229672	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3009A	N460	HPF1HH1	M6300	558022231	DAVID F RUN	2008	$ 3,731.00
2229902	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114A	N460	GC4BBG1	PP18L	558022231	DAVID F RUN	2008	$ 2,154.00
2229903	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114A	N460	1D4BBG1	PP18L	558022231	DAVID F RUN	2008	$ 2,154.00
2229904	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114A	N460	2D4BBG1	PP18L	558022231	DAVID F RUN	2008	$ 2,154.00
2236889	PROCESSOR, QUAD CORE	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N460	904M5H1	DCD0	558022231	DAVID F RUN	2008	$ 8,516.00
2561319	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60680	1201	N460	E2KWM3945 ABG	PP05X	558022231	DAVID F RUN	2008	$ 4,185.00
2561321	SERVER	28480	HEWLETT-PACKARD CO	KS-60680	1201	N460	USE834N4B3	DL145R03	558022231	DAVID F RUN	2008	$ 2,175.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
3019510	DISPLAY UNIT, COLOR	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	3114C	N460	CN05Y23271 61838QAA01	DHM	558022231	DAVID F RUN	2003	$ 615.00
Overall Result												$ 104,291.00

ECN	Equipment Description	Manufacturer Code	Manufacturer Name	Location	Room	Custodian Account	Manufacturer Serial No.	Model Number	Custodian Number	Custodian Name	Construction Year	Acquistion Value
2019310	PRINTER, LASERJET	HEWLE	HEWLETT PACKARD	KS-M7360	3220G	N461	USGZ213741	C4139A	866987814	ELIZABETH K HUBER	2000	$ 718.00
2212912	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3214Z	N461	3571NB1	GX620	866987814	ELIZABETH K HUBER	2006	$ 1,463.00
2213477	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-60650	2004A	N461	12XG9C1	PP04X	866987814	ELIZABETH K HUBER	2006	$ 2,209.00
2213935	COMPUTER, LAPTOP	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3220F	N461	9JJLHD1	PP04X	866987814	ELIZABETH K HUBER	2007	$ 1,455.00
2213952	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3214Y	N461	DPYFPHD1	DCSM	866987814	ELIZABETH K HUBER	2007	$ 1,159.00
2214114	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3214U	N461	CZRJHD1	DCSM	866987814	ELIZABETH K HUBER	2007	$ 825.00
2214125	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3220M	N461	3ZRJHD1	DCSM	866987814	ELIZABETH K HUBER	2007	$ 825.00
2214128	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3220H	N461	8YRJHD1	DCSM	866987814	ELIZABETH K HUBER	2007	$ 825.00
2214130	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3220K	N461	30SJHD1	DCSM	866987814	ELIZABETH K HUBER	2007	$ 825.00
2214132	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3220Q	N461	41SJHD1	DCSM	866987814	ELIZABETH K HUBER	2007	$ 825.00
2229532	COMPUTER, NOTEBOOK	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7360	3214V	N461	HGJN7G1	PP04X	866987814	ELIZABETH K HUBER	2008	$ 1,602.00
3060145	COMPUTER, DIGITAL	1GE11	DELL COMPUTER CORP F-PC'S LTD	KS-M7355	1073	N461	4XJ2851	GX270	866987814	ELIZABETH K HUBER	2004	$ 1,837.00
3060150	PRINTER, ADP	28480	HEWLETT-PACKARD CO	KS-M7360	3214Y	N461	CNGY303187	4300DTNS	866987814	ELIZABETH K HUBER	2004	$ 2,330.00
Overall Result												$ 16,898.00

Attachment J-4b

Government-Furnished Property

Government Furnished Property

NASA TAG #	NOUN	MODEL	MANUFACTURE	SERIAL #	LOCATION	COST
2108280	Printer, Laser-Jet	C4171A	Hewlett Packard	SUSDM005178	Littleton, CO	777.00
1978424	Printer, Laser-Jet	C4121A	Hewlett Packard	USEF159378	Huntington Beach, CA	1660.00
2019222	Printer, Laser-Jet	C6739A	Hewlett Packard	SGA0210FCJ	Chandler, AZ	820.00

Attachment J-5

Department of Labor Wage Determination

(15 Pages)

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REGISTER OF WAGE DETERMINATION UNDER THE SERVICE CONTRACT ACT By direction of the Secretary of Labor	U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION WAGE AND HOUR DIVISION WASHINGTON D.C. 20210
William W.Gross Director — Division of Wage Determinations	Wage Determination No.: CBA-2005-3166 Revision No.: 1 Date Of Last Revision: 4/17/2006

State: Florida

Area: Brevard

Employed on NASA, Kennedy Space Center contract for expendable launch vehicle integrated support services at Kennedy Space Center and Cape Canaveral Air Station..

Collective Bargaining Agreement between contractor: Analex Corporation, and union: IBEW AFL-CIO Local 2088, effective 2/1/2006 through 1/31/2009.

In accordance with Section 2(a) and 4(c) of the Service Contract Act, as amended, employees employed by the contractor(s) in performing services covered by the Collective Bargaining Agreement (s) are to be paid wage rates and fringe benefits set forth in the current collective bargaining agreement and modified extension agreement(s).

REGISTER OF WAGE DETERMINATION UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary
of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

William W.Gross
Director

Division of
Wage Determinations

Wage Determination No.: CBA-2005-3166
Revision No.: 0
Date Of Last Revision: 9/12/2005

State: Florida

Area: Brevard

Employed on NASA, Kennedy Space Center contract for expendable launch vehicle integrated support services at Kennedy Space Center and Cape Canaveral Air Station..

Collective Bargaining Agreement between contractor: Analex Corporation, and union: IBEW AFL-CIO Local 2088, effective 2/3/2003 through 1/31/2006.

In accordance with Section 2(a) and 4(c) of the Service Contract Act, as amended, employees employed by the contractor(s) in performing services covered by the Collective Bargaining Agreement (s) are to be paid wage rates and fringe benefits set forth in the current collective bargaining agreement and modified extension agreement(s).

REGISTER OF WAGE DETERMINATION UNDER THE SERVICE CONTRACT ACT By direction of the Secretary of Labor	U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION WAGE AND HOUR DIVISION WASHINGTON D.C. 20210
William W.Gross Director Division of Wage Determinations	Wage Determination No.: CBA-2005-3167 Revision No.: 2 Date Of Last Revision: 4/17/2006

State: California

Area: Santa Barbara

Employed on NASA, Kennedy Space Center contract for expendable launch vehicle integrated support services at Vandenberg Air Force Base, California.

Collective Bargaining Agreement between contractor: Analex Corporation, and union: Teamsters and Warehousemen Local 381, effective 11/1/2005 through 10/31/2008.

In accordance with Section 2(a) and 4(c) of the Service Contract Act, as amended, employees employed by the contractor(s) in performing services covered by the Collective Bargaining Agreement (s) are to be paid wage rates and fringe benefits set forth in the current collective bargaining agreement and modified extension agreement(s).

REGISTER OF WAGE DETERMINATION UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary
of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

William W.Gross
Director

Division of
Wage Determinations

Wage Determination No.: CBA-2005-3167
Revision No.: 1
Date Of Last Revision: 9/26/2005

State: California

Area: Santa Barbara

Employed on NASA, Kennedy Space Center contract for expendable launch vehicle integrated support services at Vandenberg Air Force Base, California.

Collective Bargaining Agreement between contractor: Analex Corporation, and union: Teamsters and Warehousemen Local 381, effective 1/1/2002 through 10/31/2005.

In accordance with Section 2(a) and 4(c) of the Service Contract Act, as amended, employees employed by the contractor(s) in performing services covered by the Collective Bargaining Agreement (s) are to be paid wage rates and fringe benefits set forth in the current collective bargaining agreement and modified extension agreement(s).

WD 05-2117 (Rev.-5) was first posted on www.wdol.gov on 10/09/2007

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

William W.Gross
Director

Division of
Wage Determinations

Wage Determination No.: 2005-2117
Revision No.: 5
Date Of Revision: 10/01/2007

State: Florida

Area: Florida Counties of Brevard, Indian River

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support And Clerical Occupations	
01011 - Accounting Clerk I	12.36
01012 - Accounting Clerk II	14.60
01013 - Accounting Clerk III	18.43
01020 - Administrative Assistant	19.20
01040 - Court Reporter	15.62
01051 - Data Entry Operator I	11.69
01052 - Data Entry Operator II	13.31
01060 - Dispatcher, Motor Vehicle	14.37
01070 - Document Preparation Clerk	11.77
01090 - Duplicating Machine Operator	11.77
01111 - General Clerk I	12.38
01112 - General Clerk II	13.29
01113 - General Clerk III	13.81
01120 - Housing Referral Assistant	16.88
01141 - Messenger Courier	10.58
01191 - Order Clerk I	11.55
01192 - Order Clerk II	13.60
01261 - Personnel Assistant (Employment) I	13.60
01262 - Personnel Assistant (Employment) II	15.04
01263 - Personnel Assistant (Employment) III	17.12
01270 - Production Control Clerk	18.35
01280 - Receptionist	9.89
01290 - Rental Clerk	11.89
01300 - Scheduler, Maintenance	14.20
01311 - Secretary I	14.20
01312 - Secretary II	15.62
01313 - Secretary III	16.88
01320 - Service Order Dispatcher	13.06
01410 - Supply Technician	18.25
01420 - Survey Worker	13.94
01531 - Travel Clerk I	10.49
01532 - Travel Clerk II	11.34
01533 - Travel Clerk III	12.13
01611 - Word Processor I	12.21
01612 - Word Processor II	13.16
01613 - Word Processor III	15.77
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	18.13
05010 - Automotive Electrician	17.29
05040 - Automotive Glass Installer	16.35
05070 - Automotive Worker	16.35
05110 - Mobile Equipment Servicer	14.76
05130 - Motor Equipment Metal Mechanic	17.98
05160 - Motor Equipment Metal Worker	16.35
05190 - Motor Vehicle Mechanic	17.98

05220 - Motor Vehicle Mechanic Helper	13.89
05250 - Motor Vehicle Upholstery Worker	15.79
05280 - Motor Vehicle Wrecker	16.35
05310 - Painter, Automotive	17.18
05340 - Radiator Repair Specialist	16.35
05370 - Tire Repairer	13.08
05400 - Transmission Repair Specialist	17.98
07000 - Food Preparation And Service Occupations	
07010 - Baker	12.08
07041 - Cook I	11.12
07042 - Cook II	12.08
07070 - Dishwasher	7.82
07130 - Food Service Worker	9.33
07210 - Meat Cutter	13.56
07260 - Waiter/Waitress	8.47
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	17.08
09040 - Furniture Handler	12.39
09080 - Furniture Refinisher	15.76
09090 - Furniture Refinisher Helper	12.74
09110 - Furniture Repairer, Minor	14.28
09130 - Upholsterer	15.76
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	9.11
11060 - Elevator Operator	8.99
11090 - Gardener	11.48
11122 - Housekeeping Aide	10.08
11150 - Janitor	10.00
11210 - Laborer, Grounds Maintenance	9.62
11240 - Maid or Houseman	7.90
11260 - Pruner	8.75
11270 - Tractor Operator	11.21
11330 - Trail Maintenance Worker	9.62
11360 - Window Cleaner	10.97
12000 - Health Occupations	
12010 - Ambulance Driver	15.46
12011 - Breath Alcohol Technician	17.67
12012 - Certified Occupational Therapist Assistant	23.88
12015 - Certified Physical Therapist Assistant	22.90
12020 - Dental Assistant	15.19
12025 - Dental Hygienist	23.76
12030 - EKG Technician	16.95
12035 - Electroneurodiagnostic Technologist	16.95
12040 - Emergency Medical Technician	15.46
12071 - Licensed Practical Nurse I	15.52
12072 - Licensed Practical Nurse II	17.38
12073 - Licensed Practical Nurse III	17.67
12100 - Medical Assistant	11.26
12130 - Medical Laboratory Technician	15.71
12160 - Medical Record Clerk	14.62
12190 - Medical Record Technician	16.36
12195 - Medical Transcriptionist	13.21
12210 - Nuclear Medicine Technologist	27.16
12221 - Nursing Assistant I	9.77
12222 - Nursing Assistant II	10.98
12223 - Nursing Assistant III	11.98
12224 - Nursing Assistant IV	13.45
12235 - Optical Dispenser	14.65
12236 - Optical Technician	13.58
12250 - Pharmacy Technician	11.63
12280 - Phlebotomist	13.45
12305 - Radiologic Technologist	22.10
12311 - Registered Nurse I	20.46
12312 - Registered Nurse II	25.03
12313 - Registered Nurse II, Specialist	25.03
12314 - Registered Nurse III	30.29
12315 - Registered Nurse III, Anesthetist	30.29
12316 - Registered Nurse IV	36.30
12317 - Scheduler (Drug and Alcohol Testing)	21.89

13000 - Information And Arts Occupations	
13011 - Exhibits Specialist I	16.28
13012 - Exhibits Specialist II	19.38
13013 - Exhibits Specialist III	21.19
13041 - Illustrator I	16.29
13042 - Illustrator II	19.38
13043 - Illustrator III	21.19
13047 - Librarian	20.37
13050 - Library Aide/Clerk	9.10
13054 - Library Information Technology Systems Administrator	19.38
13058 - Library Technician	12.47
13061 - Media Specialist I	14.31
13062 - Media Specialist II	15.74
13063 - Media Specialist III	17.31
13071 - Photographer I	12.95
13072 - Photographer II	15.67
13073 - Photographer III	18.66
13074 - Photographer IV	20.41
13075 - Photographer V	22.56
13110 - Video Teleconference Technician	15.74
14000 - Information Technology Occupations	
14041 - Computer Operator I	15.85
14042 - Computer Operator II	17.24
14043 - Computer Operator III	19.34
14044 - Computer Operator IV	21.22
14045 - Computer Operator V	23.68
14071 - Computer Programmer I (1)	18.98
14072 - Computer Programmer II (1)	23.42
14073 - Computer Programmer III (1)	27.62
14074 - Computer Programmer IV (1)	27.62
14101 - Computer Systems Analyst I (1)	26.40
14102 - Computer Systems Analyst II (1)	27.62
14103 - Computer Systems Analyst III (1)	27.62
14150 - Peripheral Equipment Operator	15.85
14160 - Personal Computer Support Technician	21.22
15000 - Instructional Occupations	
15010 - Aircrew Training Devices Instructor (Non-Rated)	23.92
15020 - Aircrew Training Devices Instructor (Rated)	31.59
15030 - Air Crew Training Devices Instructor (Pilot)	35.00
15050 - Computer Based Training Specialist / Instructor	27.62
15060 - Educational Technologist	20.95
15070 - Flight Instructor (Pilot)	35.00
15080 - Graphic Artist	20.58
15090 - Technical Instructor	19.20
15095 - Technical Instructor/Course Developer	23.23
15110 - Test Proctor	15.49
15120 - Tutor	15.49
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	7.75
16030 - Counter Attendant	7.75
16040 - Dry Cleaner	9.67
16070 - Finisher, Flatwork, Machine	7.75
16090 - Presser, Hand	7.75
16110 - Presser, Machine, Drycleaning	7.75
16130 - Presser, Machine, Shirts	7.75
16160 - Presser, Machine, Wearing Apparel, Laundry	7.75
16190 - Sewing Machine Operator	10.30
16220 - Tailor	10.94
16250 - Washer, Machine	8.39
19000 - Machine Tool Operation And Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	16.76
19040 - Tool And Die Maker	19.92
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	12.05
21030 - Material Coordinator	18.35
21040 - Material Expediter	18.35
21050 - Material Handling Laborer	9.57
21071 - Order Filler	11.67
21080 - Production Line Worker (Food Processing)	13.84

21110 - Shipping Packer 12.65
21130 - Shipping/Receiving Clerk 12.69
21140 - Store Worker I 10.94
21150 - Stock Clerk 14.55
21210 - Tools And Parts Attendant 15.80
21410 - Warehouse Specialist 14.58
23000 - Mechanics And Maintenance And Repair Occupations
23010 - Aerospace Structural Welder 23.86
23021 - Aircraft Mechanic I 22.72
23022 - Aircraft Mechanic II 23.86
23023 - Aircraft Mechanic III 25.05
23040 - Aircraft Mechanic Helper 15.97
23050 - Aircraft, Painter 19.61
23060 - Aircraft Servicer 17.89
23080 - Aircraft Worker 18.80
23110 - Appliance Mechanic 15.76
23120 - Bicycle Repairer 13.08
23125 - Cable Splicer 20.53
23130 - Carpenter, Maintenance 15.76
23140 - Carpet Layer 15.19
23160 - Electrician, Maintenance 18.94
23181 - Electronics Technician Maintenance I 18.69
23182 - Electronics Technician Maintenance II 22.66
23183 - Electronics Technician Maintenance III 25.45
23260 - Fabric Worker 14.55
23290 - Fire Alarm System Mechanic 17.44
23310 - Fire Extinguisher Repairer 13.84
23311 - Fuel Distribution System Mechanic 19.18
23312 - Fuel Distribution System Operator 16.44
23370 - General Maintenance Worker 16.56
23380 - Ground Support Equipment Mechanic 22.72
23381 - Ground Support Equipment Servicer 17.89
23382 - Ground Support Equipment Worker 18.80
23391 - Gunsmith I 16.66
23392 - Gunsmith II 19.02
23393 - Gunsmith III 21.44
23410 - Heating, Ventilation And Air-Conditioning Mechanic 16.81
23411 - Heating, Ventilation And Air Contditioning Mechanic (Research Facility) 17.77
23430 - Heavy Equipment Mechanic 17.93
23440 - Heavy Equipment Operator 16.89
23460 - Instrument Mechanic 16.89
23465 - Laboratory/Shelter Mechanic 20.21
23470 - Laborer 11.04
23510 - Locksmith 15.76
23530 - Machinery Maintenance Mechanic 19.95
23550 - Machinist, Maintenance 17.68
23580 - Maintenance Trades Helper 12.74
23591 - Metrology Technician I 16.89
23592 - Metrology Technician II 17.86
23593 - Metrology Technician III 18.62
23640 - Millwright 20.21
23710 - Office Appliance Repairer 18.13
23760 - Painter, Maintenance 15.76
23790 - Pipefitter, Maintenance 16.80
23810 - Plumber, Maintenance 16.06
23820 - Pneudraulic Systems Mechanic 17.44
23850 - Rigger 17.44
23870 - Scale Mechanic 15.52
23890 - Sheet-Metal Worker, Maintenance 17.64
23910 - Small Engine Mechanic 15.00
23931 - Telecommunications Mechanic I 21.95
23932 - Telecommunications Mechanic II 22.95
23950 - Telephone Lineman 18.14
23960 - Welder, Combination, Maintenance 16.49
23965 - Well Driller 17.44
23970 - Woodcraft Worker 17.44
23980 - Woodworker 13.54
24000 - Personal Needs Occupations

24570 - Child Care Attendant	8.01
24580 - Child Care Center Clerk	11.46
24610 - Chore Aide	9.57
24620 - Family Readiness And Support Services Coordinator	11.33
24630 - Homemaker	14.03
25000 - Plant And System Operations Occupations	
25010 - Boiler Tender	17.44
25040 - Sewage Plant Operator	16.48
25070 - Stationary Engineer	17.44
25190 - Ventilation Equipment Tender	12.74
25210 - Water Treatment Plant Operator	16.48
27000 - Protective Service Occupations	
27004 - Alarm Monitor	13.31
27007 - Baggage Inspector	11.84
27008 - Corrections Officer	16.48
27010 - Court Security Officer	16.85
27030 - Detection Dog Handler	15.65
27040 - Detention Officer	16.48
27070 - Firefighter	16.09
27101 - Guard I	11.84
27102 - Guard II	15.65
27131 - Police Officer I	18.15
27132 - Police Officer II	20.16
28000 - Recreation Occupations	
28041 - Carnival Equipment Operator	11.35
28042 - Carnival Equipment Repairer	11.62
28043 - Carnival Equpment Worker	7.82
28210 - Gate Attendant/Gate Tender	12.36
28310 - Lifeguard	11.01
28350 - Park Attendant (Aide)	13.83
28510 - Recreation Aide/Health Facility Attendant	10.09
28515 - Recreation Specialist	17.13
28630 - Sports Official	11.01
28690 - Swimming Pool Operator	14.78
29000 - Stevedoring/Longshoremen Occupational Services	
29010 - Blocker And Bracer	16.92
29020 - Hatch Tender	16.52
29030 - Line Handler	16.52
29041 - Stevedore I	16.17
29042 - Stevedore II	17.91
30000 - Technical Occupations	
30010 - Air Traffic Control Specialist, Center (HFO) (2)	32.97
30011 - Air Traffic Control Specialist, Station (HFO) (2)	22.72
30012 - Air Traffic Control Specialist, Terminal (HFO) (2)	25.03
30021 - Archeological Technician I	14.56
30022 - Archeological Technician II	16.54
30023 - Archeological Technician III	20.23
30030 - Cartographic Technician	19.71
30040 - Civil Engineering Technician	19.10
30061 - Drafter/CAD Operator I	11.70
30062 - Drafter/CAD Operator II	15.05
30063 - Drafter/CAD Operator III	18.21
30064 - Drafter/CAD Operator IV	19.71
30081 - Engineering Technician I	12.00
30082 - Engineering Technician II	15.25
30083 - Engineering Technician III	17.55
30084 - Engineering Technician IV	21.16
30085 - Engineering Technician V	25.87
30086 - Engineering Technician VI	30.47
30090 - Environmental Technician	18.78
30210 - Laboratory Technician	22.55
30240 - Mathematical Technician	19.24
30361 - Paralegal/Legal Assistant I	13.81
30362 - Paralegal/Legal Assistant II	18.68
30363 - Paralegal/Legal Assistant III	22.84
30364 - Paralegal/Legal Assistant IV	27.66
30390 - Photo-Optics Technician	19.71
30461 - Technical Writer I	17.96
30462 - Technical Writer II	21.97

30463 - Technical Writer III	26.57
30491 - Unexploded Ordnance (UXO) Technician I	20.95
30492 - Unexploded Ordnance (UXO) Technician II	25.35
30493 - Unexploded Ordnance (UXO) Technician III	30.39
30494 - Unexploded (UXO) Safety Escort	20.35
30495 - Unexploded (UXO) Sweep Personnel	20.95
30620 - Weather Observer, Combined Upper Air Or Surface Programs (2)	17.31
30621 - Weather Observer, Senior (2)	19.24
31000 - Transportation/Mobile Equipment Operation Occupations	
31020 - Bus Aide	10.56
31030 - Bus Driver	15.56
31043 - Driver Courier	12.48
31260 - Parking and Lot Attendant	9.94
31290 - Shuttle Bus Driver	13.42
31310 - Taxi Driver	10.94
31361 - Truckdriver, Light	13.48
31362 - Truckdriver, Medium	14.22
31363 - Truckdriver, Heavy	15.44
31364 - Truckdriver, Tractor-Trailer	15.44
99000 - Miscellaneous Occupations	
99030 - Cashier	8.76
99050 - Desk Clerk	9.53
99095 - Embalmer	22.02
99251 - Laboratory Animal Caretaker I	10.23
99252 - Laboratory Animal Caretaker II	11.03
99310 - Mortician	22.59
99410 - Pest Controller	13.48
99510 - Photofinishing Worker	9.71
99710 - Recycling Laborer	11.69
99711 - Recycling Specialist	14.40
99730 - Refuse Collector	11.13
99810 - Sales Clerk	11.29
99820 - School Crossing Guard	9.67
99830 - Survey Party Chief	14.45
99831 - Surveying Aide	9.58
99832 - Surveying Technician	13.14
99840 - Vending Machine Attendant	14.55
99841 - Vending Machine Repairer	17.01
99842 - Vending Machine Repairer Helper	14.55

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $3.16 per hour or $126.40 per week or $547.73 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, 4 weeks after 15 years, and 5 weeks after 20 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE (Standard Form 1444 (SF 1444))

Conformance Process:

The contracting officer shall require that any class of service employee which is

not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C)(vi)) When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).

2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

Rev. Feb. 1973

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION

NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE

(See Instructions on Reverse)

CONTACT: Roger A. MacLeod, Contracting Officer, (321)867-2879

A 1519328

MAIL TO:

Administrator
Wage and Hour Division
U.S. Department of Labor
Washington, DC 21210

RECEIVED 1/4/02

CDA Reco RECEIVED 1/22/02

2. Estimated solicitation date *(use numerals)*

Month	Day	Year
9	24	2001

3. Estimated date bids or proposals to be opened or negotiations begun *(use numerals)*

Month	Day	Year
11	13	2001

4. Date contract performance to begin *(use numerals)*

Month	Day	Year
3	1	2002

5. PLACE (S) OF PERFORMANCE
1. Kennedy Space Center and Cape Canaveral Air Force Station
Brevard County, Florida
- AND-
2. Vandenburg Air Force Base
Santa Barbara County, California

6. SERVICES TO BE PERFORMED *(described)*

NASA RFP 10-01-0001: Expendable Launch Vehicle Integrated Services Code III – Modification to Prior WD A1281478 due to implementation of New Collective Bargaining Agreement between SMI International and Teamsters and Warehousemen Union Local No. 381 at VAFB, California

7. INFORMATION ABOUT PERFORMANCE

A. [X] Services now performed by a Contractor
B. [ ] Services now performed by Federal Employees
C. [ ] Services not presently being Performed

8. IF BOX A IN ITEM 7 IS MARKED, COMPLETE ITEM 8 AS APPLICABLE

a. Name and address of incumbent contractor
1. McDonnell Douglas Aerospace & Defense Space Systems-KSC
A Wholly-Owned Subsidiary of the Boeing Company
P.O. Box 21233, Kennedy Space Center, FL 32815-0233
2. Space Mark, Inc., 5475 Tech Center Dr., Suite 210
Colorado Springs, CO 80919

b. Number(s) of any wage determination(s) in incumbent's contract
1. 1994-2117 Revision 18 dated 05/31/01 – Brevard, Florida
2001-0222 Revision 01 dated 07/16/01 – Brevard, Florida
2. 1994-2064 Revision 12 dated 05/07/01 – San Luis Obispo, Santa Barbara, California

c. Name(s) of union(s) if services are being performed under collective bargaining agreement(s). ***Important:*** Attach copies of current applicable collective bargaining agreements

CBA between Boeing Space Coast Operations (McDonnell Douglas Aerospace and Defense Systems & IBEW Local 2088, 2/7/00-2/2/03
CBA between SMI International & Teamsters and Warehousemen Local 381, 11/30/01-11/29/05

9. OFFICIAL SUBMITTING NOTICE

SIGNED: Dudley R Campbell

DATE: 12-18-01

TYPE OR PRINT NAME: James E. Hattaway, Jr.
Director, Procurement Office

TELEPHONE NO.: 407/867-7212

10. TYPE OR PRINT NAME AND TITLE OF PERSON TO WHOM RESPONSE IS TO BE SENT
AND NAME AND ADDRESS OF DEPARTMENT OR AGENCY, BUREAU, DIVISION, ETC.

NASA
John F. Kennedy Space Center
Attn: SEB-ELVIS
Kennedy Space Center, FL 32899

RESPONSE TO NOTICE
(by Department of Labor)

A. [✓] The attached wage determination(s) listed below apply to procurement

2001-0222 (1) 2002-0029 (2)
94-2117 (18)

B. [ ] As of this date, no wage determination applicable to the specified locality and classes of employees is in effect.

C. [ ] From information supplied, the Service Contract Act does not apply *(see attached explanation)*.

[ ] Notice returned for additional information *(see attached explanation)*

Signed: [signature]
(U.S. Department of Labor)

FEB 25 2002
(Date)

98-103

COMPUTER-GENERATED
10/90

STANDARD FORM 98a
Rev. Feb. 1973

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION

NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE

(Attachment A)

11. NOTICE NO.: NASA-KSC

A1519328

12. CLASSES OF SERVICE EMPLOYEES TO BE EMPLOYED ON CONTRACT	13. NUMBER OF EMPLOYEES IN EACH CLASS	14. HOURLY WAGE RATE THAT WOULD BE PAID FEDERALLY EMPLOYEE
NON-EXEMPT, NON-UNION EMPLOYEES Boeing Space Coast Operations (McDonnell Douglas, Brevard County, Fla.		
Secretary II	1	$ 11.36
Secretary III	2	$12.66
Library Technician	1	$11.36
Laboratory Technician	1	$12.66
Engineering Technician II	1	$10.16
Engineering Technician III	7	$ 11.36
Engineering Technician IV	1	$ 14.07
Engineering Technician V	0	$ 17.22
Engineering Technician VI	3	$ 20.83
NON-EXEMPT, UNION Boeing Space Coast Operations (McDonnell Douglas, Brevard County, Florida)		
*Collective Bargaining Agreement between: Boeing Space Coast Operations and the International Brotherhood of Electrical Workers Local 2088		
* LDAS/CDAS/EME Technician	24	$ 17.22
* Lead LDAS/CDAS/EME Technician	4	$ 20.83
NON-EXEMPT, UNION EMPLOYEES Space Mark, Incorporated, Santa Barbara County, CA		
Collective Bargaining Agreement between: SMI International and Teamsters Warehousemen Union Local No. 381		
Carpenter, Maintenance	1	
Computer Systems Analyst	1	
Construction Superintendent	1	
Communications Engineer	1	
Drafter IV	1	
Electrical Avionics Engineer	1	
Electrician Maintenance	1	
Electronic Technician, Maintenance 1	2	
Electronic Technician, Maintenance 2	4	
Electronic Technician, Maintenance 3	1	
Engineering Technician IV	2	
Environmental Engineer	1	

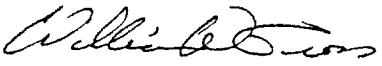
CONTINUED ON NEXT PAGE

COMPUTER-GENERATED 10/90

STANDARD FORM 98a Rev. Feb. 1973 U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION	NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE *(Attachment A)*	11. NOTICE NO. NASA-KSC A1519328 Page 3 of 3

12. CLASSES OF SERVICE EMPLOYEES TO BE EMPLOYED ON CONTRACT	13. NUMBER OF EMPLOYEES IN EACH CLASS	14. HOURLY WAGE RATE THAT WOULD BE PAID FEDERALLY EMPLOYE
CONTINUED FROM PREVIOUS PAGE		
Facilities Manager ✓	1	
General Clerk IV ✓	1	
Heavy Equipment Mechanic/Driver ✓	2	
Industrial Support Supervisor ✓	1	
Janitor ✓	1	
Janitor, Lead ✓	1	
Launch Site Support Coordinator ✓	1	
Launch Site Support Engineer ✓	5	
Logistics Supervisor ✓	1	
Mechanical/Propulsion Engineer ✓	1	
Mission Systems Supervisor ✓	1	
Network Administrator ✓	1	
Purchasing Agent ✓	1	
Quality Assurance Representative ✓	2	
Safety Representative ✓	1	
Safety, QA and Environmental Lead ✓	1	
Supply Technician ✓	2	
Technical Clerk ✓	1	
Welder/Machinist ✓	1	

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor



William W. Gross
Director

Division of
Wage Determinations

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, D.C. 20210

Wage Determination No.: 1994-2117
Revision No.: 18
Date of Last Revision: 05/31/2001

State: Florida

Area: Florida Counties of Brevard, Indian River

** Fringe Benefits Required Follow the Occupational Listing **

OCCUPATION TITLE	MINIMUM WAGE RATE
Administrative Support and Clerical Occupations	
Accounting Clerk I	10.19
Accounting Clerk II	11.71
Accounting Clerk III	13.83
Accounting Clerk IV	17.45
Court Reporter	12.47
Dispatcher, Motor Vehicle	11.30
Document Preparation Clerk	9.54
Duplicating Machine Operator	9.54
Film/Tape Librarian	11.91
General Clerk I	9.08
General Clerk II	10.22
General Clerk III	10.98
General Clerk IV	12.33
Housing Referral Assistant	14.77
Key Entry Operator I	9.09
Key Entry Operator II	10.76
Messenger (Courier)	8.16
Order Clerk I	9.03
Order Clerk II	12.36
Personnel Assistant (Employment) I	9.99
Personnel Assistant (Employment) II	11.24
Personnel Assistant (Employment) III	12.29
Personnel Assistant (Employment) IV	13.78
Production Control Clerk	15.83
Rental Clerk	10.99
Scheduler, Maintenance	12.43
Secretary I	12.43
Secretary II	13.67
Secretary III	14.77
Secretary IV	16.80
Secretary V	18.50
Service Order Dispatcher	10.27
Stenographer I	10.57

Stenographer II	11.33
Supply Technician	16.80
Survey Worker (Interviewer)	12.83
Switchboard Operator-Receptionist	8.23
Test Examiner	13.67
Test Proctor	13.67
Travel Clerk I	9.32
Travel Clerk II	10.09
Travel Clerk III	10.40
Word Processor I	9.69
Word Processor II	10.87
Word Processor III	12.15

Automatic Data Processing Occupations

Computer Data Librarian	11.16
Computer Operator I	13.03
Computer Operator II	14.18
Computer Operator III	15.89
Computer Operator IV	17.45
Computer Operator V	19.46
Computer Programmer I (1)	16.15
Computer Programmer II (1)	19.35
Computer Programmer III (1)	23.39
Computer Programmer IV (1)	25.86
Computer Systems Analyst I (1)	21.79
Computer Systems Analyst II (1)	25.63
Computer Systems Analyst III (1)	27.62
Peripheral Equipment Operator	11.16

Automotive Service Occupations

Automotive Body Repairer, Fiberglass	16.49
Automotive Glass Installer	15.00
Automotive Worker	15.00
Electrician, Automotive	15.86
Mobile Equipment Servicer	13.54
Motor Equipment Metal Mechanic	16.49
Motor Equipment Metal Worker	15.00
Motor Vehicle Mechanic	16.49
Motor Vehicle Mechanic Helper	12.74
Motor Vehicle Upholstery Worker	14.48
Motor Vehicle Wrecker	15.00
Painter, Automotive	15.76
Radiator Repair Specialist	15.00
Tire Repairer	13.08
Transmission Repair Specialist	16.49

Food Preparation and Service Occupations

Baker	11.11
Cook I	10.11

Cook II	11.11
Dishwasher	7.82
Food Service Worker	7.82
Meat Cutter	11.11
Waiter/Waitress	8.47

Furniture Maintenance and Repair Occupations

Electrostatic Spray Painter	15.76
Furniture Handler	12.39
Furniture Refinisher	15.76
Furniture Refinisher Helper	12.74
Furniture Repairer, Minor	14.28
Upholsterer	15.76

General Services and Support Occupations

Cleaner, Vehicles	7.82
Elevator Operator	8.99
Gardener	10.11
House Keeping Aid I	7.82
House Keeping Aid II	9.74
Janitor	8.99
Laborer, Grounds Maintenance	8.47
Maid or Houseman	7.02
Pest Controller	12.25
Refuse Collector	8.99
Tractor Operator	9.87
Window Cleaner	9.74

Health Occupations

Dental Assistant	10.75
Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	10.93
Licensed Practical Nurse I	9.55
Licensed Practical Nurse II	10.73
Licensed Practical Nurse III	12.01
Medical Assistant	10.73
Medical Laboratory Technician	10.73
Medical Record Clerk	12.34
Medical Record Technician	12.93
Nursing Assistant I	7.97
Nursing Assistant II	8.96
Nursing Assistant III	9.77
Nursing Assistant IV	10.98
Pharmacy Technician	11.63
Phlebotomist	10.73
Registered Nurse I	14.92
Registered Nurse II	18.25
Registered Nurse II, Specialist	18.25
Registered Nurse III	22.09
Registered Nurse III, Anesthetist	22.09

Registered Nurse IV	26.47
Information and Arts Occupations	
Audiovisual Librarian	19.30
Exhibits Specialist I	16.21
Exhibits Specialist II	19.30
Exhibits Specialist III	21.10
Illustrator I	16.22
Illustrator II	19.30
Illustrator III	21.10
Librarian	19.55
Library Technician	12.44
Photographer I	12.81
Photographer II	15.50
Photographer III	18.45
Photographer IV	20.18
Photographer V	22.30
Laundry, Dry Cleaning, Pressing and Related Occupations	
Assembler	7.18
Counter Attendant	7.18
Dry Cleaner	7.72
Finisher, Flatwork, Machine	7.18
Presser, Hand	7.18
Presser, Machine, Drycleaning	7.18
Presser, Machine, Shirts	7.18
Presser, Machine, Wearing Apparel, Laundry	7.18
Sewing Machine Operator	8.20
Tailor	8.68
Washer, Machine	6.75
Machine Tool Operation and Repair Occupations	
Machine-Tool Operator (Toolroom)	15.76
Tool and Die Maker	18.73
Material Handling and Packing Occupations	
Forklift Operator	11.20
Fuel Distribution System Operator	14.48
Material Coordinator	16.43
Material Expediter	16.43
Material Handling Laborer	6.91
Order Filler	10.61
Production Line Worker (Food Processing)	12.68
Shipping Packer	10.57
Shipping/Receiving Clerk	11.03
Stock Clerk (Shelf Stocker; Store Worker II)	12.48
Store Worker I	9.52
Tools and Parts Attendant	14.66
Warehouse Specialist	14.58

Mechanics and Maintenance and Repair Occupations

Aircraft Mechanic	16.49
Aircraft Mechanic Helper	12.74
Aircraft Quality Control Inspector	17.76
Aircraft Servicer	14.28
Aircraft Worker	15.00
Appliance Mechanic	15.76
Bicycle Repairer	13.08
Cable Splicer	16.49
Carpenter, Maintenance	15.76
Carpet Layer	15.19
Electrician, Maintenance	16.49
Electronics Technician, Maintenance I	18.04
Electronics Technician, Maintenance II	22.66
Electronics Technician, Maintenance III	25.45
Fabric Worker	14.28
Fire Alarm System Mechanic	16.49
Fire Extinguisher Repairer	13.54
Fuel Distribution System Mechanic	16.49
General Maintenance Worker	15.00
Heating, Refrigeration and Air Conditioning Mechanic	16.49
Heavy Equipment Mechanic	16.49
Heavy Equipment Operator	16.49
Instrument Mechanic	16.49
Laborer	11.04
Locksmith	15.76
Machinery Maintenance Mechanic	16.49
Machinist, Maintenance	17.68
Maintenance Trades Helper	12.74
Millwright	16.49
Office Appliance Repairer	15.76
Painter, Aircraft	15.97
Painter, Maintenance	15.76
Pipefitter, Maintenance	16.49
Plumber, Maintenance	15.76
Pneudraulic Systems Mechanic	16.49
Rigger	16.49
Scale Mechanic	15.00
Sheet-Metal Worker, Maintenance	16.49
Small Engine Mechanic	15.00
Telecommunication Mechanic I	16.49
Telecommunication Mechanic II	17.24
Telephone Lineman	16.49
Welder, Combination, Maintenance	16.49
Well Driller	16.49
Woodcraft Worker	16.49
Woodworker	13.54

Miscellaneous Occupations

Animal Caretaker	9.00
Carnival Equipment Operator	11.35
Carnival Equipment Repairer	11.62
Carnival Worker	7.82
Cashier	6.93
Desk Clerk	7.52
Embalmer	16.57
Lifeguard	8.61
Mortician	18.67
Park Attendant (Aide)	10.83
Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	8.68
Recreation Specialist	14.12
Recycling Worker	10.94
Sales Clerk	8.33
School Crossing Guard (Crosswalk Attendant)	8.46
Sport Official	7.49
Survey Party Chief (Chief of Party)	11.91
Surveying Aide	7.89
Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	10.83
Swimming Pool Operator	11.11
Vending Machine Attendant	10.94
Vending Machine Repairer	12.77
Vending Machine Repairer Helper	10.94

Personal Needs Occupations

Child Care Attendant	7.32
Child Care Center Clerk	10.48
Chore Aid	7.91
Homemaker	11.66

Plant and System Operation Occupations

Boiler Tender	16.49
Sewage Plant Operator	15.76
Stationary Engineer	16.49
Ventilation Equipment Tender	12.74
Water Treatment Plant Operator	15.76

Protective Service Occupations

Alarm Monitor	12.20
Corrections Officer	12.20
Court Security Officer	12.33
Detention Officer	12.20
Firefighter	13.83
Guard I	7.01
Guard II	12.38
Police Officer	14.99

Stevedoring/Longshoremen Occupations

Blocker and Bracer	16.68
Hatch Tender	14.97
Line Handler	14.97
Stevedore I	16.17
Stevedore II	17.91

Technical Occupations

Air Traffic Control Specialist, Center (2)	26.07
Air Traffic Control Specialist, Station (2)	17.98
Air Traffic Control Specialist, Terminal (2)	19.79
Archeological Technician I	12.68
Archeological Technician II	14.26
Archeological Technician III	17.61
Cartographic Technician	17.61
Civil Engineering Technician	15.58
Computer Based Training (CBT) Specialist/ Instructor	21.33
Drafter I	9.26
Drafter II	11.91
Drafter III	14.41
Drafter IV	17.15
Engineering Technician I	9.30
Engineering Technician II	11.96
Engineering Technician III	14.47
Engineering Technician IV	17.22
Engineering Technician V	18.84
Engineering Technician VI	20.82
Environmental Technician	17.45
Flight Simulator/Instructor (Pilot)	25.09
Graphic Artist	20.23
Instructor	21.12
Laboratory Technician	15.89
Mathematical Technician	15.31
Paralegal/Legal Assistant I	11.16
Paralegal/Legal Assistant II	15.10
Paralegal/Legal Assistant III	18.46
Paralegal/Legal Assistant IV	22.35
Photooptics Technician	15.31
Technical Writer	19.62
Unexploded (UXO) Safety Escort	16.57
Unexploded (UXO) Sweep Personnel	16.57
Unexploded Ordnance (UXO) Technician I	16.57
Unexploded Ordnance (UXO) Technician II	20.05
Unexploded Ordnance (UXO) Technician III	24.02
Weather Observer, Combined Upper Air and Surface Programs (3)	16.45
Weather Observer, Senior (3)	18.27
Weather Observer, Upper Air (3)	16.45

Transportation/ Mobile Equipment Operation Occupations

Bus Driver	14.16
Parking and Lot Attendant	9.94
Shuttle Bus Driver	13.42
Taxi Driver	10.94
Truckdriver, Heavy Truck	14.89
Truckdriver, Light Truck	13.42
Truckdriver, Medium Truck	14.16
Truckdriver, Tractor-Trailer	14.89

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $2.02 an hour or $80.80 a week or $350.13 a month.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, 4 weeks after 15 years, and 5 weeks after 20 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.

3) WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via

transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

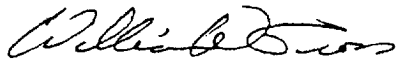
5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor



William W. Gross
Director

Division of
Wage Determinations

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, D.C. 20210

Wage Determination No.: 2001-0222
Revision No.: 1
Date of Last Revision: 07/16/2001

State: Florida

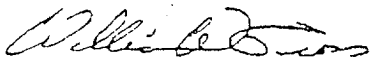
Area: Florida County of Brevard

Employed on NASA contract for expendable launch vehicle integrated support services at Kennedy Space Center and Cape Canaveral Air Force Station:

Collective Bargaining Agreement between Boeing Space Coast Operations and International Brotherhood of Electrical Workers AFL-CIO Local #2088, effective February 7, 2000 through February 2, 2003.

In accordance with Sections 2(a) and 4(c) of the Service Contract Act, as amended, employees employed by the contractor(s) in performing services covered by the Collective Bargaining Agreement(s) are to be paid wage rates and fringe benefits set forth in the current collective bargaining agreement and modified extension agreement(s).

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor



William W. Gross
Director

Division of
Wage Determinations

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, D.C. 20210

Wage Determination No.: 2002-0029
Revision No.: 2
Date of Last Revision: 03/04/2002

This wage determination applies to the following:
Vandenburg Air Force Base
Santa barbara County, California

Employed on NASA contract for expendabe launch vehicle services.

Collective Bargaining Agreement between SMI International and Teamsters and Warehouse Union Local No.381 effective November 30, 2001 through November 29, 2005.

In accordance with Sections 2(a) and 4(c) of the Service Contract Act, as amended, employees employed by the contractor(s) in performing services covered by the Collective Bargaining Agreement(s) are to be paid wage rates and fringe benefits set forth in the current collective bargaining agreement and modified extension agreement(s).

A1004187

WD 95-0090 (Rev.-19) was first posted on www.wdol.gov on 06/03/2008
FL/RH/MS

REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Shirley F. Ebbesen
Director

Division of Wage Determinations

Wage Determination No: 1995-0090
Revision No: 19
Date Of Revision: 05/29/2008

State: California
Area: California Counties of San Luis Obispo, Santa Barbara

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE		MINIMUM WAGE RATE
Food & Lodging:		
(not set)	- Food Service Worker	8.45
07041	- Cook I	10.41
07042	- Cook II	12.28
07070	- Dishwasher	7.98
07250	- Waiter/Waitress	7.98
11060	- Elevator Operator	7.98
11210	- Laborer, Grounds Maintenance	8.45
11240	- Maid or Houseman	8.45
99030	- Cashier	8.45
99050	- Desk Clerk (1)	8.45
Halfway House & Residential Community Treatment:		
(not set)	- Food Service Worker	8.45
(not set)	- Secretary	11.88
01011	- Accounting Clerk I	10.36
01012	- Accounting Clerk II	11.29
01115	- General Clerk I	9.62
01611	- Word Processor I	9.62
07041	- Cook I	10.41
07042	- Cook II	12.28
07070	- Dishwasher	7.98
11150	- Janitor	8.45
11210	- Laborer, Grounds Maintenance	8.45
11240	- Maid or Houseman	8.45
23370	- General Maintenance Worker	11.04
27101	- Guard I	9.83
27102	- Guard II	10.42
99050	- Desk Clerk (1)	9.62
Moving & Storage:		
21040	- Material Handling Laborer	8.98
21071	- Forklift Operator	10.41
21130	- Shipping Packer	10.41
21300	- Warehouse Specialist	10.41

31361	- Truckdriver, Light Truck	10.42
31362	- Truckdriver, Medium Truck	11.09
31363	- Truckdriver, Heavy Truck	11.66
31364	- Truckdriver, Tractor-Trailer	12.23

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $3.24 per hour or $129.60 per week or $561.60 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg 29 CFR 4.173)

HOLIDAYS: A minimum of eleven paid holidays per year: New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Rates are applicable only under the appropriate occupational category

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Under the policy and guidance contained in All Agency Memorandum No. 159, the Wage and Hour Division does not recognize for section 4(c) purposes prospective wage rates and fringe benefit provisions that are effective only upon such contingencies as "approval of Wage and Hour, issuance of a wage determination, incorporation of the wage determination in the contract, adjusting the contract price, etc." (The relevant CBA section) in the collective bargaining agreement between (the parties) contains contingency language that Wage and Hour does not recognize as reflecting "arm's length negotiation" under section 4(c) of the Act and 29 C.F.R. 5.11(a) of the regulations. This wage determination therefore reflects the actual CBA wage rates and fringe benefits paid under the predecessor contract."

Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993 as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE [Standard Form 1444 (SF 1444)]

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. (See Section 4.6 (C)(vi)) When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of

Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

□

Revised: July 2005

AWARD FEE PERFORMANCE EVALUATION PLAN

FOR

OVERALL SERVICES

UNDER THE

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT (ELVIS)

CONTRACT NAS10-02026

KENNEDY SPACE CENTER, FLORIDA 32899

AWARD FEE PERFORMANCE EVALUATION PLAN

FOR OVERALL SERVICES UNDER THE

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT CONTRACT

SIGNATURE PAGE

Concurrences:

S.M. Francois
Manager, Launch Services Program

Humberto Garrido
Deputy Director, Safety and Mission Assurance

Dudley R. Cannon, Jr.
Director, Procurement Office

N.A. Carroll
Chief Financial Officer

Bruce G. Hevey
Director, Information Technology and Communication Services

Tara L. Gillam
Manager, Office of Diversity and Equal Opportunity

Approval:

Woodrow Whitlow, Jr.
Deputy Center Director

TABLE OF CONTENTS

SECTION I. INTRODUCTION

The NASA Launch Services Program (LSP) mission is to provide launch service excellence, expertise, and leadership to assure mission success for its customers. The Expendable Launch Vehicle Integrated Support (ELVIS) contract provides the LSP with launch support services that are safe, reliable, and affordable. Services provided include the management, operation, maintenance, and sustaining engineering of LSP telemetry stations located at Cape Canaveral Air Force Station and Vandenberg Air Force Base (VAFB); engineering services/studies and technical services for various ground/flight systems and payloads; and management, operation, maintenance and sustaining engineering of the assigned NASA facilities, systems, and equipment at VAFB.

The ELVIS contract contains two separate award fee performance evaluation plans: one covering fixed-price award fee contract line item numbers (CLINs) 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 and one covering the fixed-price award fee Safety and Mission Assurance (S&MA) CLINs 1003, 2003, and 3003. (Task orders issued for out-of-core hour support under CLINs 1008, 2008 and 3008 supplement and are in addition to the in-core services furnished under the contract's fixed-price award fee CLINs and, for award fee purposes, shall be evaluated as part of the applicable fixed-price in-core award fee CLIN.) This award fee performance evaluation plan defines the process by which the government will encourage and reward the contractor for safe, high quality, and timely performance of fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011.

This plan describes the evaluation criteria upon which the contractor will be evaluated; the award fee process, the method for determining the earned award fee, the process for changing plan coverage, and the organizational structure established for administering the award fee provisions of the ELVIS contract for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. The award fee evaluation process is structured to provide maximum flexibility for changes in management, business, and performance emphasis.

SECTION II. AWARD FEE EVALUATION

A. GENERAL

The evaluation of the contractor's total award fee for safe, high quality, and timely performance of fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be based upon a subjective assessment of how well the contractor "meets" or "exceeds" the applicable performance evaluation factors set forth in this award fee plan. The final determination of the award fee amount payable to the contractor will be made by the

NASA/KSC Fee Determination Official (FDO) on a semi-annual basis, in accordance with the timetables outlined in the ELVIS contract. The FDO will make this determination by judgmentally determining and measuring the Contractor's performance against specifically designated performance evaluation criteria and the recommendations provided by the Award Fee Board (AFB). Only the award fee performance evaluation factors set forth in the performance evaluation plan shall be used to determine award fee scores.

The total award fee pool will be allotted to both the fixed-price and cost-reimbursement portions of the contract (exclusive of S&MA CLINs 1003, 2003, and 3003, contractor acquired property CLINs 1009, 2009, and 3009, maintenance and repair CLINs 1013, 1014, 2013, 2014, 3013 and 3014; and travel CLINs 1010, 2010, and 3010) with a portion of the total available award fee allocated to each of the evaluation periods as delineated in Tables 3B, 3D, and 3F of the ELVIS contract. The fixed price, estimated cost, and available award fee pools are subject to equitable adjustments arising from requirement changes captured in contract modifications.

Even though the contractor's performance will be continually monitored, it will be formally assessed at the mid-point of each evaluation period. The contractor will be provided a report of the mid-point assessment to include identification of performance levels for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 which require remedial attention or adversely affect final award fee ratings.

B. EVALUATION CRITERIA

The award fee earned for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be based upon a subjective evaluation of contractor performance against the award fee performance evaluation factors identified in Section III, Enclosure B of this plan. The factors include an assessment of adherence to contract technical and schedule requirements, program management, contract administration/business performance, cost control, and areas of emphasis (AoEs).

C. AWARD FEE PROCESS

The award fee process is intended to encourage and reward the contractor for safe, high quality, timely, and cost-conscious performance in fulfilling the requirements set forth in the contract. The contractor can earn an award fee from a minimum of zero dollars to the maximum available award fee for each assigned evaluation period of the contract, in accordance with "Available and Earned Fee" Tables B-1, B-2, and B-3. An overall award fee determination of zero shall be made for any evaluation period when there is a major breach of safety or security as defined in NASA Federal Acquisition Regulation Supplement (NFS) 1852.223-75, Major Breach of Safety or Security.

An official award fee determination fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be conducted semiannually in accordance with Kennedy Documented Procedure (KDP) KDP-KSC-P-2402, Award Fee Evaluation Process. The award amount and the award-fee determination methodology are unilateral decisions made solely at the discretion of the government. Each award fee period evaluation rating is discrete and final and the unearned award fee in any given period shall not be carried forward or "rolled-over" into subsequent award fee periods. The FDO's award fee determination is not subject to appeal under the Disputes Clause.

Within 30 calendar days following each evaluation period, the Contracting Officer's Technical Representative (COTR) will prepare a summary report on the evaluation of the contractor's performance under fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 based on government performance surveillance data, AoEs, and contractor furnished data (if provided). A copy of the evaluation report shall be provided the contractor. The contractor may, if desired, submit comments relative to the summary report to the COTR within 5 working days from receipt of the evaluation report. The contractor may also request to provide a presentation to the FDO and AFB on that period's performance.

The AFB will convene to review the award fee report, the COTR's award fee presentation and recommended score, and the contractor's self-assessment. After consideration of this data, the AFB will assist the FDO in the FDO's determination of the period's rating and an appropriate amount of earned award fee. The Contracting Officer (CO) shall normally be present during AFB deliberations. The FDO's final award fee determination for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be provided to the contractor and COTR within 45 calendar days after the end of the period being evaluated. Following notification of the fee determination, the CO will issue a modification to the contract identifying the amount of award fee earned and authorizing payment by the KSC "Accounts Payable" office to the contractor. The earned award fee, less any provisional payments of fee, shall be paid within 60 calendar days after the end of the evaluation period.

D. AWARD FEE PARTICIPANTS

The following organizational structure has been established in accordance with KDP-KSC-P-2402, Award Fee Evaluation Process, for administering the award fee provisions of fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 of the ELVIS contract:

1. Fee Determination Official (FDO)

The FDO is the person responsible for the final determination of the award fee score and amount of fee earned for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. The FDO signs the award fee determination letter for the evaluation period specifying the amount of award fee determined, as well as, the basis for that determination. The FDO is the Chairperson of the AFB which is comprised of key staff members. The FDO for the ELVIS Contract is the Deputy Director of NASA's Kennedy Space Center. The FDO may designate an alternate FDO when appropriate.

2. Award Fee Board (AFB)

The AFB is the advising board responsible for the semiannual review and evaluation of the contractor's overall performance. The AFB reviews and considers the summary evaluation report prepared by the COTR and the contractor's self-assessment and assists the FDO in making the FDO's unilateral award fee determination. Changes to the Board require the approval of the FDO. Ex-officio members of the Board include the CO, COTR, and legal counsel.

3. Contracting Officer (CO)

The CO is the individual responsible for the overall administration of the ELVIS contract. The CO is responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationship. The ELVIS CO reviews, approves, and transmits the AoE letter to the contractor, AFB members, and the technical performance monitors at least 30 days prior to the start of each award fee period. The CO advises the AFB on award fee rating standards, policies and procedures; attends all AFB meetings as a non-voting member; modifies the contract to reflect the contractor's earned award fee and prepares any FDO approved changes to the award fee plan.

4. Contracting Officer's Technical Representative (COTR)

The COTR is the individual, delegated by the CO, with the responsibility for monitoring the contractor's technical performance and delivery of the final products and/or services under fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. The COTR also serves as the performance evaluation coordinator and focal point for the accumulation and development of all award fee evaluation reports, reviews, and presentations to include presenting a recommended score to the AFB and FDO. The COTR reviews and validates technical inputs received from the performance evaluation monitors and provides written documentation concerning performance problems to the

contracting officer for resolution. The COTR submits a preliminary award fee report summary for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 to the contractor and asks if the contractor desires to make a self assessment presentation to the AFB. The COTR includes, in the award fee package provided to the AFB, contractor responses to the government's preliminary award fee report summary. The scheduling and coordinating of AFB meetings is performed by the COTR.

The COTR is responsible for requesting, reviewing, and consolidating candidate AoEs for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 from the performance evaluation monitors, program managers, and contracting officer. The Launch Services Program Manager recommends for CO approval the AoE for the evaluation period and forwards them to the COTR. The COTR prepares the transmittal letter of the AoEs and forwards it to the contracting officer for signature at least 45 days prior to the start of the award fee period. The CO reviews, approves, and transmits the AoEs to the contractor, performance evaluation monitors, and award fee board members at least 30 days prior to the start of the award fee period.

5. Performance Evaluation Monitors

Performance evaluation monitors are technical specialists intimately familiar with specific assigned areas of responsibility. Appointed by the Launch Services Program Manager, performance evaluation monitors provide continuous evaluation of the contractor's performance under fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 in accordance with the contract performance surveillance and award fee plans. They meet regularly with the appropriate contractor management representatives to discuss performance issues and promptly identify, in writing, performance problems to the COTR. Performance evaluation monitors also develop and submit candidate AoEs to the COTR. Performance evaluation monitors may be changed at any time without approval of the FDO.

SECTION III. CHANGES IN PLAN COVERAGE

The award fee plan may be revised unilaterally by the government prior to the beginning of any evaluation period as long as the CO notifies the contractor, in writing, of any such changes 30 days prior to the start of the relevant evaluation period. Any changes occurring within the evaluation period shall require mutual agreement of the government and contractor.

A. AWARD FEE BOARD (AFB) MEMBERS

Board Title	Code	Position
Chair (FDO):	AA-A	Deputy Center Director
Members:	VA	Manager, Launch Services Program
	OP	Director of Procurement
	SA	Deputy Director, Safety and Mission Assurance
	GG	Chief Financial Officer
	IT	Director, Information Techology and Communication Services
	AJ	Manager, Office of Diversity and Equal Opportunity
Ex-Officio Members:	CC	Chief Counsel
	OP	Contracting Officer
	OP	Award Fee Board Recorder
	VA	Contracting Officer's Technical Representative

B. AWARD FEE PERFORMANCE EVALUATION FACTORS

The contractor shall be evaluated in the areas of (1) technical performance and program management, (2) Contract Administration/Cost Control, and (3) Areas of Emphasis for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. Though all factors are weighted equally in importance, the significance of the rating received for one factor could have a substantial affect on the overall rating.

1. Technical Performance and Program Management Factor

The evaluation criteria outlined below have been established to measure the contractor's performance and assist the government in the award fee evaluation process for fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. Though both subfactors are weighted equally in importance, the significance of the rating received for one subfactor could have a substantial affect on the overall factor rating.

Subfactor 1A - Technical/Schedule Performance

The "Technical/Schedule Performance" subfactor will evaluate the contractor's accomplishments relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. The areas to be evaluated include:

The contractor's ability to effectively accommodate customer launch site requirements in mission planning activities (as evidenced by the low volume of late requirements identified after customer arrival at the launch site) relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The contractor's ability to resolve unexpected problems, including the contractor's ability to continue to meet milestones when unplanned customer requirements are identified relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The effectiveness of the contractor's overall safety program relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated. Among the areas to be reviewed are: the contractor's emphasis on safety, safety training, mishap reporting, actions taken to prevent accidents or safety violations, recognition of

safety hazards/violations and remedial actions, and timeliness and adequacy of required safety documentation. An overall fee determination of zero will be made for any evaluation period when there is a major breach of safety directly related to the work on the contract. A major breach of safety, as defined in NFS 1852.223-75, "Major Breach of Safety or Security," "is an act or omission of the contractor that consists of an accident, incident, or exposure resulting in a fatality or mission failure; or in damage to equipment or property equal to or greater than $1 million; or in any "willful" or "repeat" violation cited by the Occupational Safety and Health Administration (OSHA) or by a state agency operating under an OSHA approved plan."

The effectiveness of the contractor's overall security program relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated. An overall fee determination of zero shall be made for any evaluation period when there is a major breach of security that is directly related to the work on the contract. A major breach of security may occur on or off government installations. A major breach of security, as defined in NFS 1852.223-75, "Major Breach of Safety or Security," "is an act or omission by the contractor that results in compromise of classified information, illegal technology transfer, workplace violence resulting in criminal conviction, sabotage, compromise or denial of information technology services, equipment or property damage from vandalism greater than $250,000, or theft greater than $250,000."

The contractor's provision of appropriate quantities and skill levels for effective and efficient performance based services relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The contractor's responsiveness in correcting facility and facility system problems occurring during mission processing activities relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The contractor's provision of sound engineering and technical judgment showing initiative in finding areas of concern that could potentially impact mission success relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated. This includes the contractor's ability to provide proactive recommendations of solutions to identified mission analysis, integration, and/or operations problems.

The contractor's provision of sound quality assurance techniques that identify problems, provide proper levels of insight, and reduce risk to ensure mission success relative to

fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The effectiveness of the contractor's IT security program including cooperative efforts where more than one contractor (including subcontractors) share responsibilities for systems and data relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The management and effectiveness of the contractor's health program relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The management and effectiveness of the contractor's export control program relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The management and effectiveness of the contractor's environmental management program relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

Subfactor 1B - Program Management

The "Program Management" subfactor will evaluate the contractor's overall management of the program management areas covering fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. The areas to be evaluated include:

The contractor's overall ability and effectiveness in responding to program management issues, identifying and correcting problems, timeliness and accuracy of submitted data, and monitoring activities and schedules relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The contractor's management of the broad range of program functions required at multiple geographical locations relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated. This includes an examination of the consistency across all work sites of contractor responsiveness to

events that require prompt action for resolution. The contractor's provision of staffing at appropriate quantities and skill levels to support effective and efficient performance based services relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The contractor's effectiveness in managing subcontracts as they relate to technical performance and program management relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

2. Contract Administration/Cost Control Factor

The evaluation criteria outlined below have been established to measure the contractor's performance and assist the government in the award fee evaluation process relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. Though both subfactors are weighted equally in importance, the significance of the rating received for one subfactor could have a substantial affect on the overall factor rating.

Subfactor 2A – Contract Administration/Business Performance

The "Contract Administration" subfactor evaluates the contractor's performance in establishing, implementing, and carrying out meaningful business management policies to comply with contract requirements and prudent business practices relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. The areas to be evaluated include:

The contractor's overall compliance with the terms and conditions of the contract, the quality and timeliness of all reporting requirements, and the contractor's responsiveness to inquiries from the CO relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The adequacy of the contractor's business and management systems to include the contractor's labor relations activities, equal opportunity employment practices, the contractor's property and supply management system, the contractor's purchasing system, contractor/subcontractor compensation packages, subcontracting activities, accounting system, and estimating system relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated.

The contractor's responsiveness to requests for contract change proposals and task plans relative to fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011 will be evaluated to include the contractor's submission of timely, complete proposals and cooperation in negotiating the change and/or task plan.

The contractor's accurate segregation, accumulation, and reporting of costs for each element of cost for cost reimbursable CLINs will be evaluated.

The contractor's effectiveness in segregating the financial activity and resources for cost reimbursable and fixed price portions of the contract will be examined.

Subfactor 2B - Cost Control (Applicable Only to Cost-Reimbursable CLINs)

The "Cost Control" subfactor evaluates the contractor's performance against the negotiated estimated cost of the cost-reimbursable CLINs of the contract (CLINs 1011, 2011, and 3011). The fixed-price CLINs are not evaluated for cost control. The Government will initially perform a comparative analysis of actual accrued contract costs, as provided in the contractor's NASA Form 533 reports, versus the negotiated estimated cost for the cost-reimbursable CLINs.

The government recognizes that contract costs may increase for reasons outside the contractor's control and will take such situations into consideration when evaluating contractor cost control. Adjustments for these situations, as well as, for the value of undefinitized change orders may be applied to the initial comparative analysis.

Emphasis on cost control will be balanced against other performance requirement objectives. The contractor is not incentivized to pursue cost control to the point that overall performance is significantly degraded. For example, incentivizing an underrun that results in direct negative impacts on technical performance, safety, or other critical contract objectives is both undesirable and counterproductive. Therefore, evaluation of cost control will conform to the following guidelines:

Normally, the contractor will be given a score of 0 for cost control when there is a significant overrun within its control. However, the contractor may receive higher scores for cost control if the overrun is insignificant. Scores should decrease sharply as the size of the overrun increases. In any evaluation of contractor overrun performance, the Government will consider the reasons for the overrun and assess the extent and effectiveness of the contractor's efforts to control or mitigate the overrun.

The contractor will normally be rewarded for an underrun within its control, up to the maximum score allocated for cost control, provided the average numerical rating for all other award fee evaluation factors is 81 or greater. An underrun will be rewarded as if

the contractor has met the negotiated estimated cost of the contract when the average numerical rating for all other factors is less than 81 but greater than 60.

The contractor will be rewarded for meeting the negotiated estimated cost of the contract, but not to the maximum score allocated for cost control, to the degree that the contractor has prudently managed costs while meeting contract requirements. No award will be given in this circumstance unless the average numerical rating for all other award fee evaluation factors is 61 or greater.

3. Areas of Emphasis Factor (AoEs)

AoEs capturing areas of contract performance that are of particular importance and deserving of special attention during the award fee evaluation period may be established and evaluated for each evaluation period. AoEs, if established, will be communicated to the contractor by the CO at least 30 days prior to the start of each award fee evaluation period. If the Contractor is not provided with this notification within the prescribed time-period, then the Government will have effectively waived its right to evaluate the AoE when determining the contractor's award fee. Upon this occurrence, only the performance evaluation factors of the existing plan will be evaluated, unless the contractor agrees, in writing, to acceptance of the late AoE notification.

C. NUMERICAL RANGES AND ADJECTIVE DEFINITIONS

In accordance with NFS 1816.405-275, Award Fee Evaluation Scoring, the following standard adjectival ratings and the associated numerical scores shall be used to define the various levels of performance under the contract.

ADJECTIVE RATING	RANGE OF POINTS	DESCRIPTION
Excellent	100 - 91	Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance.
Very Good	90 - 81	Very effective performance, fully responsive to contract requirements; contract requirements accomplished in a timely, efficient and economical manner for the most part; only minor deficiencies.
Good	80 - 71	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.
Satisfactory	70 - 61	Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance.
Poor/Unsatisfactory	60 - 0	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas, which adversely affect overall performance.

D. SCORE CONVERSION CHART

Award Fee Score		Percentage (%) of Available Fee
100	Excellent	100.0
99		99.0
98		98.0
97		97.0
96		96.0
95		95.0
94		94.0
93		93.0
92		92.0
91		91.0
90	Very Good	90.0
89		89.0
88		88.0
87		87.0
86		86.0
85		85.0
84		84.0
83		83.0
82		82.0
81		81.0
80	Good	80.0
79		79.0
78		78.0
77		77.0
76		76.0
75		75.0
74		74.0
73		73.0
72		72.0
71		71.0
70	Satisfactory	70.0
69		69.0
68		68.0
67		67.0
66		66.0
65		65.0
64		64.0
63		63.0
62		62.0
61		61.0
60 and below	Poor/Unsatisfactory	0.0

NOTE: The award fee scale is a linear scale between a rating of 61 and 100; with the percentage of award fee earned being the same as the performance rating. A performance rating below 61 will result in no award fee earned for that semiannual period. The award fee earned is determined by applying the numerical score percentage for the period to the award fee pool. (Example: a score of 85 yields an award fee of 85% of the award fee pool.) The award fee score shall be assigned in whole numbers (i.e., no decimals).

Revised: July 2005

AWARD FEE PERFORMANCE EVALUATION PLAN

FOR

SAFETY AND MISSION ASSURANCE SUPPORT

UNDER THE

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT (ELVIS)

CONTRACT NAS10-02026

KENNEDY SPACE CENTER, FLORIDA 32899

AWARD FEE PERFORMANCE EVALUATION PLAN

FOR

SAFETY AND MISSION ASSURANCE SUPPORT

UNDER THE

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT (ELVIS)

CONTRACT NAS10-02026

SIGNATURE PAGE

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TABLE OF CONTENTS

SECTION I. INTRODUCTION

The NASA Expendable Launch Vehicle (ELV) Program mission is to provide launch service excellence, expertise, and leadership to assure mission success for its customers. The Expendable Launch Vehicle Integrated Support (ELVIS) contract provides the ELV Program with launch support services that are safe, reliable, and affordable. Services provided include the management, operation, maintenance, and sustaining engineering of the NASA ELV telemetry stations located at Cape Canaveral Air Force Station (CCAFS) and Vandenberg Air Force Base (VAFB); engineering services/studies and technical services for various ground/flight ELV systems and payloads and; management, operation, maintenance and sustaining engineering of the assigned NASA facilities, systems, and equipment at VAFB. The ELVIS contractor is required to implement a safety, health, and mission assurance program that provides a safe and healthy work environment, minimizes program risk, and maximizes mission success.

The ELVIS contract contains two separate award fee performance evaluation plans: one covering the fixed-price award fee Safety and Mission Assurance (S&MA) contract line item numbers (CLINs) 1003, 2003, and 3003 and one covering fixed-price award fee CLINs 1001-1002, 1004-1008, 1012, 2002, 2004-2008, 2012, 3002, 3004-3008, and 3012 and cost-reimbursable award fee CLINs 1011, 2011, and 3011. (Task orders issued for out-of-core hour support under CLINs 1008, 2008 and 3008 supplement and are in addition to the in-core services furnished under the contract's fixed-price award fee CLINs and, for award fee purposes, shall be evaluated as part of the applicable fixed-price in-core award fee CLIN.) This award fee performance evaluation plan defines the process by which the government will encourage and reward the contractor for safe, high quality, and timely performance in fulfilling the requirements set forth in the S&MA CLINs 1003, 2003, and 3003 of the ELVIS contract.

This plan describes the evaluation criteria upon which the contractor will be evaluated; the award fee process and method for determining the earned award fee, the process for changing plan coverage, and the organizational structure established for administering the S&MA award fee provisions of the ELVIS contract. The award fee evaluation process is structured to provide maximum flexibility for changes in management, business, and performance emphasis.

SECTION II. AWARD FEE EVALUATION

A. GENERAL

The evaluation of the Contractor's S&MA award fee will be based upon a subjective assessment of how well the contractor "meets" or "exceeds" the applicable award fee performance evaluation factors set forth in this award fee plan. The final determination of the award fee amount payable to the contractor will be made by the NASA/KSC Fee Determination Official (FDO) on a semi-annual basis, in accordance with the timetables outlined in the ELVIS contract. The FDO will make this determination by judgmentally

determining and measuring the contractor's performance against specifically designated award fee performance evaluation criteria and the recommendations provided by the Award Fee Board (AFB). Only the award fee performance evaluation factors set forth in the performance evaluation plan shall be used to determine award fee scores.

The total award fee pool for the S&MA effort will be allotted to CLINs 1003, 2003, and 3003 of the ELVIS contract with a portion of the total available award fee allocated to each of the evaluation periods as delineated in S&MA Fixed-Price and Award Fee Tables 3C, 3E, and 3G of the ELVIS contract. The fixed price and available award fee pools are subject to equitable adjustments arising from requirement changes captured in contract modifications.

Even though the contractor's performance will be continually monitored, it will be formally assessed at the mid-point of each evaluation period. The contractor will be provided a report of the mid-point assessment to include identification of S&MA performance levels that require remedial attention or that may adversely affect final award fee ratings.

B. EVALUATION CRITERIA

The award fee earned for the S&MA effort will be based upon a subjective evaluation of contractor performance against the S&MA award fee performance evaluation factors identified in Section IV, Enclosure B of this plan. The factors include an assessment of adherence to S&MA contract technical and schedule requirements, S&MA program management, S&MA contract administration/business performance, and S&MA areas of emphasis (AoEs).

C. AWARD FEE PROCESS

The award fee process is intended to encourage and reward the contractor for safe, high quality, and timely performance in fulfilling the S&MA requirements set forth in the contract. The contractor can earn an award fee from a minimum of zero dollars to the maximum available award fee for each assigned evaluation period of the contract, in accordance with contract S&MA Contract Tables B-1a, B-2a and B-3a. An overall S&MA award fee determination of zero shall be made for any evaluation period when there is a major breach of safety or security as defined in NASA Federal Acquisition Regulation Supplement (NFS) 1852.223-75, Major Breach of Safety or Security.

An official S&MA award fee determination will be conducted semiannually in accordance with Kennedy Documented Procedure (KDP) KDP-KSC-P-2402, Award Fee Evaluation Process. The award amount and the award-fee determination methodology are unilateral decisions made solely at the discretion of the government. Each award fee period evaluation rating is discrete and final and the unearned award fee in any given period shall not be

carried forward or "rolled-over" into subsequent award fee periods. The FDO's award fee determination is not subject to appeal under the Disputes Clause.

Within 30 calendar days following each evaluation period, the Performance Evaluation Coordinator (PEC) will prepare a summary report on the evaluation of the contractor's S&MA performance based on government performance surveillance data, AoEs, and contractor furnished data (if provided). A copy of the evaluation report shall be provided the contractor. The contractor may, if desired, submit comments relative to the summary report to the PEC within 5 working days from receipt of the evaluation report. The contractor may also request to provide a presentation to the FDO and AFB on that period's performance.

The S&MA AFB will convene to review the award fee report, the PEC's award fee presentation and recommended score, and the contractor's self-assessment. After consideration of this data, the AFB will assist the FDO in the FDO's determination of the period's rating and an appropriate amount of earned award fee. The Contracting Officer (CO) shall normally be present during AFB deliberations. The FDO's final award fee determination will be provided to the contractor and PEC within 45 calendar days after the end of the period being evaluated. Following notification of the fee determination, the CO will issue a modification to the contract identifying the amount of award fee earned and authorizing payment by the KSC "Accounts Payable" office to the contractor. The earned award fee, less any provisional payments of fee, shall be paid within 60 calendar days after the end of the evaluation period.

D. AWARD FEE PARTICIPANTS

The following organizational structure has been established in accordance with KDP-KSC-P-2402, Award Fee Evaluation Process, for administering the award fee provisions for S&MA CLINs 1003, 2003, and 3003 of the ELVIS contract:

1. Fee Determination Official (FDO)

The FDO is the person responsible for the final determination of the S&MA award fee score and amount of fee earned. The FDO signs the award fee determination letter for the evaluation period specifying the amount of award fee determined as well as the basis for that determination. The FDO is the Chairperson of the AFB which is comprised of key staff members. The FDO for the ELVIS Contract is the Deputy Director of NASA's Kennedy Space Center. The FDO may designate an alternate FDO when appropriate.

2. Award Fee Board (AFB)

The AFB is the advising board responsible for the semiannual review and evaluation of the contractor's overall performance. The AFB reviews and considers the summary evaluation report prepared by the PEC and the contractor's self-assessment and assists the FDO in making the FDO's unilateral award fee determination. Changes to the Board require the approval of the FDO. Ex-officio members of the Board include the CO, PEC, Contracting Officer's Technical Representative (COTR), and legal counsel.

3. Contracting Officer (CO)

The CO is the individual responsible for the overall administration of the ELVIS contract. The CO is responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationship. The ELVIS CO reviews, approves, and transmits the S&MA AoE letter to the contractor and AFB members at least 30 days prior to the start of each award fee period. The CO advises the AFB on award fee rating standards, policies and procedures; attends all AFB meetings as an ex-officio member; modifies the contract to reflect the contractor's earned award fee, and prepares any FDO approved changes to the S&MA award fee plan.

4. Performance Evaluation Coordinator (PEC)

The PEC is the individual within the Safety and Mission Assurance Directorate serving as the focal point for the accumulation and development of all award fee evaluation reports, reviews, and presentations to include presenting a recommended score to the AFB and FDO. The PEC submits a preliminary award fee report summary to the contractor and asks if the contractor desires to make a self assessment presentation to the AFB. The PEC includes, in the award fee package provided to the AFB, contractor responses to the government's preliminary award fee report summary. The scheduling and coordinating of AFB meetings is performed by the PEC.

The PEC is responsible for requesting, reviewing, and consolidating candidate S&MA AoEs from the COTR, performance evaluation monitors, program managers, and CO. The Deputy Director, Safety and Mission Assurance Directorate, recommends for CO approval, the AoEs for the evaluation period and forwards them to the PEC. The PEC prepares the transmittal letter of the recommended AoEs and forwards it to the CO for signature at least 45 days prior to the start of the award fee period. The CO reviews, approves, and transmits the AoEs to the contractor, performance evaluation monitors, and AFB members at least 30 days prior to the start of the award fee period.

5. Contracting Officer's Technical Representative (COTR)

The S&MA COTR is the individual, delegated by the CO, with the responsibility for monitoring the contractor's technical performance and delivery of the S&MA final products and/or services under the contract. The S&MA COTR reviews and validates technical inputs received from the performance evaluation monitors and provides written documentation concerning S&MA performance problems to the CO for resolution. The S&MA COTR reviews preliminary award fee reports with the PEC.

6. Performance Evaluation Monitors

Performance evaluation monitors are technical specialists intimately familiar with specific assigned areas of responsibility. Appointed by the S&MA Deputy Director, performance evaluation monitors provide continuous evaluation of the contractor's performance in accordance with the contract performance surveillance and award fee plans. They meet regularly with the appropriate contractor management representatives to discuss S&MA performance issues and promptly identify, in writing, performance problems to the COTR. Performance evaluation monitors also develop and submit candidate S&MA AoEs to the COTR. Performance evaluation monitors may be changed at any time without approval of the FDO.

SECTION III. CHANGES IN PLAN COVERAGE

The award fee plan may be revised unilaterally by the government prior to the beginning of any evaluation period as long as the CO notifies the contractor, in writing, of any such changes 30 days prior to the start of the relevant evaluation period. Any changes occurring within the evaluation period shall require mutual agreement of the government and contractor.

IV. Enclosures

A. AWARD FEE BOARD (AFB) MEMBERS

Board Title	Code	Position
Chair (FDO):	AA-A	Deputy Center Director
Members:	SA	Deputy Director, Safety and Mission Assurance
	OP	Director of Procurement
	GG	Chief Financial Officer
	IT	Director, Information Technology and Communications Services
	AJ	Manager, Office of Diversity and Equal Opportunity
	VA	Manager, Launch Services Program
Ex-Officio Members:	CC	Chief Counsel
	OP	Contracting Officer
	OP	Award Fee Board Recorder
	SA	Contracting Officer's Technical Representative
	SA	Performance Evaluation Coordinator

B. S&MA AWARD FEE PERFORMANCE EVALUATION FACTORS

The contractor will be evaluated in the areas of (1) S&MA technical performance and program management, (2) S&MA contract administration/business performance, and (3) S&MA areas of emphasis. Though all three factors are normally weighted equally in importance, the significance of the rating received for one factor could have a substantial affect on the overall rating.

1. S&MA Technical Performance and Program Management Factor

The evaluation criteria outlined below have been established to measure the contractor's S&MA performance and assist the government in the S&MA award fee evaluation process. Though both subfactors are weighted equally in importance, the significance of the rating received for one subfactor could have a substantial affect on the overall factor rating.

Subfactor 1A - S&MA Technical/Schedule Performance

The "Technical/Schedule Performance" subfactor will evaluate the contractor's accomplishments in S&MA CLINs 1003, 2003, and 3003. The areas to be evaluated include:

The contractor's ability to effectively plan and execute S&MA support requirements will be evaluated.

The contractor's ability to resolve unexpected S&MA problems and unanticipated S&MA support, including the contractor's ability to continue to meet milestones when unplanned S&MA support requirements are identified will be evaluated.

The effectiveness of the contractor's overall safety program, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated. Among the areas to be reviewed are: the contractor's emphasis on safety, safety training, mishap reporting, actions taken to prevent accidents or safety violations, recognition of safety hazards/violations and remedial actions, and timeliness and adequacy of required safety documentation. An overall fee determination of zero will be made for any evaluation period when there is a major breach of safety directly related to the work on the contract. A major breach of safety, as defined in NFS 1852.223-75, "Major Breach of Safety or Security," "is an act or omission of the contractor that consists of an accident, incident, or exposure resulting in a fatality or mission failure; or in damage to equipment or property equal to or greater than $1 million; or in any "willful" or "repeat" violation cited by the Occupational Safety and Health Administration (OSHA) or by a state agency operating under an OSHA approved plan."

The effectiveness of the contractor's overall security program, as related to CLINs 1003, 2003, and 3003, will be evaluated. An overall fee determination of zero will be made for any evaluation period when there is a major breach of security that is directly related to the work on the contract. A major breach of security may occur on or off government installations. A major breach of security, as defined in NFS 1852.223-75, "Major Breach of Safety or Security," "is an act or omission by the contractor that results in compromise of classified information, illegal technology transfer, workplace violence resulting in criminal conviction, sabotage, compromise or denial of information technology services, equipment or property damage from vandalism greater than $250,000, or theft greater than $250,000."

The contractor's provision of appropriate quantities and skill levels for effective and efficient performance based services, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated.

The contractor's responsiveness in correcting problems occurring during mission support activities, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated.

The contractor's provision of sound engineering and technical judgment showing initiative in finding areas of concern that could potentially impact S&MA requirements, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated. This includes the contractor's ability to provide proactive recommendations of solutions to identified S&MA support activities.

The contractor's provision of sound quality assurance techniques that identify problems, provide proper levels of insight, and reduce risk to ensure mission success, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated.

The effectiveness of the contractor's information technology (IT) security program, as related to S&MA CLINs 1003, 2003, and 3003, including cooperative efforts where more than one contractor (including subcontractors) share responsibilities for systems and data will be evaluated.

The management and effectiveness of the contractor's health program, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated.

The management and effectiveness of the contractor's export control program, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated.

The management and effectiveness of the contractor's environmental management program, as related to S&MA CLINs 1003, 2003, and 3003, will be evaluated.

Subfactor 1B - S&MA Program Management

The "Program Management" subfactor will evaluate the contractor's overall management of the program management areas, as related to S&MA CLINs 1003, 2003, and 3003 of the contract. The areas to be evaluated include:

The contractor's overall ability and effectiveness in responding to program management issues, identifying and correcting problems, timeliness and accuracy of submitted data, and monitoring activities and schedules, as related to S&MA CLINs 1003, 2003, and 3003 will be evaluated. The overall evaluation of program management functions performed to meet all ELVIS contract requirements will be evaluated under the Overall ELVIS Award Fee Plan (Attachment J-6a).

The contractor's management of the broad range of program functions required at multiple geographical locations, as related to S&MA CLINs 1003, 2003, and 3003 will be evaluated. This includes an examination of the consistency across all work sites of contractor responsiveness to events that require prompt action for resolution.

The contractor's provision of staffing at appropriate quantities and skill levels to support effective and efficient performance based services, as related to S&MA CLINs 1003, 2003, and 3003 will be evaluated.

The contractor's effectiveness in managing subcontracts as they relate to technical performance and program management, as related to S&MA CLINs 1003, 2003, and 3003 will be evaluated.

2. S&MA Contract Administration/Business Performance Factor

The "Contract Administration" subfactor evaluates the contractor's performance in establishing, implementing, and carrying out meaningful business management policies to comply with contract requirements and prudent business practices as related to S&MA CLINs 1003, 2003, and 3003. The areas to be evaluated include:

The contractor's overall compliance with the terms and conditions of the contract, the quality and timeliness of all reporting requirements, and the contractor's responsiveness to inquiries from the CO, as related to CLINs 1003, 2003, and 3003, will be evaluated.

The adequacy of the contractor's business and management systems to include the contractor's labor relations activities, equal opportunity employment practices, the contractor's property and supply management system, the contractor's purchasing system, contractor/subcontractor compensation packages, subcontracting activities, accounting system, and estimating system, as related to CLINs 1003, 2003, and 3003, will be evaluated.

The contractor's responsiveness to requests for contract change proposals and task plans will be evaluated to include the contractor's submission of timely, complete proposals and cooperation in negotiating the change and/or task plan, as related to CLINs 1003, 2003, and 3003.

3. S&MA Areas of Emphasis Factor (AoEs)

AoEs capturing areas of contract performance that are of particular importance and deserving of special attention during the award fee evaluation period may be established and evaluated for each evaluation period. AoEs, if established, will be communicated to the contractor by the CO at least 30 days prior to the start of each award fee evaluation period. If the contractor is not provided with this notification within the prescribed time-period, then the government will have effectively waived its right to evaluate the AoE when determining the contractor's award fee. Upon this occurrence, only the performance evaluation factors of the existing plan will be evaluated, unless the contractor agrees, in writing, to acceptance of the late AoE notification.

C. NUMERICAL RANGES AND ADJECTIVE DEFINITIONS

In accordance with NFS 1816.405-275, Award Fee Evaluation Scoring, the following standard adjectival ratings and the associated numerical scores shall be used to define the various levels of performance under the contract.

ADJECTIVE RATING	RANGE OF POINTS	DESCRIPTION
Excellent	100 - 91	Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance.
Very Good	90 - 81	Very effective performance, fully responsive to contract requirements; contract requirements accomplished in a timely, efficient and economical manner for the most part; only minor deficiencies.
Good	80 - 71	Effective performance; fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.
Satisfactory	70 - 61	Meets or slightly exceeds minimum acceptable standards; adequate results; reportable deficiencies with identifiable, but not substantial, effects on overall performance.
Poor/Unsatisfactory	60 - 0	Does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; deficiencies in one or more areas, which adversely affect overall performance.

D. SCORE CONVERSION CHART

Award Fee Score		Percentage (%) of Available Fee
100	Excellent	100.0
99		99.0
98		98.0
97		97.0
96		96.0
95		95.0
94		94.0
93		93.0
92		92.0
91		91.0
90	Very Good	90.0
89		89.0
88		88.0
87		87.0
86		86.0
85		85.0
84		84.0
83		83.0
82		82.0
81		81.0
80	Good	80.0
79		79.0
78		78.0
77		77.0
76		76.0
75		75.0
74		74.0
73		73.0
72		72.0
71		71.0
70	Satisfactory	70.0
69		69.0
68		68.0
67		67.0
66		66.0
65		65.0
64		64.0
63		63.0
62		62.0
61		61.0
60 and below	Poor/Unsatisfactory	0.0

NOTE: The award fee scale is a linear scale between a rating of 61 and 100; with the percentage of award fee earned being the same as the performance rating. A performance rating below 61 will result in no award fee earned for that semiannual period. The award fee earned is determined by applying the numerical score percentage for the period to the award fee pool. (Example: a score of 85 yields an award fee of 85% of the award fee pool.) The award fee score shall be assigned in whole numbers (i.e., no decimals).

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Attachment J-7

DD Form 254

Contract Security Classification Specification

(7 pages)

DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION SPECIFICATION

(The requirements of the DoD Industrial Security Manual apply to all aspects of this effort.)

1. CLEARANCE AND SAFEGUARDING
a. FACILITY CLEARANCE REQUIRED: Secret
b. LEVEL OF SAFEGUARDING REQUIRED: NONE

2. THIS SPECIFICATION IS FOR: (X and complete as applicable)
- [X] a. PRIME CONTRACT NUMBER: NAS10-02006
- [ ] b. SUBCONTRACT NUMBER:
- [ ] c. SOLICITATION OR OTHER NUMBER: Due Date (YYMMDD):

3. THIS SPECIFICATION IS: (X and complete as applicable)
- [ ] a. ORIGINAL (Complete date in all cases): Date (YYMMDD): 020601
- [X] b. REVISED (Supersedes all previous specs): Revision No: 1 Date (YYMMDD): 040207
- [ ] c. FINAL (Complete item 5 in all cases): Date (YYMMDD):

4. IS THIS A FOLLOW-ON CONTRACT? [ ] YES [X] NO. If Yes, complete the following:
Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.

5. IS THIS A FINAL DD FORM 254? [ ] YES [ ] NO. If Yes, complete the following:
In response to the contractor's request dated _____, retention of the identified classified material is authorized for the period of _____.

6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)

a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
Analex Corporation 5904 Richmond Hwy, Suite 300 Alexandria, VA	0BBD6	Defense Security Service 1235 Jefferson Davis Hwy, Suite 209 Arlington, VA 22202

7. SUBCONTRACTOR

a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)

8. ACTUAL PERFORMANCE

a. LOCATION	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
KSC, CCAFS and Vandenberg, AFB, CA and Launch Services Provider Facilities		Defense Security Service 1201 Minuteman St. Bldg. 423, Rm. N110 PAFB, FL 32925

9. GENERAL IDENTIFICATION OF THIS PROCUREMENT
Provide integrated support services to the NASA Expendable Launch Vehicle (ELV) Program

10. THIS CONTRACT WILL REQUIRE ACCESS TO:	YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	[ ]	[X]	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	[X]	[ ]
b. RESTRICTED DATA	[X]	[ ]	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	[ ]	[X]
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION	[ ]	[X]	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	[ ]	[X]
d. FORMERLY RESTRICTED DATA	[ ]	[X]	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	[ ]	[X]
e. INTELLIGENCE INFORMATION:			e. PERFORM SERVICES ONLY	[ ]	[X]
(1) Sensitive Compartmented Information (SCI)	[ ]	[X]	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	[ ]	[X]
(2) Non-SCI	[ ]	[X]	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	[ ]	[X]
f. SPECIAL ACCESS INFORMATION	[ ]	[X]	h. REQUIRE A COMSEC ACCOUNT	[ ]	[X]
g. NATO INFORMATION	[ ]	[X]	i. HAVE TEMPEST REQUIREMENTS	[ ]	[X]
h. FOREIGN GOVERNMENT INFORMATION	[ ]	[X]	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	[ ]	[X]
i. LIMITED DISSEMINATION INFORMATION	[ ]	[X]	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	[ ]	[X]
j. FOR OFFICIAL USE ONLY INFORMATION	[X]	[ ]	l. OTHER (Specify)	[ ]	[X]
k. OTHER (Specify)	[ ]	[ ]			

DD Form 254, DEC 1999 — Previous editions are obsolete

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the National Industrial Security Program Operating Manual (NISPOM) or unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify)

John F. Kennedy Space Center
Attn: XA-A
Kennedy Space Center, FL 32899

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)* for review.
*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance needed for this effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.)

1. Security classification guidance will be provided under separate cover.
2. Storage capabilities at KSC and CCAFS will be provided by the government.

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.) ☒ Yes ☐ No

a long-term visitor to KSC the contractor will comply with all applicable KSC Security issuances.

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.) ☒ Yes ☐ No

Inspections of contractor activities at KSC are the responsibility of the NASA/KSC Protective Services and Safeguards Office
Inspections of contractor activities at VAFB, CA are the responsibility of the 30SFS SFAI VAFB, CA.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (Include Area Code)
Jo Ann Brophy	Industrial Security Officer	(321) 867-2468

d. ADDRESS (Include Zip Code)
NASA/KSC
Attn: TA-C
Kennedy Space Center, FL 32899

e. SIGNATURE

17. REQUIRED DISTRIBUTION

- ☒ a. CONTRACTOR
- ☐ b. SUBCONTRACTOR
- ☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
- ☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
- ☒ e. ADMINISTRATIVE CONTRACTING OFFICER
- ☒ f. OTHERS AS NECESSARY

DD Form 254 Reverse, DEC 1999

THIS SUPPLEMENT IS PART OF DD FORM 254 DATED: June 6, 2002
FOR NASA CONTRACT NUMBER: NAS10-02026

Block 13 (continued).

Item 10a: All classified items or items designated "Controlled Cryptographic Items" are identified in the "CLASSIFICATION" column. Downgrading/declassification instructions for each classified item are provided.

ELEMENTS OF INFORMATION	CLASSIFICATION	DOWNGRADING/ DECLASSIFICATION	REMARKS
a. Government furnished cryptographic keying material:	SECRET	OADR	May be designated "NOFORN." Keying material may not be declassified or downgraded without written approval.
b. Government furnished (1) Cryptographic equipment:			
Payload Specific Equip.	SECRET	OADR	
TSEC/KG-46	SECRET	OADR	
AN/CYZ-10	UNCLAS-CCI	N/A	
KOI-18/TSEC	UNCLAS-CCI	N/A	
KYK-13/TSEC	UNCLAS-CCI	N/A	
STU-III	UNCLAS-CCI	N/A	
(2) Other equipment: DES (various)	UNCLAS	N/A	These equipments may use unclassified keying material designated, "CRYPTO."
(3) Components:	UNCLAS-CCI	N/A	
(4) Elements:	UNCLAS-CCI	N/A	
(5) Parts kits:			Contractor will not hold classified parts kits or repair parts.
(6) Repair parts:			
c. Technical Documentation: (1) Repair and maintenance manuals:	SECRET	OADR	
(2) Operational instructions:	UNCLAS	N/A	
(3) Doctrine, policy, and guidance:	SECRET	OADR	
d. Equipment configuration:	UNCLAS	N/A	
e. Equipment design information:	Contractor is not authorized to design classified equipment or components under the terms of this contract.		
f. Contractor generated tooling/test equipment:	Contractor is not authorized to generate classified equipments under the terms of this contract.		
g. Contractor generated reports, correspondence, and technical data:	SECRET	OADR	
h. Other material (specify below):			

i. Item 10e2: Non-SCI intelligence information will be protected as prescribed in DCID 1/7, Security Controls on Disseminated Information, the NISPOM, and other provided guidance. The contractor is authorized access to classified Non-SCI intelligence information.

j. Item 10j: For Official Information Only information will be safeguarded in accordance with the Privacy Act Program and Freedom of Information Act.

k. Item 11a: Performance on this contract is restricted to NASA installations, Cape Canaveral Air Force Station (CCAS), Patrick Air Force Base (PAFB), and worldwide landing sites. Contractor is authorized to receive and generate classified material at only these locations. Contractor is authorized to transmit and exchange classified material between the cited installations pursuant to local governing directives. All classified material sent to or from Kennedy Space Center (except DCS items) will be forwarded via the KSC CMCC.

l. Item 11f: Performance on this contract outside the continental United States will be under direct supervision of NASA, John F. Kennedy Space Center.

m. Item 11j: OPSEC guidance will be provided by the Program Manager under separate cover.

n. Item 15: Industrial security inspections of contractor COMSEC activities are under the purview of the NASA KSC Protective Services Office and the NASA Central Office of Record (COR). Defense Security Service (DSS) is relieved of this responsibility.

o. The following classification guides (current and subsequent revisions) are made a part of this contract:

(1) STS Security Classification Guide

(2) Space Network Security Classification Guide

(3) NASA COMSEC Classification Guide

Additional classification guidance will be provided by the NASA KSC Security Classification Officer as necessary.

p. Classified information will not be entered into any ADP system, word processing system or other electrical system until that particular system has been approved by the appropriate Government official as meeting the requisite standards. A letter of such approval must be kept on file.

q. The NASA KSC COMSEC Officer, located in the NASA KSC Protective Services Office, will serve as the Contracting Officer's Technical Representative for all matters pertaining to COMSEC,

including COMSEC account administration and management, the Data Encryption Standard (DES), and Public Key Cryptography (PKC).

r. The contractor will comply with requirements of the following instructions. Distribution of documents 4 through 8 will be limited to those contractor personnel performing COMSEC responsibilities.

(1) NPG 1600.6A, NASA COMSEC Procedures and Guidelines.

(2) NPG 1620.1, NASA Security procedures and guidelines.

(3) KHB 1610.1B, KSC Security Handbook.

(4) NSTISSI 4005, Safeguarding Communications Security (COMSEC) Facilities and Materials.

(5) NTISSI 4004, Routine Destruction and Emergency Protection of COMSEC Material.

(6) NTISSI 3013, Operational Security Doctrine for the Secure Telephone Unit III (STU-III) Type 1 Terminal.

(7) NTISSI 3005, Safeguarding and Control of Data Encryption Standard (DES) Equipment and Associated Unclassified Communications Security Aids.

(8) Such other NASA KSC security handbooks, manuals, and management instructions, and all other attendant procedures, plans and instructions as may be applicable. Guidance concerning COMSEC applicability of any document may be obtained from the NASA KSC COMSEC Officer.

s. Classified material storage capability under this contract will be provided by NASA.

t. The Facility Security Officer, COMSEC Account Manager, and Alternate COMSEC Account Manager(s) must hold a final SECRET Government clearance.

u. COMSEC work areas must meet requirements of reference (1 and 4), paragraph (r), except all areas containing operational keying material marked "CRYPTO" must be designated "LIMITED AREAS" (identical to DOD "CLOSED AREAS") as defined in reference (3), paragraph (s). A list of individuals (Contractor and Government personnel) who access such limited areas will be maintained throughout the contract and be disposed of in accordance with the NASA KSC COMSEC Officer's instructions.

v. A copy of all COMSEC Material Reports (SF 153) received by or originated by the contractor's COMSEC account will be forwarded to the NASA COR.

w. The NASA KSC COMSEC Officer, or his/her designated represen-

tative, may conduct periodic audits, full or partial, to ensure compliance with references listed in paragraph (s).

x. All contractor personnel, prior to being granted access to classified COMSEC information and/or material under this contract, must be U. S. citizens granted a final security clearance by the Government. Foreign nationals, immigrant aliens, personnel holding interim SECRET clearances, or personnel holding a contractor granted CONFIDENTIAL clearance are not eligible for access to classified COMSEC information released or generated under this contract.

y. Reproduction of cryptographic keying material is STRICTLY PROHIBITED under this contract, without prior written approval from the KSC COMSEC Officer.

z. COMSEC keying material and other accountable COMSEC paper material will be destroyed by burning, pulping, pulverizing, or crosscut shredding in accordance with references (1) and (2), paragraph (s). All other accountable COMSEC material will be disposed of in accordance with instructions issued by the NASA KSC COMSEC Officer.

aa. The contractor will not divulge to any individual, company, organization, or other U.S. Government Department or Agency, any information, either classified or unclassified, pertaining to the design or capabilities of COMSEC systems or equipment being developed, produced, or provided as Government furnished equipment under this contract, or previous NASA contracts, without the prior approval of the NASA KSC COMSEC Officer.

ab. The contractor will not release classified COMSEC information to any activity or individual of the contractor's organization not directly engaged in providing services under this contract or to another contractor (including a subcontractor), Government agency, private individual, or organization without written consent of the NASA KSC COMSEC Officer.

ac. All UNCLASSIFIED COMSEC information will be restricted in dissemination to contractor/subcontractor and Government personnel involved in this contract. Any proposed release into the public domain of information pertaining to COMSEC activities on this contract will be forwarded to the NASA KSC COMSEC Officer for review and approval. The term "release" includes, but is not limited to, newspaper articles, company newsletters, contract announcements, advertisements, brochures, photographs, motion picture films, technical papers, and unclassified presentations on any phase of this contract at any forum.

ad. The contractor will make an immediate report to the NASA COR and the NASA KSC COMSEC Officer of any incident or violation of the requirements of these security provisions, irrespective of the contractor's judgment as to whether or not a compromise or possible compromise has occurred. A follow-up written report is

required and will be submitted to the NASA COR and the NASA KSC COMSEC Officer.

ae. Requests for clarification and guidance concerning security requirements under this contract will be directed to the NASA KSC COMSEC Officer.

Attachment J-8

Contractors Safety and Health Plan

(~~90~~ pages)

Expendable Launch Vehicle Integrated Support Contract (ELVIS)

Safety & Health Plan

01/09/06

Foreword

The purpose of this Safety and Health Plan is to ensure that Analex and NASA employees and equipment/missions are protected. Through implementation of this plan, employees will be provided with operating procedures for protecting themselves and equipment/missions for obtaining necessary safety training, the reporting of hazardous conditions, and with information concerning their rights and responsibilities relative to occupational safety and health. As Program Manager, I will take personal responsibility for ensuring that this plan, as approved by NASA, is implemented and that it is periodically reviewed and updated, as necessary, to ensure that the end result is a safe, productive work environment.

Charles W. Tyd
Analex Program Manager

1/09/06
Date

1.0 Management Leadership and Employee Participation

1.1 Policy

It is the policy and philosophy of the Analex Team to take every reasonable precaution to protect the health and safety of our employees, customers, the public, and the environment. To this end, the Analex Team subscribes to the following in conducting its business activities:

- The majority of mishaps are preventable through implementation of effective safety and health control policies and practices integrated with the overall management of our business.
- Safety and health protection of employees takes precedence over productivity, it is good business, and it prevents human suffering.
- Employees will be trained to identify, evaluate and control safety, health and environmental hazards to protect themselves, other workers, and property. Following safety, health, and environmental policies and procedures is a requirement of employment.
- Every manager, team member, and/or employee is responsible for their safety and the safety of others in the workplace. Everyone is responsible for following the Contract Safety and Health Plan, policies, and procedures at all times.
- Management will audit/review safety performance and the working environment and take corrective action to ensure a safe working environment in compliance with company policies, goals and objectives.

1.2 Goals and Objectives

The goal of this safety plan and program is to provide a safe and healthy working environment for the employees working under the ELVIS Contract at all geographic locations. In addition, it is our objective to ensure KSC and the LSP Program excellence in safety and health by:

- Abiding by and where appropriate, assisting with, the implementation and development of KSC and NASA requirements for safety and health policies and processes.
- Supporting and assisting with KSC's efforts to meet OSHA's Voluntary Protection Program (VPP) Star worksite requirements.
- Supporting and implementing the annual safety and health goals and objectives established by KSC.

Specific, performance related, safety and health goals and objectives will be established by the Program Manager on an annual basis. We will assess our progress in attaining our goals and objectives through the use of metrics. The leading indicators (warning signs) and trailing indicators (results) used to metric may include: OSHA Injury Frequency and Severity rates; Property damage incidents and cost; Mishap/Close Call Reporting; Safety and Health training completion status; Inspection and audit completion and finding closure status; Hazard Analysis/Job Hazard Analysis completion status; Performance Evaluation Profile Results; Safety observations results; and VPP Element implementations assessments. These metrics support the assessment and reporting on the overall effectiveness of the Safety and Health program.

1.3 Management Leadership

The Analex Team believes that it is essential for our ELVIS managers to provide the visible management leadership that is essential to attain our Safety and Health Program goals and objectives. Responsibilities will be assigned in writing, in accordance with section 1.5, and expectations clearly communicated for safety and health performance for all Team personnel. This Safety and Health Plan is developed with clear, written safety policy, which is endorsed by the Program Manager. This will be communicated to all employees during safety committee meetings, all hands meetings, and as part of safety orientation training conducted for all employees. A safety policy specific for the Contract has been developed which reflects the beliefs and principles of our team. Progress towards our goals will be continuously measured, reviewed, and corrected, as necessary, at all Contract levels. Newly developed safety issues will be addressed through management and employee-led safety committees.

The Program Manager will have overall responsibility and accountability for the safety program. The Program Manager will direct the safety program through the Health & Safety Representative. The Health & Safety Representative will be responsible for the management of Contract safety reporting and day-to-day safety administration tasks. He/she will be a qualified safety professional and will assist with hazard identification/evaluation/control, procedure development and review, record keeping, and overall monitoring of the Contract safety program. Specific tasks to be assigned to this individual are detailed in section 1.5.

Managers will be ultimately responsible for the safety and health of their people, spaces, and equipment. The Health & Safety Representative is available as an advisor to all managers. Managers will solicit volunteers among their functions to serve as section Safety Committee Representatives to assist them within their respective areas with work area inspections, accident investigations, training, and other safety issues that may apply. These representatives will also serve to assist the Health & Safety Representative with the functions and Contract-wide safety activities.

1.4 Employee Involvement

All employees will be expected and strongly encouraged to participate in the Safety and Health Program. Employee participation ensures that individuals are involved in identifying hazards, recommending and monitoring hazard controls, and participating in the development, execution, and success of our program. Employees will be trained to allow them to productively participate in inspections, audits, surveys, and program reviews. We will ensure and encourage communication between managers and employees regarding safety issues by establishing an environment for open communications between managers and employees. Our employees will be authorized, encouraged, and empowered to stop work activities they believe present potentially serious safety or health hazards. We also believe that the off-the-job safety of our employees is a factor in their overall health and safety, and in the success of our safety and health program.

Employees will participate in our safety and health program by:

- Participating in safety and health audits
- Performing Job Safety Analysis, hazardous operations assessments, procedure assessments, operational readiness reviews
- Participating as members of the safety committee and sub-committees
- Participating in KSC, VAFB, and field site host safety committees
- Volunteering to plan and conduct the site level safety and health activities
- Participating in Mishap and Close Call investigations, provide input on hazard corrective action
- Providing safety and health input to our program and sharing safety information sources
- Identifying and communicating hazards
- Being encouraged by managers to develop creative themes and methods of communicating the message to employees regarding on and off the job safety.

Employee involvement starts with clearly defined employee responsibilities, which will be defined at the time of hire and are discussed in our safety policies and procedures. Another form of employee participation will be the employee management interface, as this encourages employee understanding and participation in the program. This will be fostered through the following:

- Employees will be encouraged to report hazards directly to their management.
- Employees will be encouraged to report hazards and mishaps free of concern of reprisal.
- Employees will be informed of their rights and responsibilities under OSHA.

1.5 Assignment of Responsibility

Managers, occupying positions of leadership and direct control over all ELVIS work activities, are a key element in complying with the safety and health program. Their most important responsibility is to set the example for employees assigned to them by demonstrating full support and compliance with safety policies and requirements. In addition, managers are responsible for ensuring that employees are trained in safe work practices, understand the physical and health hazards of assigned tasks, and are provided with and use proper protective equipment. They will monitor their areas continually for factors capable of causing mishaps and intervene to prevent them. Finally, managers are responsible for taking appropriate corrective and disciplinary actions when their employees violate safety rules. Management responsibilities to carry out the Safety and Health program are further outlined below.

1.5.1 Program Manager

- Appointment of an individual to serve as the Health & Safety Representative.
- Provide oversight for the development and implementation of Safety and Health programs within the Contract.
- Delineate and document safety and health responsibility and accountability of subordinates within the Contract.
- Ensure that adequate resources are provided to meet the needs of the Contract's Safety and Health program.

- Enforce Safety and Health policies and procedures and ensure compliance with applicable local, state, and federal safety and health regulations.
- Ensure that all employees receive training as required by this policy.
- Provide for all formal contacts with regulatory agencies and NASA.

1.5.2 Managers

- Actively participate in the implementation of the safety policy and conduct activities within their area in the manner that will prevent injury to personnel and damage to property.
- Control the design, engineering, condition, and use of equipment, facilities, processes, methods, and procedures to eliminate or control hazards and minimize work-related losses.
- Notify the Health & Safety Representative of hazardous operations.
- Ensure employees are trained.
- Coordinate the development of hazardous operation procedures with the safety manager and Health & Safety Representative.
- Ensure that assigned employees understand safety responsibilities, are trained in safe procedures for accomplishing assigned work, practice safe work habits, and use protective equipment or apparel as required.
- Maintain a clean and efficient area of operation, correct hazardous conditions and practices, investigate accidents and injuries, and make required reports within specified time limits.
- Review proposals for new and modified equipment, facilities, processes, methods, and procedures with the Health & Safety Representative prior to completing final plans.
- Conduct monthly inspections of responsible areas and operations.

1.5.3 Health & Safety Representative

Our Health & Safety Representative is a knowledgeable safety leader. Responsibilities include:

- Implement site-specific Safety and Health programs.
- Provide day-to-day oversight of Safety and Health programs.
- Conduct and document employee training.
- Act as the interface with any regulatory agency.
- Work with Site Safety Representatives and Program Manager to identify Safety and Health concerns and needs, as well as programs or actions to mitigate the concerns.
- Provide feedback to Program Manager concerning the status of the program.
- Maintain copies of all required forms.
- Take necessary action when unsafe conditions are found to exist, including Stop Work.
- Act as a Contract liaison between the Team and NASA/Site Representatives.
- Support ELVIS sites safety, health, environmental, and fire protection concerns and goals.
- Participate in NASA safety and health meetings

1.5.4 Company Physician

The majority of our Contract personnel will be located on-site and will be utilizing the KSC Clinic for occupational health and emergency medical services. Since Analex does not have an on-site company physician, the Program Manager and/or Health & Safety Representative will be the primary point of contact for communicating medical data from the KSC clinic to Corporate Management. For employees at other locations, the Program Manager and/or Health & Safety

Representative will be the point of contact to facilitate communication of medical data to Contract management.

1.5.5 Designated Safety Official

Our designated safety official is the Health & Safety Representative.

1.5.6 Employee Responsibilities

The success of a safety program is dependent on the attitudes and participation of the employees. Employees will take personal responsibility for their own safety and the safety of their fellow employees. Specifically employees will:

- Conduct their work in accordance with safety and health policies and procedures, as well as any job instructions received.
- Report to their immediate manager, safety representative, or Health & Safety Representative any safety and health concerns (hazards) associated with their activities as Analex Team employees.
- Promptly report all mishaps and occupational injuries and illnesses as directed by procedures.
- Participate with safety and health personnel during inspections, surveys, and investigations.
- Utilize protective equipment (for example, safety glasses, respirators, and machine guards) when prescribed and/or required by standards, good work practice, or when directed by management.
- Be an active participant in ensuring the safety of fellow employees, hardware, and facilities.

1.5.7 Contract Safety Committee

An employee safety committee will be formed to foster employee involvement in the safety and health program. Committee meetings will be held monthly. An agenda will be published beforehand and minutes will be generated for electronic distribution to all personnel. Additionally, the minutes will be posted to the Safety Section of the LSP Portal so that it may be viewed by any employee. This system will also contain other safety information for employee review, such as audit results, accident trends, and injury statistics.

The committee will be formulated to assess the safety status of the Contract, to discuss safety alerts, Close Calls, hazardous conditions, or safety issues that have been received or reported. When required, committee members will participate in Incident Investigation. Another role of the committee will be to provide a communication forum for safety and health information through all echelons of the organization. Committee members will play a critical role in discussing employee issues, as well as disseminating safety and health information through their respective groups.

A volunteer will chair the Committee. Committee membership will include:

- Program Manager (Champion)
- Committee Chairperson
- Committee Secretary
- Safety Representatives from each Technical & Area Manager on the Analex Team
- Safety representatives from field sites (via telecon)

- Sub Committee Chairpersons (if required)

1.6 Provision of Authority

It is the policy of the Analex Team to comply with all applicable safety and health regulatory requirements. This Safety & Health Plan is therefore designed to be fully consistent with the NASA KSC Safety Program as defined by KNPR 8720.1, KSC Reliability, Maintainability and Quality Assurance Procedural Requirements, and KNPR 1840.19, KSC Industrial Hygiene Program. We will also ensure we are in compliance with VAFB and Launch Service Provider field site requirements. Our Plan will also meet and/or exceed all KSC, NASA, OSHA, Environmental Protection Agency, and other Federal, State, and local regulations to include, but not be limited to, the following:

- KNPR 8715.3, KSC Safety Practices Handbook
- NPD 8700.1 NASA Policy for Safety and Mission Success
- FSPCMAN 91-710-V1-V7 Range Safety User Requirements Manual
- KNPD 1800.2, KSC Hazard Communication Program
- NPR 8621.1, NASA Procedural Requirements for Mishap Reporting, Investigating, and
- Recordkeeping
- KNPR 1870.1, KSC Sanitation Program
- KNPD 8500.1, KSC Environmental Management
- JHB 2000, Consolidated Comprehensive Emergency Management Plan (CCEMP)
- KNPR 1840.19, KSC Industrial Hygiene Program
- Federal Law as recorded in 29 CFR 1910 and 1926, and 40 CFR 1 through 799, Environmental Protection Rules

This plan will be periodically reviewed, as necessary, but at least on an annual basis, to ensure that changes in federal, state, local, KSC, VAFB, or field site regulations are reflected within the Contract's programs, policies, and procedures. This will be a responsibility of the Health & Safety Representative and Program Manager. Revisions to this plan will be resubmitted to the KSC ELV SFAO for approval and comment.

1.7 Accountability

1.7.1 Manager Accountability

Managers will be held accountable for meeting their safety, health, and environmental protection responsibilities. Authority and responsibility for safety and health protection are clearly defined in their performance plan. Higher management will evaluate safety, health, and environmental protection performance as part of every yearly evaluation. Manager performance standards are as follows:

1.7.1.1 Program Manager

- Defining the organization's safety and health requirements and liabilities
- Ensuring compliance with all safety regulations that apply to the Contract
- Providing required safety training for employees and managers
- Ensuring employees have knowledge of specific hazards in their workplace
- Establishing and communicating safety responsibilities to managers and employees

- Provide ongoing review of manager performance and provide feedback
- Conduct formal performance assessments which include measures of safety performance
- Taking action to reduce personal injury or unsafe use of facilities and resources
- Conducting periodic safety assessments
- Ensuring mishaps are promptly and completely investigated
- Ensuring that corrective action is implemented immediately
- Providing adequate budget resources for safety

1.7.1.2 Area Managers

- Attending required management safety and health training
- Knowing safety requirements and liabilities
- Ensuring employees are aware of the hazards in their workplace, understand needed safeguards, and are properly trained
- Providing safety orientation for all new employees
- Establishing a work environment that meets health and safety regulations
- Ensuring hazards are promptly corrected
- Conducting safety inspections at least monthly
- Taking action to reduce personal injury or unsafe use of resources
- Discussing safety issues and concerns at staff and group meetings
- Ensuring employee safety representation to the ELVIS Safety & Health Committee
- Providing ongoing review of performance with feedback and coaching to all employees
- Initiating disciplinary action for employee violations of safety/health procedures

The results of performance against these standards will be documented in the manager's annual performance review.

1.7.2 Employee Accountability

All Contract employees will be held responsible for their own safety and the safety and health of their coworkers. Annual performance reviews for employees will also include measurements of safety performance. Employees will conduct themselves in a safe manner, adhering to all policies and procedures. They will, if required, wear safety articles and use any protective equipment provided at all times. They will immediately report any injury, accident, or violation to their respective manager.

1.7.3 Disciplinary Policy and Procedures

An employee or manager found to have negligently violated safety procedures will be subject to disciplinary action up to and including dismissal. Intentional violation will be subject to dismissal except under extenuating circumstances. Discipline may include a letter to the personnel file, reassignment of duties and responsibilities, salary review impact, or dismissal.

Throughout the year, the managers provide employee performance review, feedback, and coaching, and ensure that employees are apprised of all applicable policies and procedures. In the event of an employee violating a policy or procedure, the manager will confer with the Health & Safety Representative, Human Resources, and the Program Manager to determine the

level of reprimand and/or other discipline. The two types of violations, which will result in some form of disciplinary action, are as follows:

1.7.3.1 Minor Violation

A minor violation is an unintentional or negligent infraction that does not result in an injury or that would not require disclosure to a regulatory entity. Minor violations will be handled in the following manner:

- First Violation. The individual's manager will discuss the violation and related regulations with the affected employee and inform him or her that future violations may result in further disciplinary action up to and including termination. The manager will document the discussion, maintaining the documentation for possible future reference.
- Second Violation. The individual's manager will prepare a written letter of reprimand. Copies will be provided to the individual in question and sent through management to the Human Resources Office. The manager may also use the employee's performance appraisal to document unacceptable behavior. The individual's manager will discuss the violation and related regulations with the affected employee and inform him or her that future violations may result in further disciplinary action up to and including termination.
- Third Violation. The individual's manager will prepare a written reprimand advising the employee of 1 to 2 days suspension without pay. Additionally, the employee may be required to complete an awareness-training program. Copies will be provided to the individual in question and sent through management to the Human Resources Office. The individual's manager will discuss the violation and related regulations with the affected employee and inform him or her that future violations may result in further disciplinary action up to and including termination.
- Fourth Violation. The individual's manager will prepare a written reprimand advising the employee of temporary reassignment, salary review impact, or dismissal. Additionally, employees may be required to complete an awareness-training program. Copies will be provided to the individual in question and sent through management to the Human Resources Office. The individual's manager will discuss the violation and related regulations with the affected employee and inform him or her that future violations may result in further disciplinary action up to and including termination.
- Fifth Violation. The individual's manager will garner approval of termination of employee with or without separation pay from the appropriate corporate officials.

1.7.3.2 Major Violation

A major violation is an infraction committed knowingly in an effort to circumvent established policy and procedure. A violation that would legally require disclosure to a regulatory entity, cause an injury, and/or result in an administrative order or financial penalty would also be considered major. The cited employee will receive disciplinary action up to and including dismissal as approved by the corporate officials. Disciplinary action other than discharge will be suspension for a period of 1 to 5 days without pay. Suspensions with pay will be considered only in cases where it can be established that the major violation was committed without intent. Administrative details will be accomplished in the manner described for minor violations.

1.7.4 Employee Motivation

To encourage employee participation and accountability in the safety program, a Contract awards program, where employees may receive performance awards for superior safety performance, will be implemented. Employees will receive awards/recognition for outstanding support of the Contract safety program by providing noteworthy contributions, outstanding personal or team participation, suggestions, participating in the hazard reporting or Close Call Program, and developing creative, informative activities for the Safety and Health Program. Periodic contests, mini-fairs, drawings/quizzes/games, awareness campaigns, and motivational speaker activities may be used to maintain employee safety and health motivation, awareness and participation. These will be conducted for the benefit of team employees at all Contract locations. Knowledge of safety & health gained at work will help our employees maintain their safety and health at home, in sports, driving, and in disaster preparedness as well.

1.8 Program Evaluation

Analex will evaluate its safety, health, and environmental compliance program through self-evaluations. The self-evaluation will be conducted using the four major categories and 32 elements from OSHA's Voluntary Protection Program guidelines. The program self-evaluation will be conducted annually. The evaluation will be discussed and distributed through the Contract Safety Committee and electronically to all managers and employees. Objectives for the next year will be developed by focusing on areas of weakness identified in the annual evaluation and by soliciting input.

1.9 Performance Documentation

The Health & Safety Representative will identify, acquire, and maintain all pertinent safety and health data such as procedures, accident/incident/mishap reports and logs, records, minutes of meetings, checklists, statistics, reports, analyses, and notes which pertain to safety and health processes or programs. This information will be processed and analyzed to produce meaningful data and reports that will be provided to NASA in compliance with contract requirements, or upon request.

1.9.1 Material Safety Data Sheets

To comply with KNPD 1800.2, KSC Hazard Communication Program, VAFB, and field site requirements and to maintain compliance with 29 CFR 1910.1200, OSHA's Hazard Communication Standard, Analex will provide copies of all Material Safety Data sheets for hazardous materials brought onto a field or government site and/or included in products delivered to NASA. One copy of each sheet will be sent to the KSC or site central repository, along with any information on new or changed locations and/or quantities normally stored or used. All chemical and hazardous material purchases will be approved through the Health & Safety Representative to ensure compliance and to maintain an accurate hazardous material inventory. The Contract will also initiate and maintain a hazard communication program as outlined in Procedure 8.0.

1.9.2 Hazardous Material Inventory

On an annual basis, upon request by KSC's Occupational Health Officer, the Health & Safety Representative will compile an annual inventory report of all hazardous materials it has located on Government property and which are within the scope of 29 CFR 1910.1200, Hazard Communication, and Federal Standard 313 (or FED-STD-313), Material Safety Data, Transportation

Data and Disposal Data for Hazardous Materials Furnished to Government Activities, as revised. For non-KSC locations the site inventory data will be provided to VAFB and field site occupational health representatives. The information to be provided will include:

- The identity of the material
- The location of the material by building and room
- The quantity of each material normally kept at each location. This inventory will be implemented and provided to NASA as directed.

1.10 Government Access to Safety and Health Program Documentation

Upon request, all ELVIS Contract safety and health documentation, including personnel records, will be made available to KSC or other governmental agencies for inspection or audit.

1.11 Safety Requirements Review

Standards are constantly changing, and it is important to review new and revised standards to ensure continual compliance. In addition to Federal, State, and local regulatory agencies, NASA safety requirements will impact Contract operations, and this plan and procedures will be maintained as required with NASA applicable requirements. The Health & Safety Representative will be responsible for ensuring the review of new or revised standards from federal, state, local, or NASA authorities. The standards under review will be compared to current standards for new or revised requirements that will be incorporated into the ELVIS plans, facilities, or operations. Applicable audit tools and documents will be revised where necessary to ensure compliance with the identified new or revised standard.

The Contracting Officer Technical Representative may also request a review of specific standards by ELVIS Contract personnel. If requested, these standards will be reviewed under direct tasking in accordance with provisions of the Contract.

1.12 Procurement and Contract Safety

This Safety and Health Plan is applicable to all Analex Team personnel and to those companies, firms, or individuals that may be subcontractors to Analex. All suppliers of goods and services to this Contract will be responsible for compliance with NASA, KSC, EPA, OSHA, and State/local requirements and the referenced documents on which this plan is based. As part of the Request for Proposal process on work to be performed under the ELVIS Contract, subcontractors will be required to submit safety performance documentation for evaluation as part of the selection process. In addition, all safety and health requirements will be flowed to subcontractors. Subcontractors will be monitored for compliance with safety and health requirements as part of the subcontractor performance evaluation process.

Every effort will be made to ensure that all equipment and materials purchased for use on the Contract meet applicable safety and health requirements. The purchase of any new equipment, other than office supplies/furniture/equipment, will be approved by the Health & Safety Representative to ensure adequate safeguards are in place to prevent potential injuries and preclude any adverse safety and health issues. The Health & Safety Representative will also approve any new chemicals to be purchased that are not on the chemical inventory list. A Purchase Request Form will be completed and approved prior to purchasing or bringing such materials onto the premises. Prudent practices such as substitution will be used to limit potential employee exposure to hazardous chemicals and to limit hazardous waste.

2.0 Workplace Analysis

Classification and assessment of hazards and their associated risk levels is a cornerstone of any effective safety program. The recognition and control of hazards before mishaps, close calls, or failures occur is a prime objective of safety analysis. Hazard recognition and control is not a single factor; it involves systematic research, observations, inspections, and analysis of the operations and the jobs as they evolve from the design phase to the final operational or disposal phase. Identification of the hazards related to operations, equipment, or facilities early in the life cycle facilitates proper design and controls. Hazard analysis and risk assessment will be the responsibility of the manager of the affected area supported by the Health & Safety Representative as required. All safety engineering products that address operations, equipment, etc., on NASA property will be subject to NASA safety review and concurrence.

Hazard analysis is composed of two distinct areas: hazard identification and hazard control. A hazard may be defined as a potential for doing harm, while risk is the evaluation of the hazard. Once hazards have been identified, it is then necessary to rank by assessing the severity and probability of occurrence and identifying the resulting Risk Assessment Code. The hazards are then addressed with more critical Risk Assessment Code items given priority. The hazards are then analyzed for their cause(s) so as to develop a hazard control strategy. Hazard analysis, risk assessment and Risk Assessment Code assignment will be performed in accordance with KNPR 8715.3, SP-01.03-00 ELVIS Risk Management Plan, and SP-01.09-02 Hazard Identification, Analysis and Control. Those hazards identified as being immediately dangerous to life or health will be reported immediately to management, safety, and SFAO. Steps will be taken immediately to prevent occurrence of the hazard or exposure to employees and the hazard will be controlled to a safe condition.

2.1 Hazard Identification

Hazard Identification will involve compiling an inventory of hazards associated with the work performed on the Contract along with operations and work environments that are in the vicinity or in close proximity to Contract operations. To begin the hazard identification process, analysts will become familiar with the items to be analyzed as well as the environment and planned operations to be reviewed. Analytical effort and rationale will be documented progressively and systematically. Hazard analysis will be documented using the customer specified formats.

2.1.1 Comprehensive Survey

Qualified safety professionals will participate in wall-to-wall assessment of Contract facilities, process, equipment, and materials. The focus will be the identification of hazards and associated hazard controls. The inspection of startup or new facilities and operations will also include an inspection by a safety and health inspection team comprised of certified and otherwise qualified safety and health professionals, along with the management of the facility. All facilities where Analex Team personnel will be working will be evaluated based upon compliance with applicable regulations and commonly accepted safe work practices.

2.1.2 Change Analysis

All changes to facilities, systems, equipment, processes, materials, operations, procedures, and maintenance will be evaluated to ensure that safety is not compromised. The analysis of change will be conducted by the respective manager, Health & Safety Representative, Program Manager, area safety representatives, and certified or otherwise qualified safety and health professionals. The Health & Safety Representative will assess the requested use of specialized equipment and/or chemicals to identify potential alternatives that minimize safety, health and environmental effects.

Changes may be driven by new or modified regulatory and NASA requirements. In these cases, analyses will be completed for the affected process or facility to develop an action plan for achieving compliance with the applicable requirement and for ensuring the health and safety or surrounding personnel.

2.1.3 Hazard Analysis and Control

Analysis of systems and operations to identify potential hazards is a primary element of the system safety process of mishap prevention. Performance of qualitative hazard analyses to identify hazards and ensure their resolution is a combined effort of the safety and the engineering disciplines. Preliminary hazard analyses are performed for the preliminary design review/30 percent design review to identify safety-critical areas, identify and evaluate hazards, and identify the safety design and operations requirements first to eliminate, or secondly, if complete elimination is not possible, to control the identified hazards. The preliminary hazard analyses are further developed into systems hazard analyses later in the design phase to further define and evaluate hazards, as well as elimination and control provisions, after the design is more mature. Safety performs further analysis to identify hazardous conditions with a potential for personnel injury or damage to hardware/equipment during hazardous ground processing operations as a part of the Safety Review process and other evaluations. Hazards identified through qualitative analysis will be classified in accordance with KNPR 8715.3.

Hazard analyses will be updated when changes occur to interrelated areas of design and system or subsystem integration that affect reported hazards or present new hazards. All potential hazards, including those resulting from failures, regardless of subsystem or component redundancy, will be analyzed. Also analyzed will be hazards emanating from normal or emergency equipment operations, the environment, design characteristics, human factors, and potential credible mishaps. This is accomplished through safety participation in the engineering change request process. This safety review identifies changes, which require a revision to existing analyses. Hazards introduced by design modification will be identified, with adequate controls established, and be provided for management review of proposed engineering changes.

Failures or malfunctions that could independently or collectively present a hazard to interfacing hardware will also be identified and eliminated or controlled in order to assure that normal operation of equipment cannot degrade the safety of interfacing hardware or the total system.

Safety data on vehicles/hardware/equipment provided by developers will be analyzed for compliance with NASA-KSC safety requirements. Where examination of the data indicates an inconsistency or non-compliance with the safety requirements, NASA will be notified per DRD-20, and any potential resolutions will be proposed.

Analysis of hazardous operational procedures is conducted using guidance contained in KNPR 8715.3. Analysis worksheets are maintained electronically. The analysis is conducted of all operational procedures to determine which contain hazardous operations. Then reviews are conducted on hazardous operations procedures to ensure thorough hazard identification and ef-

fective resolution via operational safety controls. The analyses identify applicable hazard information from several sources including design analyses, ground Missile System Pre-launch Safety Packages, KSC safety requirements documents, and applicable hazard reports. Once hazards are identified, appropriate operational controls are assured. Controls include control areas, required safety devices and equipment, cautions, warnings, emergency procedures, requirements for working with hazardous materials, and necessary precautions to ensure that hazardous conditions are not induced into flight hardware, GSE, and/or facility systems during ground/launch processing operations.

Safety will produce an analysis worksheet for each hazardous procedure reviewed to ensure that required hazard controls from whatever source are consistently included in all hazardous procedures. In addition, a special operational analysis may be produced, when required, for processing facilities and facility systems to support the operational readiness reviews.

2.2 Inspections and Audits

2.2.1 Purpose

Regular inspections of ELVIS facilities and operations will be conducted to identify and correct unsafe conditions and/or work practices. Safety and Health Program procedures will be audited to ensure proper implementation, compliance to current requirements, and to identify opportunities for continuous improvement.

2.2.2 General

The Health & Safety Representative, Program Manager, ELVIS Safety & Health Committee, and managers of each respective Contract area will conduct a variety of inspections and audits. If a regulatory entity such as OSHA or NIOSH wishes to conduct a compliance inspection of Contract facilities, contact the Program Manager and Health & Safety Representative.

2.2.2.1 Audits

The ELVIS Contract will operate an audit program, which will identify potential policy and procedural weaknesses, areas for improvement, unsatisfactory execution of the Safety and Health programs, and activities that constitute either a failure to correct or a repeat finding from an earlier audit. The scheduled completion of audits will support the completion of the annual program evaluation (See paragraph 1.8). Initiating an audit for evaluating a safety and health program(s) is a way to test the effectiveness of written or informal programs. The process involves focusing on a specific program or procedure and evaluating its implementation through records review, incident and mishap data review, on-site reviews using compliance checklists, observations, interviews, or questionnaire completion. If there are incidents related to the program being audited, these will be tracked back through the applicable safety and health program and reports. By taking this tactic, one can determine whether an effective safety and health program has been implemented. Audit findings and associated corrective actions will be documented, assigned to responsible party and tracked to closure.

2.2.2.2 Inspections

The ELVIS Contract will conduct safety and health inspections of all work areas under the jurisdiction of the ELVIS Contract; each site will be covered quarterly. These inspections will comply with OSHA and KSC directives regarding inspection procedures and abatement plans. Cor-

rective actions will be initiated to resolve findings identified during all inspections. These will be tracked to closure using the Reporting Online Corrective System (ROCS) database. Findings that present immediate danger to personnel or equipment will result in an immediate stop work until properly corrected.

Preparation: The person conducting the inspection will review previous reports for trends, common infractions, and repeat items. If not a management-performed inspection, the responsible manager will be contacted to ensure his/her availability and knowledge of the inspection. The methods of assessment, review documentation, and reporting will be reviewed for any possible improvements in either efficiency or effectiveness.

Conducting the Inspection: The inspection will involve the use of a checklist as a guide for items to be covered (Appendix C). Findings will be documented as clearly as possible; photographs and diagrams may be used to emphasize a finding. The inspection will be as comprehensive as possible, addressing operations and behavior observations as well as facilities and equipment.

Post Inspection: The inspection findings will be entered into ROCS to facilitate status tracking, closure documentation and trending.

2.2.2.3 Safety and Health Audits and Inspections Examples

Manager Self-inspection: Managers (or their designee) are responsible for formally inspecting their areas on a monthly basis. These inspections will be documented on the appropriate form per SP-01.09-11 (Appendix C), and sent to the Health & Safety Representative. The results of these inspections will be forwarded to the Health & Safety Representative and captured in the ELV Portal.

Formal Inspections: The S&MA department will conduct quarterly inspections of all Contract facilities. **KSC or site Occupational Safety or Occupational Health Inspections:** KSC/VAFB/Site Safety and Health Representatives are authorized to enter any work area and conduct inspections. All employees will cooperate fully with the safety and health inspectors during his/her inspection.

Operational Readiness Inspections: The inspection of startup or new facilities and operations will include an inspection by a safety and health inspection team to be formed by the Health & Safety Representative, an appointed site representative, or SFAO.

Annual Lockout/Tagout audit: A comprehensive compliance audit will be conducted on an annual basis of the lockout/tagout program. This will focus on compliance to current regulatory, customer, and site requirements and the implementation of SP-01.09-21, Lockout/Tagout.

Annual Hazard Communication audit: An evaluation will be conducted on an annual basis of the hazardous communication program. This will focus on compliance to current regulatory, customer, and site policies, requirements and hazards applicable under 29 CFR 1910.1200 and the implementation of SP-01.09-04, Hazard Communication and Hazardous Material Control.

Annual Hazardous Waste Management audit: An evaluation will be conducted on an annual basis of the hazardous waste management program against the Safety and Health Plan, Paragraph 4.1.4.3, Hazardous Waste Operations.

2.2.3 Responsibilities

2.2.3.1 Health & Safety Representative

Conducts or oversees program audits. Conducts or ensures safety and health inspections addressing all facilities on a quarterly basis for each location.

The Health & Safety Representative will report the findings for each audit to the Program Manager, and the Safety & Health Committee. All audit findings, along with additional safety information will be made available to all employees on the Contract website. The findings of each audit will be tracked in ROCS.

2.2.3.2 Manager Responsibilities

The manager of the inspected area initiates and follows through on necessary actions to correct all identified deficiencies. Actions include, but are not limited to, the preparation of a work request or safety training of employees. The manager will make a note of the corrective actions initiated and completed on his or her copy of the inspection checklist and submit a copy of the checklist to the Health & Safety Representative.

2.2.3.3 Employee

Participate on inspection and audit teams as required. Continually monitor their work areas and report issues to management.

2.3 Employee Reports of Hazards

An effective system for reporting hazards in the workplace has been established so that corrective action may be initiated to prevent injury to personnel or damage to facilities, equipment and hardware. The system is located on the ELVIS Portal called SHMA Unsafe Conditions database. Employees have the opportunity to submit unsafe conditions anonymously, or with their name, and a member of the S&MA department will address their concerns. Other methods available for employees to report hazards and close calls to management may include; in person, by means of their safety committee representative, during monthly manager inspections, etc.

2.3.1 Reporting Hazards

A hazard is defined as an unsafe or unhealthful condition that could possibly lead to a mishap if not corrected.

a. If possible, any hazard will be corrected by the person who discovered it and reported immediately to the manager of that respective area. If the hazard cannot be corrected immediately, the manager will take the steps necessary to correct the hazard and ensure interim safety.
b. If the manager cannot correct the hazard, the hazard will be reported to the facility manager. He/she then has to respond to the hazard with corrective action or a plan for implementing corrective action. If a manager or facility manager cannot correct the hazard within this time frame, a plan will be developed to correct the hazard and it will be submitted to the site S&MA Office.
c. If the response from these organizations is not satisfactory, the hazard can be reported to the Center Director's office or equivalent field site management office.

d. The NASA Safety Reporting System can also be used when reporting hazards to these organizations has not been satisfactory.

If the perceived hazard is not appropriately addressed by these organizations, the hazard can be reported to OSHA by calling 1-800-321-OSHA.

2.3.2 Industrial Hygiene

A comprehensive Industrial Hygiene Program will be implemented in order to fulfill the Contract and company's responsibilities to provide employees with a safe and healthful workplace. This program will include identification, evaluation, and control of chemical, biological, radiological, and physical agents through review and selective monitoring of processes, facility components, and systems that involve hazards such as asbestos, lead, formaldehyde, bloodborne pathogens, noise, radiation, mercury, heat stress, hypergolic propellants, and repetitive physical stressors. To assist with control of identified hazards, Industrial Hygiene will provide recommendations and consultation services for design, Personal Protective Equipment, product substitution, and the use of exposure reducing engineering controls such as local exhaust ventilation systems and noise reduction devices. OSHA required programs are documented and administrated by the S&MA department in coordination with site service Contractors for the provision of surveys and assessment.

3.0 Mishaps and Record Analysis

3.1 Mishap and Close Call

3.1.1. Purpose

The purpose is to provide the Analex team with guidelines for the reporting of mishaps and close calls that resulted in injury, illness, or property damage. Guidelines follow those established by NPR 8621.1, NASA Procedures and Guidelines for Mishap Reporting, Investigation, and Record keeping, KNPR 8715.3, and DRD-21. Site-specific reporting and investigation coordination requirements will be identified and procedures established for all ELVIS locations on Contractor or third party property. Reporting is mandatory in order that:

a. Cause may be identified and corrective action initiated to prevent a recurrence.
b. Hazards can be abated prior to causing a mishap or close call.
c. NASA and OSHA reporting and record keeping requirements can be met.
d. Insurance notification requirements can be met.

3.1.2 Definitions

The ELVIS Contract and NASA categorize mishaps as follows.
Mishap Types:

a. Type A: A mishap resulting in one or more of the following: (1) an occupational injury or illness resulting in a fatality, a permanent total disability, or the hospitalization for inpatient care of 3 or more people within 30 workdays of the mishap; (2) a total direct cost of mission failure and property damage of $1 million or more; (3) a crewed aircraft hull loss; (4) an occurrence of an unexpected aircraft departure from controlled flight (except high performance jet/test aircraft such as F-15, F-16, F/A-18, T-38, and T-34, when engaged in flight test activities).

b. Type B: A mishap that caused an occupational injury or illness that resulted in a permanent partial disability, the hospitalization for inpatient care of 1-2 people within 30 workdays of the mishap, or a total direct cost of mission failure and property damage of at least $250,000 but less than $1,000,000.
c. Type C: A mishap resulting in a nonfatal occupational injury or illness that caused any days away from work, restricted duty, or transfer to another job beyond the day or shift on which it occurred, or a total direct cost of mission failure and property damage of at least $25,000 but less than $250,000.
d. Type D Mishap. A mishap that caused any nonfatal OSHA recordable occupational injury and/or illness that does not meet the definition of a Type C mishap, or a total direct cost of mission failure and property damage of at least $1,000 but less than $25,000.
e. Close Call. An occurrence or a condition of employee concern in which there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1000), but which possesses a potential to cause a mishap.

3.1.3 General Requirements for Mishaps

All mishaps, regardless of apparent degree of severity or whether employees are injured or not, will be reported to the employee's manager and the S&MA department immediately after emergency procedures have been conducted. The S&MA department is responsible for notifying the Corporate Human Resources Manager as soon as possible concerning:

(1) Any accident that results in a serious injury/illness or death to a Contract employee.
(2) Any damage to Contract property where the cost to repair or replace the damaged property is greater than $2,500;
(3) Any accident involving damage to a Contract owned or leased vehicle; and
(4) Any accident that results in injury to an individual who is not an employee of the Contract or damage to property not owned by the Contract.

3.1.4 ELVIS Reporting Requirements for Close Calls and Mishaps

For reporting Close Calls and Mishaps, employees shall refer to SP-01.04-01, Mishap and Close Call reporting.

3.1.5 Investigating Mishaps

For investigating Close Calls and Mishaps that occur, employees shall refer to SP-01.09-06, Mishap and Close Call Investigation.

3.2 Trend Analysis

To effectively prevent mishaps and injuries, the Analex Team will study existing or developing trends in close calls, mishaps, and inspection findings. This information will be used to analyze trends and identify required corrective action.

All findings from inspections, close call reports, and mishap investigations will be analyze to discover underlying trends. The Health & Safety Representative will provide reports for all mishap data to include first aid, lost time, medical treatment, OSHA record injuries/illnesses, property damage, hazard-tracking information, and submitted close calls. NASA will have insight to this data through the EX3 database. This information will be further analyzed to identify specific areas, facilities, organizations, etc., that exhibit negative or adverse trends, and the underlying root causes contributing to the trend. Corrective actions taken to minimize or reverse the undesired trend will include hardware and/or procedure modifications and revised or revisited training. The proposed course of action will be presented to management and the Program Manager for review and action.

3.2.1 Accident/Incident Summary Report

Prior to the tenth calendar day following the close of each month, the Health & Safety Representative in conjunction with Analex's Human Resources Manager will submit a mishap/incident summary report to the Program Manager and NASA. The report will follow the NASA Safety Statistics Report format.

3.2.2 Log of Occupational Injuries and Illnesses

a. The Occupational Safety and Health Act requires employers to report within 8 hours to OSHA any accident that involves a death, or the in-patient hospitalization of three or

more employees, and to maintain certain records regarding work-related injuries and illnesses.

b. An OSHA Form 300, Log and Summary of Occupational Injuries and Illnesses, will be maintained for each ELVIS location. Each recordable injury or illness (as defined on the Form 300) will be recorded on the log within 6 working days after learning of its occurrence.
c. An annual summary will be developed based on the information contained in the log for each establishment.
d. The summary will be completed at the conclusion of the calendar year and posted in a place where all employees are likely to see it (such as the ELVIS web page and office bulletin boards). This posting requirement applies even if no recordable injuries occurred for the subject calendar year. The summary will be posted no later than February 1 and remain in place until March 1. After that date, the log and summary, and OSHA Form 101 (or its equivalent) will be retained on the premises for 5 years.
e. For each establishment on and off NASA property that performs work on the Contract, Analex will deliver to the Government a copy of its annual summary of occupational injuries and illnesses (or equivalent). Data will be compiled and reported by calendar year and provided to the Government within 45 days after the end of the year to be reported (e.g. not later than February 15 of the year following.)

4.0 Hazard Prevention and Control

Hazards that are identified during inspections, hazard analyses, operational readiness inspections, facilities analyses, and/or job safety analyses will be eliminated or controlled to prevent injury. The Safety Representatives will enter findings that are the result of inspections performed into the ELV Portal for trending, tracking to closure, and employee awareness.

Once hazards have been identified and analyzed, effective controls will be implemented to prevent an injury and/or property damage. The selection of these controls will be based upon the hazard reduction precedence sequence that is described in the following section.

4.1 Appropriate Controls

Corrective actions will be determined according to the hazard reduction precedence sequence.

a. Design to eliminate the hazard. Design or substitution of a less hazardous material will first eliminate hazards, if possible. Damage control, containment, and isolation of potential hazards will be a consideration in the design phase, where possible, and throughout the life of the system.
b. Provide Safety Devices. Hazards that cannot be eliminated through design will be reduced through the use of appropriate safety devices as part of the system, subsystem, equipment, facility, or operations.
c. Provide Cautions and Warnings. Where it is not possible to preclude the existence or occurrence of a known hazard, devices will be employed to detect hazardous conditions and generate an adequate warning signal.
d. Develop Special Procedures. Administrative controls such as special work procedures, training, barriers, and signs can be used where the magnitude of existing or potential hazards cannot be reduced through the design or use of safety and warning devices.
e. Personal Protective Equipment. This will be used as a last resort when no other controls are possible or it will be used in addition to other control methods.
f. Hazard Control Design Criteria

    (1) Safety design requirements are based on sound engineering practices and safety design principles for a particular system.
    (2) Material selection will be selected to serve the need while having the least amount of risk.
    (3) Hazardous substances, components, and operations will be isolated from personnel and incompatible materials.
    (4) Equipment will be located so that access during operations, servicing, maintenance, or repair minimizes personnel exposure to hazards such as electrical, toxic substances, radiation, and sharp injury-producing surfaces.
    (5) Environmental conditions such as temperature, pressure, noise, toxicity, acceleration, or vibration will be controlled and minimized.
    (6) Designs will incorporate displays, controls, and operating procedures that minimize the risk for human error.
    (7) Alternate approaches to minimize risk will be used such as interlocks, redundancy, fire suppression, protective clothing and equipment, devices, and procedures.

(8) Power sources, controls, and critical components will be protected by physical separation or shielding.
(9) Minimize the severity of personnel injury or damage to equipment in the event of a mishap.
(10) Design software-controlled or monitored functions to minimize hazards resulting from software malfunctions.

After controls have been selected and design measures used as much as possible to eliminate hazards, the task, project, facility, or equipment will be re-evaluated. The hazard will be reassessed assuming that proposed controls are eliminated. If any new hazards arise from the assessment, they will be evaluated and controls implemented to prevent their occurrence. All phases of the operation will be considered such as test, startup, operation, maintenance, and disposal.

Each hazard/risk will be assigned a risk value based on SP-01.03-00. All identified hazards not eliminated by design and their controls will be closed-loop tracked. If residual risks remain after implementation of these controls, a decision will be made to determine how much risk is deemed acceptable by the Program Manager.

The implementation of effective controls will involve a coordination effort between this Contract, SFAO, emergency authorities, and the KSC, VAFB, and field site Environmental Compliance office or representative. Specific services that may be needed to respond to a particular emergency will be coordinated through these entities. Specific hazards that may affect these organizations will also be presented to their management for control approval and acceptance.

4.1.1 Hazardous Operations

A hazardous operation is a job that involves hazardous materials, conditions, or equipment that requires special precautions to prevent injury or property damage. Safety of operations will be achieved through incorporating safety requirements and controls into test plans and procedures, advanced planning for contingency and emergency situations, pretask briefings, safety surveillance and exposure assessments during hazardous operations, and post task critiques.

Hazardous operations require greater attention of managers and safety personnel to ensure safe operations. Prior to personnel being assigned to tasks that involve hazardous operations, procedures will be developed and approved by management; training and certification of employees completed, and permit requirements identified. Managers are responsible for identifying any hazardous operations not previously identified and ensuring that employees receive the proper training and follow procedures. NASA will have access on request to any hazardous operations procedure or related implementation data.

If previous uncontrolled hazardous conditions are found to exist, operations will stop until the condition is corrected or hazard controls are put in place. All managers and employees have the duty to stop work if hazardous conditions are identified per SP-01.09-07. Once a stop work has been initiated, the Area Manager and safety representative will approve the return to operations.

4.1.1.1 Identification of Hazardous Operations

To determine if a given job task or process is considered a hazardous operation, refer to KNPR 8715.3 and FSPCMAN 91-710-V1-V7 Range Safety User Requirements Manual as a guide. ELVIS S&MA department and SFAO office will jointly decide which operations are considered hazardous, with SFAO serving as the final authority. Hazardous operations procedures will be

implemented and enforced by management and the S&MA department. NASA will have access on request to data necessary to verify implementation.

Area managers, assisted by the S&MA department as required, will assess and analyze all potentially hazardous operations to determine risk to personnel, equipment, and facilities. When a serious degree of risk dictates, personnel will work in pairs. Managers will ensure that applicable requirements are followed and permits obtained. Managers will take extra care to recognize and respond to dangerous situations when employees work in hazardous areas they aren't normally assigned to or are working near public access areas.

4.1.2 Written Procedures

Prior to commencement of operations, all hazardous operations will meet the requirements for the applicable category of hazardous operations (See KNPR 8715.3) and have written Hazardous Operations Procedures or a hazardous operating permit. Managers will ensure implementation of and compliance with hazardous operations procedures. The Area Manager will approve all testing, maintenance, repair, and handling of hazardous materials or waste hazardous operations procedures. Procedures will be consistent with the quality manual requirements.

a. Hazardous Operating Procedures will include steps to:
   (1) Ensure the safety and health of personnel
   (2) Provide applicable cautions and warning statements
   (3) Specify actions to bring the emergency situation under control
   (4) Return the system(s) to nearest possible safe condition
   (5) Identify applicable personal protective equipment.
b. Hazardous Operating Procedures will be conspicuously marked on the title page to alert operators that strict adherence to the procedural steps and safety and health precautions contained in the procedures is required.
c. All Hazardous Operating Procedures will have an approval signature from the Health & Safety Representative, or assigned representative. Deviations or changes to Hazardous Operating Procedures also require approval of the Health & Safety Representative.
d. Hazardous Operating Procedures will be reviewed and updated on an annual basis. The manager, and Health & Safety Representative will participate in this review.
e. All Hazardous Operating Procedures will be available to employees for use in the performance of their duties. This may be achieved through ISO work procedure, online access, or point of operation manuals processes.

4.1.2.1 Personnel Certification

Managers will ensure the certification of employees who perform or control hazardous operations or use or transport hazardous material to ensure that the individuals possess the necessary knowledge, skill, judgment, and physical ability to do the job in a safe and healthful manner. The Health & Safety Representative will support the manager in identification of training requirements based on the identified hazardous operations. Employees will pass an oral test, written test, or experience review, and certification will be recorded.

4.1.2.2 Notification

All facilities where hazardous operations are to be performed will be posted with appropriate signs to alert all personnel of that hazard. Managers will ensure notification of all employees in the affected facility.

4.1.2.3 Space Systems and Test Safety

a. This paragraph addresses employees who may participate in testing activities at KSC and KSC Field Sites or are involved in tests at other locations including those with KSC equipment. See KNPR 8715.3 for specific requirements.
b. Training and Certification. Contract personnel will be trained in the hazards to which they may be exposed to as well as trained and certified in the test operating procedures, test emergency procedures, safety requirements, individual tasks, and personnel involved in hazardous operations.
c. Test Participation. Contract personnel involved in a test will participate in test readiness reviews, pre-test briefings, pre-test checkout, dry runs, simulated emergency drills unique to the specific test, and post-test debriefing as required ensuring full knowledge of the test hazards, procedures, and full integration in the test team.

4.1.2.4 Explosive and Solid Propellant Safety

a. This paragraph addresses employees who are exposed to explosive testing or handling operations at KSC or KSC Field sites. The Contract is involved in explosive propellant processes. See KNPR 8715.3, FSPCMAN 91-710-V1-V7, and NSS 1740.12 for specific requirements.
b. Protective Clothing. All affected personnel will wear the appropriate personal protective equipment for the hazards involved. Personnel will be trained in the proper use, limitations, and care of this equipment that may include:
   (1) Eye protection
   (2) Face shields
   (3) Wriststats or legstats
   (4) Conductive safety shoes
   (5) Non-static producing clothing such as cotton or specially treated anti-static garments.
c. Training and Certification. Employees exposed to explosive testing or handling will be certified to handle explosives, propellants, or systems under KNPR 8715.3 and/or NSS 1740.12. Training will cover the following subjects:
   (1) Nature and properties of the explosive, propellant, or system
   (2) Correct personal protective equipment to use in specific environments and where it is stored
   (3) Approved materials that are compatible
   (4) Proper handling methods for the explosive, propellant, or system
   (5) Proper storage for the explosive, propellant, or system
   (6) Proper transportation requirements for the explosive, propellant, or system
   (7) The test, procedures and emergency actions
   (8) Labeling

4.1.3 Personal Protective Equipment

Personal protective equipment includes devices and clothing designed to be worn or used for the protection or safety of an individual while in potentially hazardous areas or performing potentially hazardous operations.

4.1.3.1 Policy

To protect employees from potential hazards in the workplace, the Team will provide Personal Protective Equipment appropriate to the task. The managers supported by the Health & Safety Representative will assess the workplace to identify potential hazards and hazardous operations that necessitate the use of Personal Protective Equipment and advise employees on Personal Protective Equipment required for all operations. Managers will ensure employees receive training in the proper selection, use and limitations, inspection and maintenance of required Personal Protective Equipment. Each area, through its manager, is responsible, for obtaining the equipment and enforcing its use. Defective or damaged Personal Protective Equipment shall be repaired or replaced.

4.1.3.2 Responsibilities

a. Health & Safety Representative
   (1) Performs and maintains records of hazard assessments performed to identify Personal Protective Equipment requirements.
   (2) Assists the Manager in selecting appropriate Personal Protective Equipment.
   (3) Ensures recommended Personal Protective Equipment conforms to applicable standards (i.e., American National Standards Institute, National Institute for Occupational Safety and Health).
   (4) Provides training on Personal Protective Equipment requirements, use, limitations, proper care, maintenance, useful life, and disposal.

b. Manager
   (1) Selects required Personal Protective Equipment with support of the Health & Safety Representative and occupational health representatives as required.
   (2) Ensures required Personal Protective Equipment is readily available to employees working in areas or performing operations that require Personal Protective Equipment.
   (3) Enforces the mandatory use of Personal Protective Equipment when required to protect employee health and safety.
   (4) Ensures employees receive and understand training on proper Personal Protective Equipment selection, use, limitations, inspection, and maintenance.
   (5) Ensures Personal Protective Equipment is properly stored and maintained.

c. Employees
   (1) Use, maintain, and store Personal Protective Equipment in accordance with this procedure and instructions provided by the manager or Health & Safety Representative
   (2) Report all problems associated with Personal Protective Equipment (i.e., damaged, worn, or inadequate) to the manager or the Health & Safety Representative.
   (3) Do not use damaged or defective Personal Protective Equipment.

4.1.3.3 General Requirements for Personal Protective Equipment

a. Hazard Assessment. OSHA regulation 29 CFR 1910.132 requires an assessment of each work place to determine if hazards are present, or are likely to be present, for which the use of personal protective equipment is needed. The Sample Format for Hazard Assessment to Support Personal Protective Equipment Selection, Exhibit 4-1, may be used for this purpose. This assessment will be certified by including the name of the facility evaluated, the date of the assessment, and the name of the person performing the assessment. Selection of Personal Protective Equipment will be based on the results of this hazard assessment and will be performed by the Area Manager supported by the Health & Safety Representative and occupational health representatives as required.

b. Training. Each employee who is required to use Personal Protective Equipment will be trained and demonstrate the ability to use Personal Protective Equipment properly. Training will cover when Personal Protective Equipment is necessary, what Personal Protective Equipment is necessary, how to don, doff, adjust, and wear Personal Protective Equipment, limitations of the Personal Protective Equipment, and proper care, maintenance, useful life, and disposal of the Personal Protective Equipment. Retraining is required when changes in the work place or types of Personal Protective Equipment to be used render previous training obsolete, or if inadequacies in an employee's knowledge or use of assigned Personal Protective Equipment indicate that the employee has not retained the requisite understanding or skill.

c. For specific guidelines for eye and face, head, foot, and hand protection, reference SP-01.09-20, Personal Protective Equipment. For Respiratory Protection Program requirements reference SP-01.09-19.

Exhibit 4 - 1
Sample Format for a Hazard Assessment to Support
Personal Protective Equipment Selection

Operation, Task, or Area Assessed:

Eye and Face Protection

Hazards (check all identified hazards or potential hazards):

_____ flying particles
_____ molten metal
_____ liquid chemicals
_____ welding
_____ other eye hazard(s): _____

_____ acids or caustic chemicals
_____ chemical gases or vapors
_____ radiant energy
_____ lasers

Eye and Face Protection Selected:

Specify required capability (e.g., impact protection) and protective device:

Hazard/Operation	Eye Protection Capability Needed	Protective Device
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Head Protection

Hazards (check all that apply):

_____ Falling objects (e.g., working below other workers using tools or materials that could fall).
_____ Electrical hazard (exposed energized conductors).

Head Protection Selected:

_____ Class G helmet (impact, penetration, low voltage electrical hazard).
_____ Class E helmet (impact, penetration, high voltage electrical hazard).
_____ Class C helmet (impact and penetration resistance only).
_____ None.

Foot Protection

Hazards (check all that apply):

_____ Carrying or handling materials which could be dropped and injure the employee's feet.
_____ Work in areas where objects which would cause injury to the feet might fall onto the feet.
_____ Work involving manual material handling carts, bulk rolls, heavy pipe, etc, which could roll onto employee's feet.
_____ Nails, wire, screws, or other sharp objects that could be stepped on and puncture the foot.
_____ Areas that require non conductive electric shock resistant footwear
_____ Areas that require conductive protective footwear

Foot Protection Selected:

Specify protective capability and safety shoe required:

Hazard/Operation	Capability Needed	Safety Shoe

Hand Protection

Hazards:

_____ Thermal (hot) _____ Thermal (cold) _____ Cuts
_____ Abrasions _____ Puncture
_____ Contact with chemicals (specify):

Hand Protection Selected:

Specify protective capability and glove type selected:

Hazard/Operation	Protective Capability Needed	Glove Type

Comments:

Prepared by: _____ Date: _____

4.1.4 Hazardous Operations Permits

Identified hazardous operations that are not addressed by Hazardous Operating Procedures will require that a permit be granted prior to each single operation event in accordance with KNPR 8715.3, and site requirements. Such operations may include hazardous processing operations, confined space entry, hot work, and other designated permit required hazardous operations. The S&MA department and/or Area Manager will approve all permit requests. Managers will ensure employees are aware of permit requirements and follow the established permit system. The applicable site (KSC, VAFB, field site) permit system will be followed for each hazardous operation as required.

4.1.4.1 Operations Involving Potential Asbestos Exposure

a. General Requirements. Analex will follow all federal, state, and local regulations and guidelines to control hazards associated with asbestos in accordance with 29 CFR 1910. 1001. Management, supported by the S&MA department, will identify operations that have potential asbestos exposures and will identify specific KSC or site requirements. Employees will be trained to identify and avoid disturbing asbestos containing materials and in operations that require special asbestos training before being performed.

b. Prohibited Activities. Employees will not be involved in operations that might disturb Asbestos Containing Materials and create an employee exposure risk without proper training, procedures and permits. To ensure that this does not occur, the following activities are prohibited from being performed by Analex Team employees without prior approval of management and all required site permits.

   (1) Cutting or drilling holes in the ceiling or any other Asbestos Containing Material
   (2) Installing hangers, fasteners, drapes, or dividers in such a manner that they will damage Asbestos Containing Material.
   (3) Sanding or grinding any Asbestos Containing Material
   (4) Moving of equipment or furniture, which could damage floor tiles.
   (5) Sweeping or using compressed air to clean up Asbestos Containing Material. A vacuum equipped with a HEPA filter is required to be used for asbestos removal.
   (6) Damaging pipe or mechanical systems insulation that might contain asbestos.

c. Training. Employees who work in any buildings that contain asbestos will be notified of its presence and given procedures to follow if a suspected asbestos release occurs in the area.

4.1.4.2 Operations Involving Exposure to Toxic or Unhealthful Materials

When new operations are being considered, applicable task information such as procedures, equipment manuals, and material safety data sheets will be reviewed to identify potentially toxic or unhealthful materials that may be involved. If such hazards are discovered, the site Occupational Health Office (NASA or field site) will be notified prior to initiation of any such procedures. Contract operations will comply with site requirements for:

a. Handling toxic or hazardous materials – see KNPD 1800.2
b. Respiratory Protection – see KNPR 1820.4

c. Ionizing Radiation Protection – see KNPR 1860.1
d. Nonionizing Radiation Protection – see KNPR 1860.2

Management and occupational health will also be involved in the development of effective controls for the process to ensure that employee health is not compromised or jeopardized. Specific policies are already in place for controlling specific safety and health hazards and are contained in specific ELVIS Program System Procedures

4.1.4.3 Operations Involving Hazardous Waste

a. For hazardous waste generated on the ELVIS Contract, ELVIS affected personnel will be responsible for the following:
   (1) Participation in annual hazardous waste training.
   (2) Performing hazardous waste determinations on all waste streams.
   (3) Ensuring that hazardous wastes are accumulated in compatible containers and are prepared for shipment in appropriate containers.
   (4) Completing proper documentation for miscellaneous Hazardous Wastes disposal.
   (5) Notifying site Operations Control Center to obtain pickup service, if available or arranging for commercial service.
   (6) Ensuring that, for each pure chemical or unaltered product, a Material Safety Data Sheet is available.

   At KSC, the site is responsible for hazardous waste disposal. At VAFB this is an Analex activity. Following pickup, the receiving organization will be responsible for transportation, storage, and disposal of wastes.

b. Hazardous Waste Disposal. This procedure will provide instructions for identifying and controlling hazardous waste for employee and community safety, as well as to comply with environmental laws and regulations. For operations conducted at KSC and VAFB, the ELVIS responsibilities are as described above. NASA at KSC and VAFB are responsible for the transportation, storage, and disposal of waste generated on-site. Analex Team personnel are responsible for properly storing materials in containers, labeling those containers, inspecting satellite accumulation points, and abiding by KSC's requirements for the notification, generation, and handling of hazardous waste on site and at all contract locations. For operations at field sites, standards of the site will be observed.

4.1.4.4.Operations Involving New or Modified / Emissions/Discharges to the Environment

All Contract operations will be scrutinized for their impact to the environment. This is accomplished through the implementation of several procedures. SP-01.09-04, Hazard Communications and Hazardous Material Control, requires managers to notify the Health & Safety Representative of all waste streams and the processes from which they emanate. It requires the requester of hazardous materials or devices to route the request to the Health & Safety representative before implementing the material request. The Health & Safety Representative reviews and determines the environmental impact of the materials used and if permitting will be required.

Hazardous materials will be scrutinized for environmental impact and managed to maintain the lowest possible quantity, and for substitution of non-hazardous or less hazardous materials for hazardous materials. Proper hazardous materials handling to include quantity minimization, storage segregation, waste segregation and handling requirements will be implemented. When operations requiring permitting are identified, sufficient lead time for processing permits through the appropriate state and or federal environmental protection agency will be allotted in project plans by management due to the length of time necessary for the processing of such permits.

4.1.4.5. Pollution Prevention/Waste Minimization

The EPA and many states have identified pollution prevention as their first priority in combating environmental releases and reducing waste generation. Pollution prevention refers to a broad array of methods to reduce or eliminate the volumes and/or toxicity of pollutants in wastes or released to the environment. The pollution prevention program is intended to ensure that the Safety and Health Plan goes beyond mere regulatory requirements. The pollution prevention program will be implemented in conjunction with Safety and Health auditing, training, and reporting policies and will be subject to all tracking and disciplinary provisions of the program. Contract operations will be compliant with the requirements of KNPR 1870.1, KSC Sanitation Program and KNPR 8500.1, KSC Environmental Requirements.

4.2 Facilities Baseline Documentation

Contract facilities will be analyzed to determine if facilities baseline documentation is required for these sites. A list of those Contract occupied facilities at KSC and other Contract locations that require such documentation will be maintained. This requirement ensures that a set of baseline documentation for critical, complex, or hazardous facilities is developed, validated, and maintained for the facility by the Facility Manager. Employees will support this process by providing documentation of procedures, analyses, etc. as defined in KNPR 8715.3. This documentation may include the following:

a. Configuration control documentation including current facility drawings, equipment drawings, functional schematics, block drawings, and nonmetallic surveys.
b. General operating procedures that contain basic policies, describes the facility organization and responsibility, and procedures for collecting and maintaining baseline documentation.
c. Safety requirements and procedures that include emergency planning, certification of pressure systems and lifting equipment, calibration, testing involving human subjects, operations performed in vacuum or oxygen-enriched environments, operations with hazardous materials.
d. Detailed procedures that describe system and machinery operations.
e. Hazard analyses for the facility, equipment, and systems, which will be approved by SFAO.
f. Failure Modes and Effects Analyses for systems and subsystems that are critical systems.
g. Documented inspections.
h. Training documentation for personnel who are qualified to operate systems and equipment.
i. Preventive maintenance documentation for all critical systems and equipment.
j. Records generated from operational readiness inspections, test readiness reviews, approval of variances, pressure systems certifications, etc.

If any facilities are assigned to Analex, the Area Manager, if required will update this documentation on an annual basis, and a copy will be provided to NASA.

4.3 Preventive Maintenance

4.3.1 General

The equipment, systems, or facilities that require preventive maintenance will have procedures established to provide for the required preventive maintenance and maintenance tracking. Employees will not conduct maintenance and repair equipment such as lighting, structures, air conditioners, heaters, plumbing, office furniture, copiers, and other office equipment that is not the responsibility of the Contract. It is, however, the responsibility of employees to ensure that this equipment is well maintained and to notify appropriate individuals if service, maintenance, or repair is needed.

For equipment, systems and facilities that are the responsibility of the Contract, special attention will be provided for safety critical systems and equipment that is necessary to protect employees and property from potential damage and harm. All items requiring preventive maintenance will be identified and tracked to ensure timely completion and to identify adverse trends. Safety Alerts, Safety Flashes, etc. that are received from KSC, site, corporate or other sources will be reviewed by the Health & Safety Representative and appropriate action implemented if it affects ELVIS facilities, equipment and processes. When appropriate, the responsible Area Manager supported by the Health & Safety Representative will ensure adverse system or equipment experiences are documented into Safety Flashes and Safety Alerts.

4.3.2 Responsibilities

The responsibility for maintenance lies with the individual assigned by management to that specific area or to each specific piece of equipment. Employees assigned to perform maintenance will be properly trained and will follow all required safety procedures, such as Lockout/Tagout, if applicable, before performing maintenance.

4.3.3 Requirements

Maintenance procedures will be generated for each item where periodic maintenance is required. Appropriate warning and caution statements will be added to the procedures where applicable. A maintenance schedule will be developed for each item and management will assign employees to specific equipment, systems or facilities for which they have maintenance responsibility. The responsible manager for the work area will maintain a list of these assigned responsibilities. The lead engineers will review the maintenance schedule on a monthly basis and employees will be assigned appropriate actions to ensure that preventive maintenance is performed. A maintenance log will be kept on each maintenance item and will be checked as part of the monthly safety audits.

4.3.4 Records

The manager who has assigned responsibility for the equipment, system or facility will maintain maintenance records. The Health & Safety Representative will keep additional records, if needed. All records will be made available to KSC for review upon request.

4.4 Medical Program

4.4.1 Purpose

The health and safety of employees is of primary importance. An important part of the contract and corporate mandates is to encourage a preventive approach regarding health maintenance and to comply with Federal, State, and local requirements. These requirements include monitoring the health of those employees who may be exposed to chemical or physical hazards in the workplace. A comprehensive health maintenance program will be instituted, and will address the elements necessary for such a program. This program is to complement the requirements of KNPD 1800.1, Environmental Health Program and KNPD 1810.1, KSC Occupational Medicine Program. At KSC medical services will be provided, as defined by KNPD 1810.1, by the KSC clinic. At VAFB these services will be coordinated through the contract. The government does not provide emergency medical and evacuation services outside the United States.

For detailed occupational medical procedures see Procedure 31, Occupational Health.

4.4.2 CPR, First Aid, and Emergency Response

For emergencies that occur at ELVIS facilities, employees are expected to utilize the local site or pre-determined off-site clinic, and/or call the on-site emergency number. Individuals are not expected or required to provide emergency response such as CPR or First Aid, unless they choose to do so as "Good Samaritans". Safety Representatives, Fire Wardens, and employees will be given the opportunity to attend First Aid/Cardio Pulmonary Resuscitation training on a voluntary basis. Site-specific procedures will be identified for all ELVIS sites including Contractor and third party sites to ensure employees are properly trained for emergency response for that location. First Aid supplies will be posted in facilities where it is appropriate due to potential hazards that may exist.

4.4.3 Safety and Health Variance

The need for a variance to a safety requirement results from a situation where standard safety precautions and regulations do not permit accomplishment of, or unacceptably delay, a particular mission or operation. If departure from a safety requirement will not result in an unacceptable risk, a documented request for a variance will be prepared by the requesting organization. The Program Manager will approve safety variances that are internal to Analex operations. Variances that are Contract task related will be approved in accordance with the variance policy as stipulated in KNPR 8715.3 and FSPCMAN 91-710-V1-V7. All variances will be fully coordinated with SFAO.

5.0 Emergency Response

The Analex Team is committed to proactive emergency preparedness. To implement this, contingency plans and procedures will be prepared that cover every ELVIS location. Management will ensure these are completed and all employees are trained and drilled to effectively implement them. Our Team will fully support existing KSC, VAFB, and field site plans, procedures, and drills. To accomplish this, program management will coordinate with each sites' emergency preparedness representatives to prepare our team to respond effectively. All emergency procedures will be developed using JHB 2000 and KNPR 8715.3. Plans and procedures will address individual operations and our operating procedures will contain specific instructions necessary in dealing with emergencies to provide rapid shutdown and safeing of operations for the protection of personnel and equipment. Procedures will address means of notification, evacuation routes, emergency and protective equipment locations, and responsibilities of supervisors and employees during emergency situations, disasters, and adverse weather conditions.

5.1 General

a. All fires, medical emergencies, and bomb threats are reported immediately to those in the immediate area, emergency services, dial 911 (867-7911 for cell phones at KSC/CCAFS, and 805-734-4117 for cell phones at VAFB) and your manager or the Health & Safety Representative from a safe location.

b. The evacuation of the building is signaled by voice, fire alarm, or public address system. Employees are not to reenter the building until an "all clear" signal is received. The all clear will be signaled by the incident commander or fire officials.

c. All work area doors will be closed.

d. Employees are evacuated from the immediate area in which a fire or medical emergency has taken place and from adjacent areas that may be endangered by the occurrence.

e. When an incident is so severe that it may endanger a major portion of the building or involve the entire building, the facility will be evacuated. Employees will proceed at least 200 feet away from the building to the designated Emergency Evacuation Assembly Point.

f. Emergency Evacuation Plans have been developed and are posted throughout work areas.

5.2 Responsibilities

a. Program Manager and Managers
   (1) Have a thorough understanding of emergency procedures.
   (2) Ensure employees are in evacuation procedures.
   (3) Evacuate employees in the event of an emergency.
   (4) Ensure employees are aware of designated Marshalling Areas.
   (5) Account for employees and report results to emergency services (e.g., Fire officials).
   (6) Ensure that all persons requiring assistance during evacuation are assigned a buddy and alternate, if necessary.

b. Health & Safety Representative
   (1) Assure all areas have Emergency Evacuation Plans.
   (2) Ensure that all employees have been trained in emergency procedures and document the training.
   (3) Assist the managers in developing Emergency Evacuation Plans.

c. Employees
   (1) Report emergencies promptly.
   (2) Be knowledgeable of emergency procedures, evacuation routes, and Marshalling Areas.
   (3) Proceed to Marshalling Areas and stay out of an area that has been evacuated until an "all clear" has been given.

5.3 Emergency Reporting

In the event of an emergency, employees will report it by dialing 911 (both at KSC/CCAFS & VAFB). If dialing from a cell phone KSC/CCAFS employees need to dial 867-7911, and 805-734-4117 from VAFB. Employees will then notify their immediate supervisor and any other employees that may be in the area.

(1) State your name and exact location of emergency.
(2) State the nature of the emergency (e.g., fire).
(3) Stay on the line unless immediate evacuation is necessary.

5.4 Evacuation Procedure

a. When instructions are given to evacuate the area or building, employees will:

(1) Shut down equipment that, if allowed to run, may create a hazard or cause damage if left unattended.
(2) Close all doors to work areas.
(3) Exit the building in an orderly manner by the nearest and safest evacuation route and meet at the designated Marshalling Area.
(4) Remain in the Marshalling Area until an all clear is signaled or a management decision is made to leave the area.
(5) Persons requiring special assistance during evacuation will be assigned a buddy to assist them during the procedure. Examples of physical conditions, either temporary or permanent, which may hinder an employee's evacuation and would require assistance include:
- Use of wheelchair, crutches, or walkers
- Hearing or visual impairments
- Pregnancy (second to third trimester)
- Heart or lung conditions
- Temporary injuries
- Other disabilities hindering mobility

5.5 Fire

a. An employee who discovers a fire reports or directs another employee to report the fire and exact location to emergency services by dialing: 911 (867-7911 for cell phones at KSC/CCAFS and 805-734-4117 from VAFB)
b. Employees in the vicinity of a fire may attempt to extinguish the fire with available extinguishers only if they have been formally trained to use extinguishers, and only if it can be done safely when, or after, the emergency services have been notified.
c. All employees not assisting in extinguishing a fire will leave the area by the nearest and safest evacuation route in an orderly manner and gather at the Marshalling Area.
d. Report any smoke or smell of smoke to the emergency number (911) even if no fire is apparent.

5.6 Bomb Threat

a. An employee will take the actions itemized below if he or she receives a bomb threat.
(1) Attempt to obtain as much of the following information as possible:
(a) Location of bomb (building, area, room, and other details);
(b) Time bomb is set to go off;
(c) What it looks like (whether it is concealed or in the open);
(d) How it got into the office.
(2) Attempt to identify the caller's sex, knowledge of the building, and accent;
(3) Attempt to identify background noise;
(4) Notify the Area/Technical Manager or immediate manager and the emergency number (911) when the call ends. Do not talk to anyone else about the call except as instructed by management.

b. Fire Protection Services and/or Security, working in conjunction with local authorities, will determine whether to evacuate the building. ELVIS management will assist in ensuring an orderly and timely evacuation.

5.7 Employee Education and Drills

a. Managers are responsible for training employees in emergency procedures. A thorough understanding of reporting, actions, and evacuation procedures is required to avoid confusion during an actual emergency.
b. Employees will be trained annually, and new-hires and temporaries at the time of initial assignment. Training will be documented.
c. Training will concentrate on:

(1) Immediate action to be taken in the event of a fire or medical emergency.
(2) Identification of equipment in a work area that is to be shut down in an emergency, if it can be done safely.
(3) Location of emergency equipment in the employees' work area;
(4) The method by which employees will be notified of an emergency including facility and site warning system.
(5) Identification of evacuation routes and Marshalling Areas.

There will be at least one fire drill per calendar year (In coordination with site Fire Protection).

5.8 Hazardous Material Event

In the event of a spill or activity resulting in the potential exposure of people directly or indirectly to hazardous material, the following procedure will be used

a. Activate area alarms if evacuation is required
b. Evacuate the area if required
c. Make the appropriate phone notification from a safe location (Dial 911)
d. Notify the area manager
e. Terminate the operation and stop the source of the spill or leak, without risk of injury
f. Contact the S&MA department.

5.9 Tornadoes

If you spot a funnel cloud and time permits call 911 (867-7911 on cellular phones on KSC/CCAFS and 805-734-4117 from VAFB) and report it.

A Tornado Watch means conditions are favorable for tornado development. Listen for updates or possible warnings.
A Tornado Warning means a tornado has been sighted or is imminent. When a tornado warning (3-5 minute steady siren) is sounded:

a. Seek shelter in a substantial steel-framed or reinforced concrete building.
b. Evacuate structures with wide, free span roofs, such as high bays, aircraft hangars and atriums.
c. If you are unable to reach a steel-frame or reinforced concrete building, lie flat in a ditch or ravine.

d. If outdoors, or inside a minimum shelter, such as a shed, be alert to the possibility of flying debris.
e. If you are in a trailer, evacuate to a suitable building.
f. If you are in a boxcar or modular building, move away from doors. Go to interior parts of the facility and take cover under a desk. If inside a building, stay away from windows.
g. If possible move into a corridor and close hallway doors.
h. If you are on upper floors of a multi-story building, move to the lower floors.
i. Occupants of vehicles should seek shelter inside a building.
j. Employ the buddy system and assist those in need.
k. Report any injuries, downed power lines or gas leaks to 911 (867-7911 for Cellular
l. Phones at KSC/CCAFS and 805-734-4117 from VAFB). Return to work when "All Clear" is announced.
m. If injuries or damage results, follow Mishap Reporting SP-04.01-01.

5.10 Lightning

Phase I Lightning Advisory: Issued when lightning is present or expected within five (5) nautical miles of the announced location which may produce cloud to ground lightning within thirty (30) minutes.

Phase II Lightning Warning: Issue when lightning is imminent or observed within the five (5) nautical mile boundary of all or a specific area of PAFB, KSC or CCAFS.

If lightning is imminent or occurring:

a. Stay indoors and away from windows and metal doors.
b. Do not use any equipment that could conduct sympathetic voltages into the work area (computers, telephones, water fountains, copiers, etc.) until the immediate threat has subsided

If outside:

c. Seek shelter in a protected building or hardtop automobile
d. The highest object around should NOT be you or a nearby tree
e. Avoid tall objects like power poles and flagpoles
f. Go to the lowest area
g. Get out of open water
h. Avoid metal objects like fences, gates, and unprotected structures
i. If injuries or damage results, follow Mishap Reporting SP-04.01-01.

5.11 Thunderstorm

Severe Thunderstorm WATCH: Does not require immediate action. A severe thunderstorm watch is issued to heighten public awareness and should not be confused with a WARNING.
Severe Thunderstorm WARNING: Indicates that imminent danger to life and/or property is possible in the path of the storm and the following actions should be taken at once:

a. Postpone all outdoor activity, if at all possible.
b. Pass information on the severe weather warning on to other personnel who may not be in a position to hear the original announcement.

c. Take shelter in a sturdy building or a hardtop automobile. DO NOT take shelter in trailers or modular/temporary facilities.
d. Avoid using phones and other electrical appliances (use phone only in an emergency).
e. Get to higher ground if flooding is imminent.
f. If a funnel cloud is spotted, report it to 911 (867-7911 for cell phones at KSC/CCAFS and 805-734-4117 from VAFB) (See **Tornadoes**).
g. Wait for the "all clear" announcement by the Aural Warning System.
h. If injuries or damage results, submit Mishap/Close Calls Per Mishap Reporting SP-04.01-01.

5.12 Hurricanes

To provide for the protection of personnel, facilities, and equipment when a hurricane threatens, an ELVIS Hurricane Preparation & Recovery Plan has been developed that covers all ELVIS locations. This plan details the steps that will be taken to protect the employees, property, equipment, and the procedures to be followed after an emergency to bring the Contract operations back to normal operations.

Should a hurricane threaten, the site manger is authorized to release employees and discontinue operations. Managers will be encouraged to honor liberal leave policies to allow employees to secure their personal property and to evacuate their families in advance of community warnings. However, employees may be asked to make certain preparations prior to their departure.

In the event of a severe weather/hurricane alert, employees may be asked to:

a. Unplug all electrical equipment
b. Unplug personal computers and wrap them in plastic bags
c. Close all doors
d. Secure all valuable papers and classified materials
e. Remove bottom file drawers and place on desks or tables
f. Raise window blinds to near the top of the windows

Other general responsibilities include:

g. Keeping informed of emergency action plans regarding hurricanes
h. Keeping informed of anticipated local weather conditions and the status of the plan implementation by dialing the KSC Storm Information/Update Hotline at 861-7900.
i. Employees are encouraged to take measures before hurricane season begins to protect their homes

5.13 Earthquakes

Earthquakes strike suddenly, violently and without warning. Identifying potential hazards ahead of time and advance planning can reduce the dangers of serious injury or loss of life from an earthquake.

a. Earthquake hazard prevention:

- Fasten shelves securely to walls.
- Place large or heavy objects on lower shelves.

- Store breakable items such as bottled chemicals and glass items in low, closed cabinets with latches.
- Hang heavy items such as pictures and mirrors away from couches, and anywhere people sit.
- Brace overhead light fixtures.
- Repair defective electrical wiring and leaky gas connections. These are potential fire risks.
- Store chemicals, pesticides, and flammable products securely in closed cabinets with latches and on bottom shelves.
- Identify safe places in each room.
- Under sturdy furniture such as a heavy desk or table.
- Against an inside wall.
- Away from where glass could shatter around windows, mirrors, pictures, or where heavy bookcases or other heavy furniture could fall over.
- Locate safe places outdoors.
- In the open, away from buildings, trees, telephone and electrical lines, overpasses, or elevated expressways.
- Ensure all employees know how to respond after an earthquake.
- Train all facility managers how and when to turn off gas, electricity, and water.
- Train employees how and when to call police, or fire department and which radio station to tune to for emergency information.

b. During an Earthquake.

If indoors:

- Take cover under a piece of heavy furniture or against an inside wall and hold on.
- Stay inside.
- The most dangerous thing to do during the shaking of an earthquake is to try to leave the building because objects can fall on you.

If outdoors:

- Move into the open, away from buildings, streetlights, and utility wires.
- Once in the open, stay there until the shaking stops.

If in a moving vehicle:

- Stop quickly and stay in the vehicle.
- Move to a clear area away from buildings, trees, overpasses, or utility wires.
- Once the shaking has stopped, proceed with caution. Avoid bridges or ramps that might have been damaged by the quake.

c. After an Earthquake, be prepared for aftershocks.

- Although smaller than the main shock, aftershocks cause additional damage and may bring weakened structures down. Aftershocks can occur in the first hours, days, weeks, or even months after the quake.
- Help injured or trapped persons.
- Give first aid where appropriate. Do not move seriously injured persons unless they are in immediate danger of further injury. Call for help.
- Listen to a battery-operated radio or television for the latest emergency information.

- Stay out of damaged buildings. Return to facilities only when authorities say it is safe.
- Use the telephone only for emergency calls.

6.0 Safety & Health Training

All employees working under the ELVIS Contract will receive proper training in accident reporting, emergency evacuation procedures, and any hazards pertaining to their assignments. Training will be provided upon hire, prior to reassignment, and at regular intervals for refresher training to ensure employee understanding and retention. Where possible, employees will utilize the training classes available through KSC (JBOSC Contractor services), the NASA Safety Training Center (NSTC), and other organizations. Certification classes required for certain tasks will be provided, and Contract employees will attend as required by company and KNPR 8715.3, FSPCMAN 91-710-V1-V7, and field site requirements. All safety training materials and documentation will be made available to NASA for review upon request.

6.1 General

a. The Health & Safety Representative and Area Managers will ensure that all employees receive safety orientation and that the orientation activities are documented.

b. Managers, Health & Safety Representative, NSTC and KSC (BOSC), will conduct safety training. Formal training will be provided and conducted on a periodic basis as determined by managers and the Health & Safety Representative.

c. Training Requirements. Training requirements will be determined by reviewing applicable requirements, Safety and Health training questionnaire results, hazard data, injury and illness statistics, training records, audits, and surveillance of all operations. Job training, as a minimum, will include the following:
   (1) Potential hazards of the job
   (2) Potential hazards of the work environment
   (3) How to use applicable protective equipment and procedures
   (4) Location and use of emergency equipment and when required, hands-on evaluations.
   (5) Emergency, protective, and first aid procedures applicable to the task and environment.
   (6) How to report work-related injuries and illnesses
   (7) How to identify and report hazards to proper authorities
   (8) Safety and health standards and practices which are applicable to the job such as Lockout/Tagout, Personal Protection Equipment, Respiratory Personal Protective Equipment Training, Radiation Safety, Hazard Communication, and Hazardous Waste Management.

d. Training Frequency. The frequency of training will be based on need in relation to changing equipment, procedures, regulations, processes, and the potential for accident or injury. The following situations indicate that refresher training will be conducted:
   (1) New equipment or processes are introduced
   (2) Standard operating procedures have been revised
   (3) Employee performance needs improvement
   (4) Employees have difficulty remembering important safety information
   (5) New or revised NASA, Federal, State, or local standards are identified

(6) Increased injury and illness rates, unsafe work practices, or close calls
(7) Revised safety and health policies

e. Training Methods. Safety training can be conducted through formal classroom training, online courses, use of the KSC resources, NSTC or through on-the-job instructions. Whatever method is used, training effectiveness will be evaluated through post-training testing, management observation of performance, and injury/illness statistics.

f. Training Records. The ELVIS team documents its training through an enrollment and tracking system. All training documentation will include the names of all attendants, date and time of the training, and outlines/lesson plans for the course. If training is provided by external sources, the employees will be able to provide hands on course material and the organizations/names of who conducted the training. This training will also be documented within the tracking system.

g. Training Certifications. Some operations performed by ELVIS Contract personnel require certifications in order for individuals to perform these tasks. The manager will maintain a list of all processes which require certification, and these requirements will be added to the individuals training plan and will be consistent with the requirements of KNPR 8715.3. An annual review will ensure that refresher training, physical requirements such as medical exams, and manager observations, if required, are being performed to ensure individuals maintain qualifications for certification.

6.2 Responsibilities

a. Health & Safety Representative

(1) Provides a Safety and Health orientation course that addresses the contents of Safety and Health Plan and is presented to each new or temporary employee during the new employee orientation.
(2) Develops training for employees as necessary.

b. Managers or Human Resources

(1) Ensure that no new or temporary employee begins any work assignment without first reviewing the applicable Contract Safety and Health Plan and signing an acknowledgment form.
(2) Ensure that all employees receive needed safety training prior to beginning a new task and that he/she receives refresher training as necessary.
(3) Obtains a signed acknowledgment from each employee certifying that he or she has reviewed and understands the applicable contents of this manual.
(4) Maintains the original of a signed orientation acknowledgment or equivalent documentation.

6.3 Certification

Certain tasks, such as hazardous waste disposal, Self-Contained Atmospheric Protective Ensemble suite procedures, cryogenic handling, pressure vessel servicing, monitoring of hazard-

ous operations, etc. are of a significantly hazardous nature and require special training prior to permitting an employee to perform these functions. Some of these courses will be available from the KSC Base Operations Contractor, the NSTC, and some will be provided in house. When training is completed, employees will be tested, and those passing the tests will go through a period of on-the-job training and then be evaluated for certification by the area supervisor, the Health & Safety Representative, and other personnel as deemed necessary for their specific operation or area. The certification status will be tracked in the training database. All certifications will require periodic renewal by demonstrating continued knowledge and proficiency in the operation.

7.0 Appendix A - Reference Documents

C.1 Compliance Documents

The following Contract compliance documents, and subsequent revisions, are applicable to the ELVIS Safety and Health Program:

FSPCMAN 91-710-V1-V7	Range Safety User Requirements Manual
JHB 2000	Consolidated Comprehensive Emergency Management Plan
KNPR 8830.1	Facilities and Real Property Management Handbook
KNPR 1610.1	KSC Security Procedural Requirements
KNPR 8715.3	Kennedy Space Center Safety Practices Handbook
KNPR 1870.1	KSC Sanitation Program
KNPR 2570.1	KSC Radio Frequency Spectrum Management Procedures & Guidelines
KNPR 4000.1	Supply and Equipment System
KNPD 1800.2	KSC Hazard Communication Program
KNPD 1810.1	KSC Occupational Medicine Program
KNPD 1860.1	KSC Radiation Protection Program
KNPD 8500.1	KSC Environmental Management
KNPR 8500.1	KSC Environmental Procedural Requirements
NASA-STD-8709.2	NASA Safety and Mission Assurance Roles and Responsibilities for Expendable Launch Vehicle Services
NPR 8715.3	NASA Safety Manual
NPR 8621.1	NASA Procedures Requirements for Mishap Reporting, Investigating, and Recordkeeping
NSS/GO 1740.9	NASA Safety Standard for Lifting Devices and Equipment
KDP-P-2233	VAFB Safety Assessment of Hazardous Operations
KDP-P-2234	VAFB Safety Procedure Processing
KNPR 1840.19	KSC Industrial Hygiene Program
KNPR 1820.3	KSC Hearing Loss Prevention Program
KNPR 1820.4	KSC Respiratory Protection Program
KNPR 1860.1	KSC Ionizing Radiation Protection Program

C.2 Reference Documents

The following government documents, and subsequent revisions, will also be consulted in the implementation administration of the Safety and Health program:

AFI 32-7064	USAF VAFB Environmental Impact Analysis Process
AFM 161-30 V1	Solid Rocket/Propellants
AFM 161-30 V2	Liquid Propellants
AFR 127-100	Explosives Safety Standards
KNPD 8719.9	Examination & Licensing of KSC Operators of Special Heavy Equipment, Facility Cranes or Hoists
KNPR 8720.1	KSC Reliability, Maintainability, and Quality Assurance
KSC-STD-E-0012	Standard for Facility Grounding And Lightning Protection
KSC-STD-SF-0004	Safety Standards for Ground Piping Systems Color Coding and Identification
ASME B56.1-2000	Safety Standards for Low Lift and High Lift Trucks
KSC-STD-Z-0005	Design of Pneumatic Ground Support Equipment
MIL-STD-1472	Human Engineering
NASA STD-3000	Man-Systems Integration Standards
NFPA 70	National Electrical Code
OSHA Standards	29 CFR, Part 1910, General Industry, Part 1926, Construction

C.3 Analex Documents

Document numbers and procedure details are subject to change while the ELVIS team works towards the ISO & VPP compliance goals.

Procedure	Title
SP-01.09-01	ELVIS Contract Safety & Health Plan
SP-01.09-02	Hazard Identification, Analysis, and Control
SP-01.09-03	Safety Variances
SP-01.09-04	Hazard Communications & Hazardous Material Control
SP-01.09-05	Employee Reports of Hazards
SP-01.09-06	Mishap Investigation
SP-01.09-07	Stop Work
SP-01.09-08	ELVIS Safety & Health Committee
SP-01.09-09	Safety and Health Metrics & Trends Analysis
SP-01.09-10	Injury/Illness Log & Summary
SP-01.09-11	Facility Inspection Plan
SP-01.09-12	Safety & Health Training
SP-01.09-13	ELVIS Safety and Health Self-Evaluation Process
SP-01.09-14	General Office and Site Safety
SP-01.09-15	Danger Tag Procedure
SP-01.09-17	Ergonomics
SP-01.09-19	Respiratory Protection
SP-01.09-20	Personal Protective Equipment
SP-01.09-21	Lockout/Tagout
SP-01.09-22	Electrical Safety
SP-01.09-26	Powered Industrial Trucks
SP-01.09-27	Ladder Safety
SP-01.09-28	Scaffolding and Mobile Work Platforms
SP-01.09-29	Fall Protection Program
SP-01.09-32	Machine Guarding
SP-01.09-35	Hand Tools
SP-01.09-38	First Aid Kits Inspection and Maintenance
SP-01.09-43	Heat Stress
SP-01.09-50	Construction and Service Subcontractor Safety Program
SP-01.11-03	Emergency Preparedness
SP-01.11-04	Post Earthquake Facility Assessment
SP-01.11-05	ELVIS Hurricane Preparation and Recovery Plan
SP-04-01.01	Mishap and Close Call Reporting

8.0 Appendix B - Safety and Health Training Questionnaire

The S&H Training Questionnaire was developed to serve as a baseline tool for S&H representatives in assessing employee activities and environmental, health, and safety training needs. The questionnaire can be provided to individual employees for completion, or to the supervisor of a group of employees with similar work activities and exposures.

The questionnaire was designed to address a broad range of potential work activities, exposures, and training needs. It does not, however, provide sufficient inquiry into all work environments or tasks and, therefore, will not be relied upon as the sole means of evaluating or assessing hazards to which employees are or may be exposed. It is recommended that the checklist be utilized in conjunction with other ongoing work assessment or evaluation tools (e.g., site visits/tours, statement of work/task order reviews, verbal communications with project managers, etc.) to ensure all regulatory required training needs are addressed.

It is recommended that responses to the questionnaire be utilized to develop a location-specific training requirements matrix to facilitate the tracking of training required or received. The organization of training requirements and records in this manner can greatly simplify the task of tracking individual employee training needs and status, and also serves as an invaluable means of demonstrating compliance.

S&H Training Questionnaire

To determine training needs, simply answer the questions.

General

Yes	No	
☐	☐	Is the employee a new hire?

Required: ✓ NEW HIRE EH&S AWARENESS
HAZARD COMMUNICATION (XG160KSC-REV1189)
ERGONOMICS (ARC-005-05, ARC-006-05, ARC-007-05) Follow link below
OFFICE WORKER SAFETY (SMA-042-01) Use address below
https://solar.msfc.nasa.gov/solar/delivery/public/html/newindex.htm

☐	☐	Is the employee a designated emergency responder authorized to utilize fire extinguishers to put out incipient fires? Note: Retraining required annually

Required: ✓ FIRE EXTINGUISHER

☐	☐	Is the employee an emergency responder for hazardous materials incidents?

Required: ✓ EMERGENCY RESPONSE

☐ ☐ Does the employee work in a high noise area or work with equipment where the average noise level exceeds 85 dBA or supervise personnel who do? (High noise areas and equipment are usually posted as areas or equipment that requires hearing protection.)

Required: ✓ HEARING CONSERVATION

☐ ☐ Does the employee have supervisory or managerial responsibility?

Required: ✓ MANAGER'S EH&S AWARENESS

☐ ☐ Does the employee perform medical emergency response duties?

Required: ✓ CPR/FIRST AID

Chemical Hazards

Yes **No**

☐ ☐ Is the employee expected to work in buildings with hazardous operations, materials use or storage?

Required: ✓ EMERGENCY PROCEDURES
✓ HAZARD COMMUNICATION

Yes **No**

☐ ☐ Does the employee use or handle hazardous materials?

Required: ✓ EMERGENCY PROCEDURES
✓ HAZARD COMMUNICATION/CHEMICAL SAFETY
✓ HAZARDOUS OPERATING PROCEDURES
✓ DECONTAMINATION PROCEDURES
✓ HAZARDOUS WASTE MANAGEMENT
✓ PERSONAL PROTECTIVE EQUIPMENT
✓ FACILITY ACCESS TRAINING
✓ SPILL CONTROL AND CONTAINMENT STRATEGY
✓ WASTEWATER DISCHARGES

☐ ☐ Does the employee package for shipment or supervise employees who package for shipment hazardous and/or radioactive materials?

Required: ✓ HAZMAT TRANSPORTATION

☐ ☐ Does the employee through their course of work contact asbestos containing materials?

Required: ✓ ASBESTOS AWARENESS

☐ ☐ Does the employee conduct custodial or maintenance activities that disturb the matrix of asbestos containing materials?

Required: ✓ ASBESTOS OPERATIONS AND MAINTENANCE

☐ ☐ Does the employee work in a lab with human blood, potentially infectious body fluids, or have exposure to blood during assigned first aid, emergency response, or security activities?

Required: ✓ BLOODBORNE PATHOGENS

☐ ☐ Does the employee work with or supervise personnel who work with chemicals that are controlled by OSHA as Regulated Carcinogens (i.e., 4-Nitrobiphenyl, alpha-Naphthylamine, Methyl chloromethyl ether, 3,3'-Dichlorobenzidine (and its salts), bis-Chloromethyl ether, beta-Naphthylamine, Benzidine, 4-Aminodiphenyl, Ethyleneimine, beta-Propiolactone, 2-Acetylaminofluorene, 4-Dimethylaminoazobenzene, N-Nitrosodimethylamine, or Vinyl chloride?)

Required: ✓ CARCINOGENS, REGULATED

☐ ☐ Does the employee work in a laboratory?

Required: ✓ CHEMICAL HYGIENE FOR LABORATORIES

☐ ☐ Does the employee work with chemical mixtures that contain formaldehyde at levels exceeding 0.1% by weight or which might result in exposures above 0.1 ppm in air or supervise personnel who do? Note: Retraining required annually.

Required: ✓ FORMALDEHYDE OPERATIONS

☐ ☐ Does the employee work with lead containing alloys or materials (i.e.: solders, paints, coatings, etc.) or re-work materials that might contain lead (i.e.: painted metal, or facility remodeling).

Required: ✓ LEAD AWARENESS

☐ ☐ Does the employee work with PCB's or PCB-contaminated electrical components, such as fluorescent light ballasts or PCB- transformers; or assist during PCB spill cleanup activities?

Required: ✓ PCB HANDLING

☐ ☐ Does the employee use personal protective equipment such as gloves, glasses, face shields, etc?

Required: ✓ PERSONAL PROTECTIVE EQUIPMENT

☐ ☐ Does the employee need to use respiratory protection, such as a half-face or full-face respirator, air supplied (or airline) respirator, or a self-contained breathing ap-

paratus (SCBA), or supervise personnel who do?

Required: ✓ RESPIRATORY PROTECTION

Physical Hazards

Yes	No	
☐	☐	Does the employee work in construction (construction trades or inspectors), or as a maintenance employee (e.g., plumber, electrician)?

Required: ✓ EMERGENCY PROCEDURES
✓ HAZARD COMMUNICATION/CHEMICAL SAFETY
✓ DECONTAMINATION PROCEDURES
✓ HAZARDOUS WASTE MANAGEMENT
✓ PERSONAL PROTECTIVE EQUIPMENT
✓ SPILL CONTROL AND CONTAINMENT STRATEGY
✓ STORMWATER POLLUTION PREVENTION/WASTEWATER DISCHARGES
✓ ASBESTOS AWARENESS (PRE-1979 BUILDINGS)
✓ LEAD AWARENESS (PRE-1978 BUILDINGS)

☐	☐	Does the employee perform work in a confined space (e.g., tunnels, ducts, pits, tanks, trenches, etc.), act as an attendant during a confined space entry, or supervise personnel who do?

Required: ✓ CONFINED SPACE ENTRY

☐	☐	Does the employee /supervisor work in an elevated environment (over 4 feet) where fall protection is required or with ladders, scaffolding, or near floor openings or holes where people can fall through?

Required: ✓ FALL PROTECTION

☐	☐	Does the employee operate a powered industrial truck/forklift or supervise personnel who do?

Required: ✓ FORKLIFT TRAINING

☐	☐	Does the employee service, maintain, modify, adjust, inspect, construct, or clear equipment in which an unexpected release of energy (electricity, pneumatic, pressure, falling objects, potential energy, etc.) could harm personnel or equipment or supervise personnel who perform these activities?

Required: ✓ LOCKOUT/TAGOUT

☐ ☐ Does the employee use fixed or portable power tools (such as grinders, rotary saws, nail-guns, powered lawn mowers, etc.) that have guards that prevent physical injury?

Required: ✓ TOOL-SPECIFIC TRAINING
(SEE SUPERVISOR FOR TRAINING)
Required: ✓ MACHINE GUARDING

☐ ☐ Does the employee operate a boom lift or scissor lift or supervise personnel who do?

Required: ✓ MANLIFT

☐ ☐ Does the employee operate overhead cranes or hoists or supervise personnel who do?

Required: ✓ OVERHEAD CRANES AND HOISTS

☐ ☐ Does the employee work with compressed gasses that are stored in cylinders, portable tanks, or high-pressure delivery systems?

Required: ✓ COMPRESSED GAS SAFETY

☐ ☐ Does the employee operate a mechanical or hydraulic power press tool or supervise personnel who do?

Required: ✓ POWER PRESSES

☐ ☐ Does the employee operate woodworking machine(s) or supervise personnel who do?

Required: ✓ WOODWORKING MACHINERY SAFETY

☐ ☐ Does the employee routinely lift heavy loads or frequently bend at the waist to handle material? (Depending on the type of work, employees performing any routine lifting, regardless of weight, could benefit from this course.)

Required: ✓ BACK INJURY PREVENTION

Radiation Hazards

Yes No

☐ ☐ Does the employee work in an area where radioactive material or x-ray producing equipment is used or stored or supervise personnel who do?

Required: ✓ RADIATION SAFETY, ANCILLARY

☐ ☐ Does the employee plan, supervise, or operate industrial radiography equipment for non-destructive radiographic examinations of materials during the normal course of

his work?

Required: ✓ RADIATION SAFETY, INDUSTRIAL RADIOGRAPHY

☐ ☐ Does the employee work with (or in a room with) Class 2 or higher lasers?

Required: ✓ SAFETY, LASER

☐ ☐ Does the employee use an analytical or diagnostic x-ray machine?

Required: ✓ RADIATION SAFETY, X-RAY

☐ ☐ Does the employee work with sealed sources?

Required: ✓ RADIATION SAFETY, SEALED SOURCES

☐ ☐ Does employee work with free isotopes?

Required: ✓ RADIATION SAFETY, FREE ISOTOPES

Ergonomics

Yes No

☐ ☐ Does the employee use a visual display terminal (VDT) for more than 4 hours/day?

Required: ✓ ERGONOMICS, OFFICE

☐ ☐ Does the employee require lifting, working in uncomfortable positions, operating vibrating tools, activities requiring repetitive motions, frequent bending, stooping, or reaching?

Required: ✓ ERGONOMICS, INDUSTRIAL

Area Access

Yes No

☐ ☐ Does the employee need access to facilities that require area access training?

Required: ✓ AREA ACCESS TRAINING (Follow link below)
http://trainingrecords.ksc.nasa.gov/pdfs/matrix.pdf

Identify other potential environmental, health and safety exposures associated with your work activity that are not covered by any of the above questions. _____

_____

_____

_____

Signature:

_____ _____

Employee Name Date

9.0 Appendix C Example Work Area Safety Inspection Checklists

ELVIS Industrial Work Area Safety Inspection Checklist

	Yes	No	NA
A. General			
1. Cords/hoses routed to avoid trip hazard	☐	☐	☐
2. Emergency lights operative (29 CFR 1910.37)	☐	☐	☐
3. Machines, gears, pulleys, belts, etc. guarded/enclosed to prevent employee contact (29 CFR 1910.212)	☐	☐	☐
4. Guards painted safety yellow and point of operation hazards painted safety orange	☐	☐	☐
5. Provisions to prevent woodworking/metalworking machines from automatically restarting upon restoration of power	☐	☐	☐
6. Machinery properly secured to floor (29 CFR 1910.212)	☐	☐	☐
7. Power operated hand tools are in proper working condition (29 CFR 1910.242)	☐	☐	☐
8. Load limits marked on overhead storage areas	☐	☐	☐
9. Materials piled, racked, and stored in a safe manner (29 CFR 1910.176)	☐	☐	☐
10. Ladders in proper working condition	☐	☐	☐
11. Ladders used properly (29 CFR 1910.26, 29 CFR 1910.25))	☐	☐	☐
12. Materials, tools stowed when not in use	☐	☐	☐
13. Trash containers periodically emptied	☐	☐	☐
14. Safety shower/eyewash stations operational and unobstructed (29 CFR 1910.151)	☐	☐	☐
15. Informational signs (i.e. Danger, Warning, Caution) legible and in good condition	☐	☐	☐
16. General housekeeping of work areas is properly maintained (29 CFR 1910.22)	☐	☐	☐
17. Conditions within the work areas free from slip/trip and fall hazards	☐	☐	☐
18. Carpeting secured to floor	☐	☐	☐
19. Furniture in proper condition	☐	☐	☐
20. Controlled areas roped off	☐	☐	☐
21. Hazardous payload commodities signs posted at payload processing facilities and reflect payload and commodities present	☐	☐	☐
22. Unauthorized materials, paper, cardboard, wood removed from area	☐	☐	☐
B. Permanent/Temporary Access Stands PIC Boards			
23. Handrails and/or safety chains and toe boards in place (29 CFR 1910.28)	☐	☐	☐
24. Retracted platforms or portions of platforms secured	☐	☐	☐
25. Movable platforms secured prior to personnel access	☐	☐	☐
26. Unfastened/unsecured items on upper levels are properly and safely positioned	☐	☐	☐
27. Ladders, stands, and PIC boards are padded and secured	☐	☐	☐
C. Egress Routes and Walk/Work Surfaces			
28. Surfaces free of debris/material, which could cause a trip or slip hazard	☐	☐	☐
29. Surfaces smooth/even changes in elevation easily recognized	☐	☐	☐
30. Stairs and ramps in good condition and free of debris/obstructions	☐	☐	☐
31. Stairs with four or more risers have standard handrails and railings (29 CFR 1910.23)	☐	☐	☐
32. Floor openings have standard railings or covers (29 CFR 1910.23)	☐	☐	☐
33. Egress routes are unobstructed (29 CFR 1910.37)	☐	☐	☐
34. Emergency egress routes are identified and illuminated (29 CFR 1910.37)	☐	☐	☐
35. Doors that are not a means of egress are marked NOT AN EXIT (29 CFR 1910.37)	☐	☐	☐
36. Door hardware and panic hardware works properly (29 CFR 1910.36)	☐	☐	☐
37. Emergency egress plan is accurate and identifies the proper emergency exits	☐	☐	☐
D. Occupational Health			
38. Chemical containers properly labeled and stored	☐	☐	☐
39. Personal protective equipment properly used maintained and stored (29 CFR 1910.132)	☐	☐	☐
40. Work area illumination adequate	☐	☐	☐
41. Fume hoods have current certification	☐	☐	☐
42. Heat/cold stress adequately controlled	☐	☐	☐
43. Break/food consumption areas segregated from production areas	☐	☐	☐
E. Fire Protection/Prevention			
44. Proper type of fire extinguishers are available (29 CFR 1910.157)	☐	☐	☐
45. Signs posted denoting the location of fire protection equipment and alarm devices where visual obstruction can't be avoided (29 CFR 1910.157)	☐	☐	☐
46. Sprinkler heads, smoke, and heat detectors, are unobstructed	☐	☐	☐
47. Materials placed to prevent interference with fire protection equipment and alarm devices	☐	☐	☐
48. Fire extinguisher seals intact (29 CFR 1910.157)	☐	☐	☐
49. Fire doors are closed (when applicable)	☐	☐	☐
F. Pressure Systems			
50. Piping/tubing is marked to denote commodity pressure and flow direction	☐	☐	☐
51. Pipes and flex hoses properly secured	☐	☐	☐
52. Pressure lines routed as to avoid use as step or hand hold	☐	☐	☐
53. Compressed gas cylinders properly identified, segregated, and secured	☐	☐	☐
54. Valves/relief devices positioned so as not to endanger personnel, or be inadvertently activated	☐	☐	☐
G. Electrical			
55. Electrical equipment UL approved and properly classified for its location	☐	☐	☐
56. Electrical equipment is in proper working condition	☐	☐	☐
57. Electrical equipment is guarded/enclosed to prevent accidental contact	☐	☐	☐
58. Damaged electrical equipment is dangor tagged and taken out of service	☐	☐	☐
59. Electrical equipment, cords, and components, are not overloaded	☐	☐	☐
60. Electrical panels are unobstructed and have 36 inch clearance in front of panels (29 CFR 1910.303)	☐	☐	☐
61. Electrical panels have a panel schedule identifying circuits that the panel controls (29 CFR 1910.303) (Do NOT break integrity seals)	☐	☐	☐

ELVIS General Work Area Safety Inspection Checklist

	Yes	No	NA
A. Proper Work Practices			
1. Proper use of chairs or other furniture (eg. not leaning on back of legs or chairs, or using as stools)	☐	☐	☐
2. Proper donning and use of personal protective equipment	☐	☐	☐
3. Proper use of equipment or tools	☐	☐	☐
4. Proper lifting technique	☐	☐	☐
5. Employee following good ergonomic practices at workstation	☐	☐	☐
6. Other _____	☐	☐	☐
B. General			
7. Work area free of materials that may constitute a slip, trip or fire hazard	☐	☐	☐
8. Sharp edges protected by rubber or other protective material	☐	☐	☐
9. Materials stored in a safe manner	☐	☐	☐
10. Ladder in proper working condition	☐	☐	☐
11. Materials and tools stowed when not in use	☐	☐	☐
12. Hand tools and equipment in sound condition	☐	☐	☐
13. Good housekeeping maintained	☐	☐	☐
14. Furniture in good working condition	☐	☐	☐
15. Workstation ergonomically designed	☐	☐	☐
16. Hazardous chemical containers properly stored and labeled with contents and hazard warnings	☐	☐	☐
17. Other _____	☐	☐	☐
C. Egress Routes & Walk/Work Surfaces			
18. Walking/working surfaces free of materials/holes which could cause a slip or trip hazard	☐	☐	☐
19. Exit paths and/or doors are free from obstructions	☐	☐	☐
20. Exit lights properly illuminated	☐	☐	☐
21. Surfaces are smooth/even and changes in elevation are easily recognized	☐	☐	☐
22. Elevated surface more than 48 inches above floor or ground provided by with hand/guardrails	☐	☐	☐
23. Stairs with four or more risers have standard handrails and railings	☐	☐	☐
24. Areas identified with proper signs	☐	☐	☐
25. Audible alarms easily and distinctly recognizable	☐	☐	☐
26. Other _____	☐	☐	☐
D. Fire Protection/Prevention			
27. Fire extinguisher in its proper location, charged, and with seals intact	☐	☐	☐
28. Signs posted denoting location of fire protection equipment where visually obstructed	☐	☐	☐
29. Materials placed so as to prevent interference with fire protection equipment and alarm devices	☐	☐	☐
30. Other _____	☐	☐	☐

10.0 Appendix D– Acronyms and Abbreviations

CCAFS	Cape Canaveral Air Force Station
CFR	Code of Federal Regulations
CPR	Cardio-Pulmonary Resuscitation
DRD	Data Requirements Description
EAP	Emergency Action Plan
ELV	Expendable Launch Vehicle
ELVIS	Expendable Launch Vehicle Integrated Support
EPA	Environmental Protection Agency
ES&H	Employee Safety and Health
EWR	Eastern/Western Range
GSE	Ground Support Equipment
HAZMAT	Hazardous Materials
J-BOSC	Joint Base Operations and Support Contract
JSC	Johnson Space Center
KPD	KSC Program Directive
KSC	Kennedy Space Center
NASA	National Aeronautics and Space Administration
NIOSH	National Institute for Occupational Safety and Health

NPR	NASA Procedural Requirements
NSTS	NASA Safety Training Center
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
RAC	Risk Assessment Code
S&H	Safety & Health
SCBA	Self-Contained Breathing Apparatus
SFAO	Safety and Flight Assurance Office
SIMS	Safety Information Management System
SR&QA	Safety, Reliability and Quality Assurance
VAFB	Vandenberg Air Force Base
VPP	Voluntary Protection Program

Attachment J-9

Reserved

Attachment J-10

Statement of Equivalent Rates for Federal Hires

STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES **FOR INFORMATIONAL PURPOSES ONLY**		Page 1 of 2
CLASSES OF SERVICE EMPLOYEES	WAGE GRADE OR GENERAL SCHEDULE EQUIVALENT	HOURLY WAGE RATE THAT WOULD BE PAID IF FEDERALLY EMPLOYED
NON-EXEMPT, NON-UNION (Brevard County, FL)		
Secretary II	GS-5	11.33
Secretary III	GS-6	12.63
Library Technician	GS-5	11.36
Laboratory Technician	GS-6	12.63
Engineering Technician II	GS-4	10.12
Engineering Technician III	GS-5	11.33
Engineering Technician IV	GS-7	14.03
Engineering Technician V	GS-9	17.16
Engineering Technician VI	GS-11	20.77
NON-EXEMPT, UNION (Brevard County, FL		
* Collective Bargaining Agreement between the Boeing Company & International Brotherhood of Electrical Workers AFL-CIO, Local #2088 2/7/00 – 2/2/03		
LDAS/CDAS/EME Technician *		CBA
Lead LDAS/CDAS/EME Technician *		CBA
NON-EXEMPT, NON-UNION (Santa Barbara, CA)		
Librarian	GS-8	15.59
Janitor	WG-2	10.63
Woodcraft Worker	WG-10	17.94
Electrician Maintenance	WG-10	17.94
Machinery Maintenance Mechanic	WG-10	17.94
Welder Combination Maintenance	WG-10	17.94
Supply Technician	GS-7	14.07
Material Coordinator	WG-7	15.43
Secretary III	GS-6	12.63
Drafter IV	GS-7	14.03
Electronics Technician Maintenance III	WG-10	17.94
Engineering Technician IV	GS-7	14.03
Engineering Technician V	GS-9	17.16
General Clerk IV	GS-4	10.12

STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES

FOR INFORMATIONAL PURPOSES ONLY

THIS INFORMATION IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

A. Basic Hourly Rates: Attachment J-10, Page 1

B. Fringes are as follows:

1. Paid holidays: New Year's Day, Martin Luther King's birthday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving, and Christmas Day.
2. Annual leave: Two hours of annual leave each week for an employee with less than three years service; three hours of annual leave for an employee with three but less than fifteen years of service; and four hours of annual leave each week for an employee with fifteen or more years of service.
3. Sick Leave: Two hours of sick leave each week.
4. Life, accident and health insurance programs: government pays 33.3% of cost for life insurance; workman's compensation covers 100% of accident; and depending on health plan chosen, Government pays up to 75% of health insurance.
5. Retirement: Employees covered under CSRS – 7% of annual rate. Employees covered under FERS - .08 basic retirement plus 1% TSP contribution and up to 4% more matching TSP contribution.

Attachment J-11

Acronym List

ACRONYMS

A/E	Architect-Engineer
ACM	Access Control Monitors
AF	Air Force
ANSI	American National Standards Institute
ASNT	American Society for Nondestructive Testing
ASQ	American Society for Quality
ASRS	Automated Support Requirements System
ASTM	American Society for Testing and Materials
ATM	Asynchronous Transfer Mode
BCE	Base Civil Engineering
BOA	Business Objectives and Agreement
CAD	Computer-Aided-Design
CARDS	Computer-Aided Record and Display System
CCAFS	Cape Canaveral Air Force Station
CDLVRR	Center Director's Launch Vehicle Readiness Review
CDR	Critical Design Review
CDRL	Contract Deliverables Requirements List
CFR	Code of Federal Regulations
CIO	Chief Information Officer
CO	Contracting Officer
CofF	Construction of Facilities
COTR	Contracting Officer's Technical Representative
COTS	Commercial Off The Shelf
CSOC	Consolidated Space Operations Contract
CSU/DSU	Channel Service Unit/Data Service Unit
DCR	Design Certification Review
DRD	Data Requirement Description
EAR	Export Administration Regulations
EC	Export Control
ECAMP	Environmental Compliance Assessment Management Program
ELV	Expendable Launch Vehicles
ELVIS	Expendable Launch Vehicle Integrated Support
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ER	Eastern Range
ERB	Engineering Review Board
ERP	Engineering Review Process
ETDS	Enhanced Telemetry Display System
EWR	Eastern/Western Range
FAR	Federal Acquisition Regulation
FRR	Flight Readiness Review

FUP	Facility Utilization Plan
GIDEP	Government Industry Data Exchange Program
GOWG	Ground Operations Working Group
GSE	Ground Support Equipment
HAR	Hardware Acceptance Review
ICD	Interface Control Document
ICRD	Integrated Communications Requirements Document
IMAR	
IONET	Internet-protocol Operational Network
IPP	Installation-Provided Property
ISO	International Organization for Standardization
IT	Information Technology
ITAR	International Traffic in Arms Regulations
KDP	Kennedy Documented Procedure
KHB	Kennedy Space Center Handbook
KPD	Kennedy Space Center Program Directive
KSC	Kennedy Space Center
LAN	Local Area Network
LET	Launch Engineering Team
LMCM	Launch Management Coordination Meeting
LOP	Launch Operations Plan
LRR	Launch Readiness Review
LSIM	Launch Site Integration Manager
LSP	Launch Service Provider
LSSP	Launch Site Support Plan
LSST	Launch Site Support Trailer
MCSS	Mission Critical Space System
MDC	Mission Director's Center
MIM	Mission Integration Manager
MIT	Mission Integration Team
MIWG	Mission Integration Working Group
MOA/MOU	Memorandum of Agreement/Memorandum of Understanding
MRB	Material Review Board
MSDS	Material Safety Data Sheets
MSPSP	Mission system Pre-launch Safety Package
MUCDR	Mission Unique Critical Design Review
MUPDR	Mission Unique Preliminary Design Review
MURR	Mission Unique Requirements Review
MUX	Multiplexer
NASA	National Aeronautics and Space Administration
NDE	Non-Destructive Evaluation
NEPA	National Environmental Policy Act
NHB	NASA Handbook
NIP	Network Implementation Plan
NISN	NASA Integrated Services Network

NPD	NASA Policy Directive
NPG	NASA Procedures and Guidelines
O&M	Operations and Maintenance
OD	Operations Directive
ODIN	Outsourcing Desktop Initiative for NASA
OR	Operations Requirements
OSHA	Occupational Safety & Health Administration
PAO	Public Affairs Office
PCB	Polychlorinated Biphenyls
PCM	Pulse Code Modulation
PDM	Project Decision Meeting
PDR	Preliminary Design Review
PER	Preliminary Engineering Report
PI	Program Introduction
POC	Point-of-contact
POP	Program Operating Plan
PPF	Payload Processing Facility
PRCB	Program Requirements Control Board
PRD	Program Requirements Documentation
Pre-VOS	Pre-Vehicle-On-Stand
PRP	Personnel Reliability Program
PSP	Project Surveillance Plan
PSP	Program Support Plan
QPR	Quarterly Program Review
RCM	Reliability-Centered Maintenance
RF	Radio Frequency
ROM	Rough Order of Magnitude
S&MA	Safety and Mission Assurance
SC	Statement of Capability
SCAPE	Self-Contained Apparatus Protective Ensemble
SCS	Spacecraft Close-out Shelter
SFAO	Safety and Flight Assurance Office
SOW	Statement of Work
STD	Standard
TechDoc	Technical Documentation (System)
TIM	Technical Interchange Meeting
TRI	Toxic Release Inventory
UDS	Universal Documentation System
UTP	Unshielded Twisted Pair
VAFB	Vandenberg Air Force Base
ViTS	Video Teleconferencing Systems
VPP	Voluntary Protection Program
WBS	Work Breakdown Structure
WR	Western Range

SECTION J

ATTACHMENT J-12

Information Technology (IT) Support Functions

IT SUPPORT FUNCTIONS TABLE

Index	Name	Applicable SOW Section With Qualifications	System Requirements Specification (SRS)
0.0	ELVIS Supported IT Resources (ESResources)	Reference indices 1.0 through 8.0; NASA Required IT Resources (NRResources) designated with "NR" index suffix. Operating systems requiring support include Windows and Macintosh. Reference NASA-provided listing of NRResources.	Reference indices 1.0 through 8.0
1.0	ELVIS Supported Administrative Desktops (ESDesktops)	Reference indices 1.x; NASA Required Desktops designated with "NR" index suffix	None
1.1-NR	Launch Services Workstation System (LSWS) at KSC	SOW 10.5.1 support restricted to a maximum of 85 Administrative Workstations and 15 network printers at KSC, FL. Additionally, require support for Redhat Linux operating system	Vendor Maintenance Agreements
1.2-NR	LSWS at Chandler	SOW 10.5.1 support restricted to a maximum of 3 NASA Administrative Workstations at Chandler, AZ.	Vendor Maintenance Agreements
1.3-NR	LSWS at Denver	SOW 10.5.1 support restricted to a maximum of 5 NASA Administrative Workstations 2 network printer at Denver, CO.	Vendor Maintenance Agreements
1.4-NR	LSWS at Dulles	SOW 10.5.1 support restricted to a maximum of 2 NASA Administrative Workstations at Dulles, VA.	Vendor Maintenance Agreements
1.5-NR	LSWS at Huntington Beach	SOW 10.5.1 support restricted to a maximum of 12 NASA Administrative Workstations and 5 network printers at Huntington Beach, CA.	Vendor Maintenance Agreements
1.6-NR	LSWS at VAFB	SOW 10.5.1 support restricted to a maximum of 5 NASA Administrative Workstations and 2 network printers at VAFB, CA.	Vendor Maintenance Agreements
1.7-NR	ODIN VAFB Workstation Desktop Services	SOW 10.5.1 support restricted to a maximum of 25 ODIN workstations at VAFB, CA and 3 network printers.	MOU between ODIN and ELVIS dated 6/25/2003
1.8-NR	TDY VAFB Workstation Desktop Services	SOW 10.5.1 support restricted to a maximum of 25 ODIN or NASA workstations from KSC, FL on travel duty at VAFB, CA in support of launch campaigns.	MOU between ODIN and ELVIS dated 6/25/2003, and Vendor Maintenance Agreements
1.9	ELVIS Contractor Workstations (all locations as required by SOW)	SOW 1.3.10 Contractor Office Workstations	Vendor Maintenance Agreements
2.0	ELVIS Supported Desktop Software Tools (ESSoftware)	Reference indices 2.x; NASA Required Desktop Software Tools (NRSoftware) designated with "NR" index suffix	Reference indices 2.x

Index	Name	Applicable SOW Section with Qualifications	System Requirements Specification (SRS)
2.1-NR	Configuration Change Requirements Database / Task Assignment (CCR/TA) Database	SOW 10.5.2	None
2.2-NR	Risk Management Database (RMDB)	SOW 10.5.2	None
2.3	Contractor Risk Management Database (CRMD)	SOW 1.3.2	None
2.4	ELVIS Badging & Training Database Rev 1	SOW 1.3	None
2.5	ELVIS Costpoint Database	SOW 1.3.5	None
2.6	ELVIS DBA Database	SOW 1.3	None
2.7	ELVIS DRD Staffing Database	SOW 1.3.4	None
2.8	ELVIS DRDS Database	SOW 1.3.4	None
2.9	ELVIS DRDS Database, NASA Edition (Modified from above)	SOW 1.3.4	None
2.10	ELVIS Emp Compensations Database	SOW 1.3	None
2.11	ELVIS Emp Compensations Database Sprvsr Edition	SOW 1.3	None
2.12	ELVIS Employee Status Database	SOW 1.3	None
2.13	ELVIS Employee Status.abr Database	SOW 1.3	None
2.14	ELVIS Expendable Launch Vehicles Database	SOW 1.3.4	None
2.15	ELVIS Keyholder Database Rev 1	SOW 1.3	None
2.16	ELVIS Mission Badging Database	SOW 5.3.4	None
2.17	ELVIS Mission Forecast Database	SOW 1.3.5	None
2.18	ELVIS VE&A Database	SOW 1.3	None
2.19	ELVIS VE&A Database, Lead Edition	SOW 1.3	None
2.20	Future ESSoftware (exclusive)	The applicable SOW section for any future ESSoftware not specifically required by NASA.	None
3.0	ELVIS Supported Networks (ESNetworks)	Reference indices 3.x; NASA Required Networks (NRNetworks) designated with "NR" index suffix	Reference indices 3.x
3.1-NR	Mission Analysis Local Area Network (MA LAN)	SOW 10.5.3 not including managed switches	None

Index	Name	Applicable SOW Section With Qualifications	System Requirements Specification (SRS)
3.2-NR	RESIDENT OFFICE LOCAL AREA NETWORKS (RO LANs)	SOW 10.5.3 restricted to 120 nodes at VAFB, CA, 5 nodes at Chandler AZ, 20 nodes at Huntington Beach, CA, 20 nodes at Denver, CO, and 5 nodes at Dulles, VA, and 20 nodes at Decatur, AL; only the network support at VAFB, CA, includes management of managed routers, managed switches or boundary firewalls	Vendor Maintenance Agreements
3.3	Future ESNetworks (exclusive)	The applicable SOW section for any future networks not specifically required by NASA.	
4.0	ELVIS Supported File Sharing Resources (ESFiles)	Reference index 4.x; NASA Required Networks (NRFiles) designated with "NR" index suffix	
4.1-NR	KSC File Sharing	SOW 10.5.4 with the physical location of the shared information being at KSC or CCAFS, and with the total file space provided being between 600 and 700 Gigabytes.	None
4.2-NR	VAFB Resident Office File Sharing	SOW 10.5.4 with the physical location of the shared information being at VAFB, and with the total file space provided being between 100 and 200 Gigabytes.	None
4.3	Denver Resident Office File Sharing	SOW 10.3 restricted to the file sharing service at Denver, CO, resident office.	None
4.4	Future ESFiles (exclusive)	The applicable SOW section for any future ESFiles not specifically required by NASA.	None
5.0	ELVIS Supported Servers (ESServers)	Reference indices 5.x; NASA Required Serverss (NRServers) designated with "NR" index suffix	Reference indices 5.x
5.1-NR	NRSoftware Servers	Reference NRSoftware line items.	None
5.2	ESSoftware Servers (exclusive)	Reference ESSoftware line items, not including NRSoftware line items.	None
5.3-NR	NRFiles Servers	Reference NRFiles line items.	None
5.4	ESFiles Servers (exclusive)	SOW 1.3 for the servers Agena and Juno.	None
5.5-NR	NRWebsites Servers	Reference NRWebsites line items.	None
5.6	ESWebsites Servers (exclusive)	Reference ESWebsites line items, not including NRWebsites line items.	
5.7-NR	Launch Services Mission Analysis (LS MA) Servers	SOW 10.5.5 restricted to 8 Red Hat Linux servers, 1 SUSE Linux server and 3 IRIX servers, all at KSC.	None
5.8	Future ESServers (exclusive)	The applicable SOW section for any future ESServers not specifically required by NASA.	None
5.9-NR	Launch Services Vulnerability Scan Subsystem	SOW 10.5.5 restricted to one administrative vulnerability scan engine at Littleton, CO, one at KSC, FL, and one at VAFB, CA.	None

INDEX	NAME	APPLICABLE SOW SECTION WITH QUALIFICATIONS	SYSTEM REQUIREMENTS SPECIFICATION (SRS)
6.0	ELVIS Supported Websites (ESWebsites)	Reference indices 6.x; NASA Required Websites (NRWebsites) designated with "NR" index suffix	Reference indices 6.x
6.1-NR	Engineering Review Board Information System (ERBIS)	SOW 10.5.6	None
6.2	ELVIS TrackIT!	SOW 10.5	
6.3-NR	Launch Services Automated Support Requirements System (LS ASRS)	SOW 10.5.6	None
6.4	Launch Services Development Environment (LS Dev)	SOW 10.5.6	None
6.5-NR	RESERVED	RESERVED	RESERVED
6.6-NR	Launch Services Management System (LSMS)	SOW 10.5.6	KSC-PLN-2162 Basic and LSP-PLN-432.01 Basic
6.7-NR	Launch Services Performance Quotes Website (LS PerfQ)	SOW 10.5.6	None
6.8-NR	Launch Services Performance Web Site (LS Perf)	SOW 10.5.6	None
6.9-NR	Launch Services Portal	SOW 10.5.6	None
6.10	Launch Services Test Environment (LS Test)	SOW 10.5.6	None
6.11-NR	Mission Assurance Nonconformance Information System (MANTIS)	SOW 10.5.6	KSC-PLN-2163 Basic
6.12-NR	Mission Integration Reporting System (MIRS)	SOW 10.5.6	None
6.13-NR	Payload Planners Guide (PPG)	SOW 10.5.6	None
6.14	Reporting Online Corrections System (ROCS)	SOW 1.3.7	None
6.15	Future ESWebsites (exclusive)	The applicable SOW section for any future ESWebsites not specifically required by NASA.	None
7.0	ELVIS Supported C&T Development (ES C&T Dev)	SOW 10.5.7	Latest accepted DRD-35
8.0	ELVIS Supported (ES) IT Security	SOW 10.5.8 for ESDesktops, ESSoftware, ESNetworks, ESFiles, ESServers and ESWebsites; For all other IT resources referenced by this table, reference the SOW section associated for the related index.	Reference the related indices.
8.1	Computer-Aided Record and Display System (CARDS)	SOW 7.2	Reference Attachment J-13
8.2	ELV SharePoint	SOW 7.0	Reference Attachment J-13
8.3	ELVTM Domain	SOW 7.2	Reference Attachment J-13
8.4	Enhanced Telemetry Display System (ETDS)	SOW 7.2	Reference Attachment J-13
8.5	Mission Data Center Events Display Controllers (MDC EDC)	SOW 7.0	Reference Attachment J-13

Index	Name	Applicable SOW Section with Qualifications	System Requirements Specification (SRS)
8.6	Mission Operations Communications System II (MOCS II)	SOW 7.1	Reference Attachment J-13
8.7	Programmable Telemetry Processors (PTPs)	SOW 7.2	Reference Attachment J-13
8.8	Telecommunications Transport System (TTS)	SOW 7.5	Reference Attachment J-13
8.9	Telemetry Front End Processors (TM FEPS)	SOW 7.2	Reference Attachment J-13
8.10	Telemetry Local Area Networks (TM LANs)	SOW 7.5	Reference Attachment J-13
8.11	Vandenberg Andover System (VAS)	SOW 7.5	Reference Attachment J-13
8.12	VAS LAN	SOW 7.5	Reference Attachment J-13
8.13	WinPlot	SOW 7.2	Reference Attachment J-13
8.14	Current ELVIS Contractor Corporate IT Resources (i.e., are connected to NASA systems, but do not process, store, or transmit NASA information)	SOW 10.5.8	Reference DRD-34

IT SUPPORT FUNCTIONS TABLE

Name	Type	Current Platform	Current Size	Implementation Status
Budgetary Database	Database	Microsoft Access 2000	~20 tables ~100 queries ~20 forms ~30 reports ~100 macros	Major development complete; need to create new working copy of the database and update reports every fiscal year; new reports created on an as-needed basis
CDRL Tracking System	Database	Microsoft Access 2000	TBD	Does not currently exist; needs to be developed
Configuration Change Requirements Database	Database	Microsoft Access '97	~ 40 tables 155 queries 60 forms 28 reports 11 macros	Major development complete; needs to be converted to Microsoft Access 2000 and merge with ELV Mission Content database; new reports created on an as-needed basis
ELV Mission Content Database	Database	Microsoft Access 2000	~15 tables ~50 queries 13 forms 12 reports ~50 macros	Major development complete; needs to be merged with Configuration Change Requirements Database
ELV Partnerships/Agreements Filing System Database	Database	TBD	TBD	Does not currently exist; needs to be developed; must be compatible with the KSC Customer Agreements database.
Procedure Tracking Database	Database	Microsoft Excel	TBD	Major development complete; needs to be converted to Microsoft Access 2000
Risk Management Database	Database	Microsoft Access 97	14 tables 5 queries 4 forms 3 reports 4 macros < 2000 lines of code	Major development complete; needs to be converted to Microsoft Access 2000
Safety and Flight Assurance Surveillance Database	Database	Microsoft Word	TBD	Currently Microsoft Word document; needs to be converted to Microsoft Access 2000
Travel orders database	Database	Microsoft Access 2000	TBD	Currently in development; development is scheduled to be completed prior to Contract award
Verification Database	Database	Microsoft Access 2000	5 tables 38 queries 6 forms 30 reports 1 macro < 1000 lines of code	Major development complete; some enhancements in work which are scheduled to be completed prior to Contract award
Anonymous FTP Server	Other		~40 directories	Currently resides on an external organization's server; need to establish internal capability within ELV
File and Print Services	Other	Microsoft Windows 2000	22 print queues 8 file shares	All print queues and file shares are fully operational
Mission Analysis Computer Lab Network	Other	Ethernet	48-port 10/100 Ethernet Cisco Catalyst 3500 Series XL hub connected to a 1-Gigabit fiber optic interface	Network hardware is fully operational

Name	Type	Current Platform	Current Size	Implementation Status
Mission Analysis Computer Lab System Administration	Other	Unix (Solaris, IRIX, HP-UX, Redhat Linux) and Microsoft Windows NT/2000	~15 Unix systems, ~25 Windows NT/2000 systems and associated peripherals (printers, monitors, tape drives, disk drive subsystems, CD-ROM/DVD/CDRW drives, autobackup system, scanner, label-maker,)	All systems are fully operational
ELV Performance Web Site Phase I	Web-based	Microsoft Windows, Delphi, JavaScript, IIS, Interbase	31 pages including 17 with HTML forms that perform Interbase database queries and inputs. 27 static images 2 dynamically-generated images 1 ~2MB Interbase database file 22 database tables 47 database views	Major development complete; scheduled to be replaced by ELV Performance Web Site Phase II prior to Contract award
ELV Performance Web Site Phase II	Web-based	Linux Redhat 7.1, JDK, Java Servlets, JavaScript, Apache, PostgreSQL	TBD	Currently in development; scheduled to be completed prior to Contract award
ELV Program/Project Website	Web-based	HTML, JavaScript	1309 pages 2884 images 1675 documents (PDF, DOC, XLS, PPT, etc.)	Some web content resides on a fileshare and must be moved over to a web server
Engineering Review Board Database	Web-based	TBD	TBD	Currently under development (requirements stage); development may not be completed prior to Contract award
SFAO (S&MA) Website/Database	Web-based	TBD	TBD	Currently in development (requirements stage); development may not be completed prior to Contract award
MOCS 2 Model 3/ETDS Integration	Other	PC, NT	TBD	This project integrates mission audio with ELV telemetry display platforms. C/C++.
Computer Aided Record and Display System 2 (CARDS 2) Software Development	Other	Sun, Unix	TBD	This project will replace the current telemetry processing system in use by NASA ELV. C/C++
Digital Stripchart Integration	Other	TBD	TBD	Participate in development team to design, build, and integrate digital stripcharts into existing ELV telemetry stations.
Deployable Telemetry System	Other	TBD	TBD	Integrate hardware and software to support mobile telemetry decom and display functions.
Asynchronous Transfer Mode (ATM) Network Design and Testing	Other	TBD	TBD	Design and test ATM equipment for use in communications services.
Scramnet Monitor (CARDS 2)	Other	TBD	TBD	Design and build an inexpensive scramnet monitor for use in telemetry stations.
ELV Web Portal	Web Based	TBD	TBD	Development scheduled to be completed by contract award.
Mission Integration Reporting System	Web-Based Database	MS Windows Server, MS SQL Server, MS IIS	TBD	Development schedule is 5 months from award of Modification 115

Attachment J-13

IT Security Plans

Incorporated By Reference

IT SECURITY PLANS

DOCUMENT NUMBER	DOCUMENT TITLE AND DATE	DOCUMENT VERSION
LSP-PD-120.06-R00099	Interim Authorization to Operate for the Launch Services Program Information System	Latest released
LSP-PD-120.06-R00100	Information Technology Security Plan for the Launch Services Program Information System	Latest released
LSP-PD-120.06-R00101	Plan of Action & Milestones for the Launch Services Program Information System	Latest released

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PART IV - REPRESENTATIONS AND INSTRUCTIONS
SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

K-1 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (FAR 52.203-2) (APR 1985)

(a) The offeror certifies that-

(1) The prices in this offer have been arrived at independently, without, for the purpose of restriciting competition, any consultation, communication, or agreement with any other offeror or competitor relating to -

(i) Those prices;
(ii) The intention to submit an offer;, or
(iii) The methods or factors used to calculate the prices offered.

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory –

(1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; or-

(2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision

_____

[insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) of this provision have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of Provision)

K-2 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-11) (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of $100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than $10,000, and not more than $100,000, for each such failure.

(End of provision)

K-3 TAXPAYER IDENTIFICATION (FAR 52.204-3) (OCT 1998)

(a) Definitions.

"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

* TIN: _____.
* TIN has been applied for.
* TIN is not required because:
* Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
* Offeror is an agency or instrumentality of a foreign government;
* Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

* Sole proprietorship;
* Partnership;
* Corporate entity (not tax-exempt);
* Corporate entity (tax-exempt);
* Government entity (Federal, State, or local);
* Foreign government;
* International organization per 26 CFR 1.6049-4;
* Other _____.

(f) Common parent.

* Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

* Name and TIN of common parent:
Name _____
TIN _____

(End of provision)

K-4 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5) (JAN 2001)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals--

(A) Are ( ) are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have ( ) have not ( ), within the three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property;

(C) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision; and

(ii)(A) The Offeror, aside from the offenses enumerated in paragraphs (a)(I)(i)(A), (B), and (C) of this provision, has ( ) has not ( ) within the past three years, relative to tax, labor and employment, environmental, antitrust, or consumer protection laws—

(1) Been convicted of a Federal or State felony (or has any Federal or State felony indictments currently pending against them); or
(2) Had a Federal court judgment in a civil case brought by the United States rendered against them; or
(3) Had an adverse decision by a Federal administrative law judge, board, or commission indicating a willful violation of law.

(B) If the offeror has responded affirmatively, the offeror shall provide additional information if requested by the Contracting Officer; and

(iii) The Offeror has ( ) has not ( ), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

K-5 SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1) (OCT 2000) (ALTERNATE I) (ALTERNATE II)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 54171 Research and Development in the Physical, Engineering and Life Sciences.

(2) The small business size standard is 1000 employees

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations.

(1) The offeror represents as part of its offer that it (_____) is, (_____) is not a small business concern.

(2) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, for general statistical purposes, that it (_____) is, (_____) is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents as part of its offer that it (_____) is, (_____) is not a women-owned small business concern.

(4) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents as part of its offer that it (_____) is, (_____) is not a veteran-owned small business concern.

(5) [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.] The offeror represents as part of its offer that it (_____) is, (_____) is not a service-disabled veteran-owned small business concern.

(6) [Complete only if offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, as part of its offer, that--

(i) It (_____) is, (_____) is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office of ownership, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and

(ii) It (_____) is, (_____) is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) [Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.] The offeror shall check the category in which its ownership falls:

_____ Black American.

_____ Hispanic American.

_____ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

_____ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

_____ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

_____ Individual/concern, other than one of the preceding.

(c) Definitions. As used in this provision--

"Service-disabled veteran-owned small business concern"--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (a) of this provision.

"Veteran-owned small business concern" means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice. (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

K-6 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FAR 52.222-22) (FEB 1999)

The offeror represents that –

(a) It [ ] has, [ ] has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
(b) It [ ] has, [ ] has not filed all required compliance reports; and
(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of Provision)

K-7 AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25) (APR 1984)

The offeror represents that-

(a) It [ ] has developed and has on file, [ ] has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2); or
(b) It [ ] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(End of Provision)

K-8 CERTIFICATION OF TOXIC CHEMICAL WASTE REPORTING (FAR 52.223-13) (OCT 2000)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [Check each block that is applicable.]

(i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States

Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(End of provision)

K-9 REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE (52.227-15) (May 1999)

(a) This solicitation sets forth the work to be performed if a contract award results, and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data -- General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its Alternates II and/or III to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of Alternate V with this latter clause provides the Government the right to inspect such data at the Contractor's facility.

(b) As an aid in determining the Government's need to include Alternate II or Alternate III in the clause at 52.227-14, Rights in Data -- General, the offeror shall complete paragraph (c) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify, to the extent feasible, which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the status of such data should a contract be awarded to the offeror.

(c) The offeror has reviewed the requirements for the delivery of data or software and states [offeror check appropriate block] -- {time} None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software. {time} Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:

_____

_____

_____

Note: Limited rights data" and "Restricted computer software" are defined in the contract clause entitled "Rights in Data -- General."

(End of Provision)

[END OF SECTION]

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

L-1 LISTING OF PROVISIONS INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

PROVISION NUMBER	DATE	TITLE
52.204-6	JUN 1999	DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER
52.211-14	SEP 1990	NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE
52.222-24	FEB 1999	PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE EVALUATION
52.232-38	MAY 1999	SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER
52.237-1	APR 1984	SITE VISIT
52.237-10	OCT 1997	IDENTIFICATION OF UNCOMPENSATED OVERTIME
1852.215-81	FEB 1998	PROPOSAL PAGE LIMITATIONS Insert: See L-6, Paragraph (b)
1852.219-77	MAY 1999	NASA MENTOR-PROTÉGÉ PROGRAM
1852.227-71	APR 1984	REQUESTS FOR WAIVER OF RIGHTS TO INVENTIONS
1852.227-84	DEC 1989	PATENT RIGHTS CLAUSES
1852.233-70	MAR 1997	PROTESTS TO NASA

(End Of Provision)

L-2 INSTRUCTIONS TO OFFERORS -- COMPETITIVE ACQUISITION (FAR 52.215-1)(FEB 2000)

(a) Definitions. As used in this provision --

Discussions are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

In writing or written means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

(6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) Offer expiration date. Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

(e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall --

(1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed -- in whole or in part -- for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of -- or in connection with -- the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award.

(1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.

(8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.

(11) The Government may disclose the following information in post-award debriefings to other offerors:

(i) The overall evaluated cost or price and technical rating of the successful offeror;

(ii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection;

(iii) A summary of the rationale for award; and

(iv) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

L-3 TYPE OF CONTRACT

The Government contemplates award of a fixed price/cost reimbursement contract with an award fee provision and fixed price indefinite delivery indefinite quantity (IDIQ) task orders. The contract types by SOW are:

- SOW 2.0: Phase-in is firm fixed-priced.
- SOW Section 3.0 – 8.0: Core requirements are fixed priced award fee. As required Contractor-Acquired Property and Travel for effort related to fixed price core requirements will be on a cost-reimbursable, no-fee basis.
- SOW Section 9.0: Mission Direct Services are fixed price task orders (IDIQ).
- SOW 10.0: Vehicle Engineering and Analysis is cost plus award fee.
- SOW Section 11.0: Construction and Facilities Modifications are to be negotiated fixed price delivery/task orders (IDIQ).

L-4 COMMUNICATIONS REGARDING THIS SOLICITATION

Any questions or comments regarding this solicitation shall cite the solicitation number and be directed to the following Government representative:

Name: Roger A. MacLeod
Title: Contracting Officer
Phone: 321-867-2879 (collect calls not accepted)
FAX: 321-867-2922
E-Mail: roger.macleod-1@ ksc.nasa.gov

*Address: John F Kennedy Space Center
Kennedy Space Center FL 32899
Attention: Roger MacLeod,
Mail Code: SEB-ELVIS

*(Note: Must be complete, including Mail Code, on all transmittals.)

The Government will answer relevant and appropriate questions regarding this solicitation that are received not later than the cutoff date, **October 5, 2001**. Questions received after this date may be considered but not answered by formal amendment.

(End of provision)

L-5 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FAR 52.252-1) (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these addresses:

http://www.arnet.gov/far/

http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm

(End of provision)

L-6 WRITTEN PROPOSAL MATERIAL SUBMISSION

Submit the Past Performance Volume III specified in Section L-10, "Specific Instructions – Past Performance Factor" to the Central Industry Assistance Office (CIAO), Building N6-1009, Room 102. The CIAO is located at KSC Gate 2 on State Road 3 approximately 4 miles south of the intersection of State Road 3 and the NASA Causeway (State Road 405). Access to KSC is not required. Submission may occur between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, except legal holidays, but no later than 12:00 Noon, Eastern Standard Time (EST), **October 22, 2001.**

Submit the balance of the written proposal materials to arrive at the CIAO Room 102 no later than 12:00 Noon, Eastern Standard Time (EST), **Tuesday, November 13, 2001.** Proposals that arrive at the CIAO after the prescribed time for receipt of proposals will be considered late and treated in accordance with FAR 52.215-1, "Instructions to Offerors- Competitive Acquisitions".

The exterior packaging/envelope of all proposal documents delivered in response to this solicitation shall reflect the following information on the address label:

a. Solicitation number: RFP10-01-0001
b. Contain the legend: "To be delivered unopened to the Contracting Officer", and
c. The volume and copy numbers contained in each box.

(End of provision)

L-7 GENERAL PROPOSAL INSTRUCTIONS

Offerors are cautioned to provide complete supporting rationale for all areas of their proposal. Failure to provide such rationale could adversely impact the competitive standing of the offeror's proposal. Rationale for SOW requirements that may be affected by changes in the launch manifest should be based on the NASA Launch Services Manifest and NASA ELV Long Range Planning – Potential Missions documents (see Section L Attachment D - Workload Indicators, Annex 1).

As stated in FAR 52.215-1, the government intends to award on initial proposals. Offerors should submit their best, most realistic, and competitive proposal. Offerors are encouraged to propose innovative process improvements, proactive business strategies, operational flexibilities, methods to exceed customer expectations, as well as cost effective quality enhancements.

(a) The Proposal Shall:

(1) Demonstrate an understanding of the overall and specific requirements of the resulting contract;

(2) Include fixed price amounts and estimated costs and fee;

(3) Provide relevant past performance data.

(b) Proposal Acceptance Period

Offerors shall allow a period of not less than 180 calendar days for acceptance of proposals by the Government. Proposals must be received by the due date in L-6. The Offeror shall sign the Standard Form 33 and return it in Volume II of the proposal.

(c) General Instructions for Written Proposals

Written proposal material shall be submitted in 5 volumes: Executive Summary, Mission Suitability, Past Performance, Business and Plans and Other Data. All volumes will be individually bound in 3-ring binders. Information previously submitted, if any, will be considered only to the extent it is resubmitted. It should not be incorporated by reference. A suitable table of contents (excluded from the page limitations) shall be provided with each volume for ready reference to sections, figures, and illustrations. Title pages, table of contents, acronym list, the past performance contract list, forms, lists and the plans (except staffing plan) required to be submitted with the RFP are

excluded from the page limitation. In addition, the Business Volume is not page limited. However, this volume is to be strictly limited to price/cost information and administrative data, including the model contract. Information that can be construed as belonging in one of the other sections of the proposal will be so construed and counted against that volume's page limitation. If final revisions are requested, separate page limitations will be specified in the Government's request for the submission.

(d) Summary of Exceptions -- List any exceptions to the terms and requirements of Sections A through J of this solicitation, to the Representations and Certifications (Section K) or to the information requested in Section L. Include the reason for the exception or refer to where the reason is addressed in the proposal. Offerors are cautioned that exceptions may result in a determination of proposal unacceptability per NFS 1815.305-70, or may preclude award to an offeror if award is made without discussions, or may otherwise affect an offeror's competitive standing. Include the list of exceptions in Vol. V, Plans and Other Data.

(e) Page Limitation. The following page limitations are established for each portion of the proposal submitted in response to this solicitation. Only the number of pages shown below will be evaluated. Any pages in excess of the maximum number will be removed from the proposal without being evaluated and will be returned to the Offeror.

Volume No.		Page Limit	No. of Copies*
Volume I	Executive Summary	10	5
Volume II	Mission Suitability	~~175~~225	5
Volume III	Past Performance	30	10
Volume IV	Business (Price/Cost)	None	5
Volume V	Plans and Other Data	None	5

*Includes one complete proposal, which must be marked as "Original" for retention by the Contracting Officer.

(1) The proposal text shall be printed on 8 ½" x 11" paper with at least 1" margins on all sides. The metric standard format most closely approximating the described standard 8 ½" x 11" size may also be used. Except for the Business Volume, all volumes must be prepared and submitted using a type-size no smaller than 12-point font (within figures and graphics, a legible type size shall be used). The text shall be printed on both sides of the sheet and each side of the sheet, tab, or divider containing proposal material will be counted as a page. Printed pages and illustrations shall be legible and no larger than 11" x 17" foldouts as appropriate for the subject matter. Foldouts are considered part of the page limitations, shall be printed on one side only, and shall count as two pages. All pages must be numbered sequentially.

(2) Two copies of the proposal text, including any charts, tables, matrices, etc., and pricing data are to be provided in electronic format on Windows compatible CD-

ROM. Each CD-ROM provided is to have an external label indicating the name of the Offeror, RFP number, and a list of the files contained on the disk. Documents should be delivered in MS Word 97 or greater format or pdf format. Price/cost proposal spreadsheets shall be submitted in Excel 97 or greater format. Pictures, drawings, or figures shall be embedded in the body of the documents. In the event of a discrepancy between the electronic format and the hardcopy, the hardcopy will be considered the intended text.

(3) An official authorized to bind the company shall sign the Offeror's model contract.

(End of provision)

L-8 SPECIFIC PROPOSAL INSTRUCTIONS: VOLUME I - EXECUTIVE SUMMARY

The offeror shall provide an overview of the proposal to be used to illustrate the overall approach to meet the Government's needs and should serve as a framework for the information contained in the rest of the volumes. This volume is not evaluated; therefore information that the offerors deem important for evaluation against criteria stated in section M of the RFP, must be reflected in Volumes II, III, IV or V of the proposal.

(End of provision)

L-9 SPECIFIC PROPOSAL INSTRUCTIONS: VOLUME II - MISSION SUITABILITY PROPOSAL

The offeror's complete proposal for the Mission Suitability Factor shall be submitted in Volume II. Careful consideration should be taken in responding to this part of the solicitation. Response to the Mission Suitability Factor will allow the Government to gauge the degree of technical and management competence and understanding brought by the offeror to the performance of the ELV Integrated Support (ELVIS) contract. The proposal for the Mission Suitability Factor shall be submitted in one volume and shall cover all subfactors: Management Approach; Technical Approach; and Safety and Health. The volume shall be provided in accordance with the instructions contained in L-7, "General Proposal Instructions " paragraph (c) "General Instructions for Written Proposals".

The narrative response shall address the adequacy of the offeror's approach to implementing the requirements in the SOW. Each proposal area shall reference the requirements of the SOW section it intends to satisfy. In addition, a table cross-referencing the requirements in the SOW to proposal area shall be provided. The proposal shall be specific, detailed, and complete enough to clearly and fully demonstrate an understanding of the SOW requirements and salient aspects of the overall contract requirements.

The subfactors are listed in the following paragraphs with specific items to be addressed in the offeror's proposal. The listed items are to be considered as a minimum, and the offerors are encouraged to discuss and describe additional features that are judged to be significant.

A. Management Approach (Subfactor -1)

The offeror shall describe the approach to overall management, organization, and integration of all activities associated with this contract. This shall include, but not be limited to the following:

- The organizational approach, management and supervisory controls used to successfully accomplish the broad range of technical and business work functions at multiple locations required by the SOW.
- The business and technical interfaces to NASA and payload customers, decision-making levels of authority for conducting business.
- An organizational chart showing relationships between the offeror's organization, corporate and sub-contractor/teaming partners/other arrangements, and the work content as defined in the SOW. Identify all available corporate resources which are either internal and/or external to the company and how these resources can be obtained to support surge requirements, and special studies projects and analysis required in SOW 10.4.

The offeror shall demonstrate an understanding of performance-based contracting and how the organization and management approach will facilitate performance-based management. The Government is interested in obtaining specific "end results and outcome oriented services". The offeror shall describe techniques and processes that will be employed to ensure an acceptable level of performance including proposed performance measures. The offeror shall describe how the proposed award fee pool is appropriate and meaningful to encourage excellent performance for both Cost Reimbursable and Fixed Price areas of the contract. Explain how the use of Earned Award Fee will incentivize performance to exceed the minimum requirements of the contract or in areas that would not otherwise be emphasized.

The offeror shall demonstrate an understanding, capability, and approach to successfully manage and administer this hybrid contract. Areas of importance include but are not limited to implementation of a business system that effectively segregates Fixed Price from Cost Reimbursable contract type activity, establishes an effective work control process, has the capability to allocate and report mission/project activity, and accounts for schedule and requirements changes.

The offeror shall describe the phase-in approach for assuming responsibility for work, including the proposed management controls, a schedule showing each major event, and the critical tasks. The projected phase-in will be for a period not to exceed 30 calendar days prior to the contract start date. Discuss the approach for interfacing with the incumbent contractors during phase-in including an approach for dealing with labor unions and maintaining continuity of services at contract start date.

The offeror shall identify and discuss relevant programmatic risk areas based on the standards, regulations and requirements contained in the RFP and approach for managing the risks. Programmatic risks include, but are not limited to, technical, schedule, cost, safety and health, security (including personnel, information technology, and facilities/property), the need to involve foreign sources (offeror and/or governmental) and the risk of unauthorized technology transfer (see NPG 2190, NASA Export Control Program), and environmental considerations. The analysis conducted should address the probability of success, impact of failure, and alternatives available to meet the solicitation requirements.

The offeror shall provide a Quality Manual in accordance with American National Standard ANSI/ISO/ASQ Q9001-1994 or 2000 revision. Offeror's submitting the 1994 revision will be required to transition to Q9001-2000 by December, 2003. The Offeror shall submit a Quality Manual with their proposal and any Offeror submitting Q9001-1994 revision shall submit a schedule and describe their transition approach to becoming Q9001-2000 compliant. The Quality Manual shall be submitted in Volume V.

The offeror shall identify 5 or fewer organization positions that are considered key management and technical personnel, and provide rationale for the designation as key positions. The rationale shall include the proposed organizational position and responsibilities for each of the key personnel including how the individual's background, education, and experience qualify them for the position and evidence of the individual's commitment to work for the offeror's organization. Offerors shall complete the proposed key personnel information in the format in Section L, Attachment E for each position.

The offeror shall describe the approach to acquiring the necessary skills and staffing levels. Describe the process (es) that shall be used, after the initial staffing has been established, to identify and maintain the necessary categories and levels of skills to successfully perform the contract requirements throughout the ten-year period of performance.

The offeror shall demonstrate an understanding of the provisions and requirements of the Service Contract Act, collective bargaining agreements, and the requirements for total compensation equity. The offerors shall include a proposed Total Compensation Plan required by FAR 52.222-46 and NFS 1852.231-71. Wage and

salary ranges and fringe benefit data from the Business Volume will be used for evaluation purposes; duplication of price/cost information is not required in this volume.

B. Technical Approach (Subfactor -2)

The offeror's response under this subfactor shall address the approach to implement and perform all requirements stated in the SOW.

The offeror shall describe the proposed approach to support the successful implementation of NASA's oversight requirements for LSPs and payload customers. The offeror's approach shall adequately demonstrate:

- Understanding of the oversight requirements, implementation process, types of skills required, and role of the ELVIS contractor
- Understanding of the launch vehicle certification process and describe the types of skills required for its successful implementation and completion
- Understanding of the engineering review process and describe the types of skills required for its successful implementation and completion

The offeror shall describe the proposed approach to satisfy the mission integration and analysis requirements. The offeror's approach shall adequately demonstrate:

- Understanding of methods needed to capture and satisfy all mission integration requirements and the role the ELVIS contractor would play in the mission integration activities
- Understanding of LSPs analyses methodology used in all mission analysis areas in the SOW and discuss how the offeror would develop launch vehicle models in each of these areas
- Understanding of the methodology and the types of skills needed to review LSP-provided analyses/documentation to ensure critical mission requirements are met

The offeror shall describe the proposed approach to ensure safety requirements of the LSPs and payload customers at the PPFs in sufficient detail to demonstrate and understanding of program policies. The offeror's approach shall adequately demonstrate:

- Knowledge of hazardous processes, professional engineering practices and principles, industrial safety programs, and applicable regulations for hazardous processing of ELVs, spacecraft and ground support equipment
- Process to identify and resolve safety concerns and conflicting requirements with KSC, Air Force, LSP and spacecraft contractors
- Skill in the identification, assessment and effective resolution of safety issues in situations involving time constraints and rapidly changing parameters
- Process to provide safety instruction to all levels of NASA, LSP, and spacecraft contractor personnel

The offeror shall describe the proposed approach to establish and implement an effective quality assurance program. The offeror's approach shall provide sufficient detail to demonstrate understanding of program policies, process controls, risk identification and assessment. The offeror's approach shall adequately demonstrate:

- Capability to implement a quality surveillance program to ensure that the LSP's contractual requirements are met
- Ability to identify, assess, and effectively resolve quality issues in situations involving time constraints and rapidly changing parameters during mission integration and launch processing activities
- Understanding of methods needed to assess the flight readiness of the mission-assigned vehicles and to identify any constraints within the fleet of vehicles

The offeror shall describe the proposed approach to ensure the readiness of the facilities to support payload processing and launch activities. The offeror's approach shall adequately demonstrate:

- Understanding of the activities required to achieve readiness of the payload processing facility systems at VAFB
- Understanding of the activities required to achieve readiness of the communications and telemetry systems for payload and vehicle testing and launch at KSC and VAFB

The offeror shall describe an approach for utilizing Information Technology in the performance of contract requirements. The offeror's approach shall adequately describe:

- Proposed information systems for ensuring data sharing with NASA including maintaining interoperability and access between contractor systems/applications and Government users/customers
- Approach to implement the requirements of NPG 2810.1 Security of Information Technology

The offeror shall submit a staffing plan showing the proposed skill mix, educational level, and staffing levels including subcontractors matched to each third level element of the SOW (i.e., Section 10.1, Section 10.2). The plan shall include completed form (s) in Section L, Attachment A. The plan shall provide sufficient rationale for skills and staffing levels in order to demonstrate an understanding of the degree of effort necessary for successful performance of the functions required by the SOW. Given the diversity of work at each location, the offeror shall explain how skills can be cross-utilized in order to provide optimal efficiency of services. The offeror shall discuss approaches for balancing core services to sustain operational readiness of facilities, systems and equipment with the effort required to support peak mission-related activity.

C. Safety And Health (Subfactor -3)

The offeror shall discuss the safety approach (es) used to establish and implement the Safety and Health Plan. The approach shall provide sufficient detail to demonstrate an understanding of program policies, occupational health, industrial safety, operational safety, systems safety, process safety, safety risk identification and assessment, and external and internal reporting. The offeror shall demonstrate knowledge of Safety and Health compliance requirements and how they are effectively implemented into the safety management approach including but not limited to Federal, State, Local, NASA Agency-wide, and installation specific policies and procedures.

The offeror shall provide the Safety and Health Plan as requested in L-12.

(End of provision)

L-10 VOLUME III - SPECIFIC INSTRUCTIONS –PAST PERFORMANCE FACTOR

(a) Past performance information is one indicator of an offeror's ability to perform the contract successfully. The currency and relevance of the information, source of the information, context of the data, and general trends in offeror's performance shall be considered when preparing the Past Performance proposal.

(b) The Government will consider this information, as well as information obtained from any other sources, when evaluating the offeror's past performance. In making the selection, the source selection authority will determine the relevance of past performance information on similar contracts/projects.

(c) The Offeror shall submit the requested information in the following order:

(1) Table of Contents

(2) Overview – Provide a short overview of past performance history including any awards, certifications, or special recognition earned.

(3) The Offeror shall provide a description of past experience comparable to the effort required in this RFP. Experience should also be cited for any companies proposed to participate in 15% or more of direct labor cost on this contract as a subcontractor on a continuing basis.

(4) The Offeror shall describe experience in the segregation and management of cost, resources, and activities with hybrid (e.g., fixed price/cost-reimbursement) contracts. The offeror shall discuss the extent to which contract objectives (technical, security, management, schedule, cost, safety and health, subcontracting goals and overall mission success) were achieved.

(5) Contract List - Provide a list of all active or completed contracts during the last 3 years and identify those that are relevant to the solicitation performance requirements. The list shall include the offeror's critical subcontracts, teaming subcontracts and/or joint venture partner's contracts greater than $2M annually. For this list, include the contract name, contract numbers, contract type, brief description, and at least two points of contact (one technical and one contract administration) with their current address and phone numbers. This listing does not count against the Past Performance volume page limitation.

(d) Offerors shall send letters and questionnaires to relevant references cited in paragraph (c)(5) authorizing the government to obtain past performance information and indicate in their Past Performance volume that the letters have been sent to the references. The Government may contact the references directly. The references should be directed to complete and submit the questionnaire prior to the submittal date for the Past Performance proposal specified in the "WRITTEN PROPOSAL MATERIAL SUBMISSION" instructions of this section. A sample letter and the Past Performance Questionnaire are contained in Section L, Attachment B. The responsibility to request and track the completion of the questionnaire rests solely with the Offeror. The offeror shall exert its best effort to ensure that at least two points of contact, per relevant contract, submits a completed questionnaire.

(e) The failure to provide the information requested by this section may adversely affect the performance confidence assessment by the government. In this regard, the Source Evaluation Board will abide by the provisions and limits reflected in NFS 1815.304-70(d) in evaluating and reporting each offeror's past performance. Offerors are reminded that both independently obtained data and data provided by the offerors in their proposal may be used to assess an offeror's past performance. It is the offeror's responsibility to validate all information provided including currency of telephone numbers and addresses for points of contact.

(f) The information provided shall contain overall corporate or offeror experience and past performance, but not the experience and performance of individuals who are proposed to be involved in the required work. For newly formed businesses having little or no company experience, the relevant experience and past performance of a predecessor firm, the company's principal owner(s) or corporate officer(s) shall be submitted.

(g) The government will only discuss past performance information directly with the prospective prime or subcontractor being reviewed. If there is an issue with the proposed subcontractor's past performance, the prime can be notified of a problem, but no details may be discussed without the subcontractor's permission.

(End of provision)

L-11 SPECIFIC PROPOSAL INSTRUCTIONS - VOLUME IV – BUSINESS (PRICE/ COST FACTOR AND ADMINISTRATIVE DATA)

1. PRICE/COST FACTOR:

(a) The price/cost proposal will encompass all costs associated with the requirements of the contemplated contract and will comply with applicable FAR, NFS, and governing statutory requirements. The contract will be subject to the Service Contract Act of 1965, as amended. While the Government reserves the right to make multiple awards, it is contemplated that a single NASA contract with the following pricing structure will be awarded as a result of this RFP. It will encompass a 30-day Phase-In period (3/1/02 – 3/30/02), a 3-year, 6-month basic period (4/1/02 – 9/30/05), and two-3 year options to extend the period of performance. (Option 1: 10/1/05 – 9/30/08) and (Option 2: 10/1/08 – 9/30/11).

PHASE-IN - Firm-Fixed Price	SOW Para 2.0
CORE REQUIREMENTS:	
Fixed Price Award Fee	SOW Paragraphs 3.0 – 8.0
Cost Basis (Non-Fee-Bearing)	SOW Paragraphs 3.0 – 8.0
Cost Plus Award Fee	SOW Paragraphs 10.1 – 10.5
MISSION DIRECT SUPPORT:	
Firm Fixed Price/unit	SOW Paragraphs 9.0
FACILITY MODIFICATIONS, DESIGN, AND CONSTRUCTION- IDIQ	SOW Paragraph 11.0

(b) Cost or Pricing Information: Offerors are exempt from the requirements of submission or certification of cost or pricing data, as defined in FAR 15.401, based on a reasonable expectation of adequate price competition. Cost or pricing data and the attendant certification will be required for modification of the basic contract or if any option is exercised at an amount other than that established at initial contract award..

(c) Supporting Information Requirements: To ensure the Government is able to perform a fair assessment of each offeror's proposal, the offeror is required to submit a price/cost proposal with supporting information adequately referenced and suitable for evaluation of price reasonableness and cost realism. In preparing the price/cost proposal, the RFP specified format is required for summary level information; however, offerors may use formats and structure of their choosing in presenting supporting information. A reference column has been inserted on the attached forms for the offeror to use to identify information submitted which will support a determination of realism and reasonableness.

(d) Accounting System – A pre-award accounting system survey may be made to determine the adequacy and suitability of the offeror's accounting system to properly accumulate and report contract cost data. Attach details of any prior accounting system examinations that have been performed and state whether or not the accounting system was found adequate, the survey date, and name of the audit office or contract administration office that conducted the survey. Disclose if the proposed accounting system is currently in full operation, and if not, the anticipated date on which the survey may be conducted. Identify the hardware and software planned to be utilized in the electronic accounting system during contract performance, and location of books and records. Describe the accounting procedures for any cost element proposed to be utilized on a fractional basis in both cost-reimbursable and fixed price contract line items. Specifically address how the proposed accounting system will mitigate the risk of mischarging between cost reimbursable and fixed price contract line items.

(e) Forms: Following is the specific format requested for submittal of cost and pricing information. Forms are included in the Attachment following Section L. Offerors are required to submit one hard copy and one electronic copy of the price/cost proposal directly to the offeror's cognizant audit office concurrent with submittal of the proposal to NASA.

Submit the following information on the cover page of the price/cost proposal:

- Solicitation number
- Name, address & telephone number of the offeror
- Name, title and telephone number of the offeror's point of contact
- Total proposed amount for each performance period
- Name, address, telephone and fax number of the cognizant contract administration office and audit office
- Name, title and signature of authorized representative of the company, and date of submission.

Form A – Price/Cost Proposal Summary: Summarize the proposed contract price/cost for each performance period as indicated on the form. Specify the maximum available award fee pool amount on Form A, which may be earned under both the fixed price and applicable cost reimbursable Contract Line Items. Reconcile the totals with the amounts on the proposal cover sheet and supporting forms.

(a) Phase-In - Offerors are requested to summarize the proposed firm fixed price for the Phase-In period on Form A, and attach details supporting the proposed amount.
(b) Facility Modifications, Design and Construction – Information regarding the cost of performing the projects described in SOW paragraph 11.0

is provided in RFP M-6 Price/Cost Evaluation Factor. Offerors are not required to include costs for SOW 11.0 in the total proposed amount.

Form B –Core Requirements – SOW 3.0 – 8.0. Submit a Form B for the Basic Period and each option.

Fixed Price - Specify the fixed price by year in each performance period for the Core Requirements outlined in SOW paragraphs 3.0 – 8.0. The fixed price shall include all direct costs, applicable indirect costs and anticipated profit associated with fulfilling the requirements of SOW paragraphs 3.0 – 8.0, except the items described in the following paragraph, which will be acquired on a cost reimbursable basis. Submit pricing-related information in the supporting data which will demonstrate reasonableness of the proposed prices, such as basis of estimate, rough order of magnitude, vendor quotes, cost estimating relationships, market prices, projections, escalation assumptions, etc.

Cost Basis (Non-Fee-Bearing) Contractor Acquired Property (CAP)/Travel. The Government has identified the following items which the ELVIS contractor will be required to procure during contract performance for which the nature and quantity would not be expected to vary with the offeror's planned approach to performing SOW requirements 3.0 – 8.0. The specific categories and Government estimated direct cost in GFY02 (6 months) are presented below:

$ 15K	NASA customer transient office supplies
$ 150K	All expendable, consumable supplies and materials, (e.g., magnetic tapes, strip charts, clean room garments, components and piece parts, etc.)
$ .450K	All mobile and lift equipment, shop and calibration equipment, communications equipment, and maintenance equipment
$ 65K	Travel
$ 680K	Total GFY 02 Direct Cost (6 months)
$ 1,401K	Total GFY 03 Direct Cost (1 year)

For proposal preparation and evaluation purposes, Offerors should include these values, plus applicable indirect costs in their proposal on Form B, and use an annual escalation factor for direct costs of 3% per year for the remaining contract years. Disclose each indirect rate and application base used to compute the indirect cost shown on the form. During contract

performance, the contractor will be reimbursed for incurred costs on a non-fee bearing basis, excluding any profit or fee.

Form C – Core Requirements – SOW 10.1 – 10.5. Submit a Form C for the Basic Period and each option. Specify the total estimated cost by year. Supporting data required for each cost element is as follows:

Direct Labor Hours and Costs – Identify the labor hours (straight-time and overtime) and costs by individual labor classification. Provide details of the labor rate development, including the proposed hourly labor rate, labor burdens, (FICA, Federal/State Unemployment insurance, Workers' Compensation), and fringe benefits (health insurance, pension and other benefits). Demonstrate compliance with applicable Department of Labor Wage Determination and collective bargaining agreement, relating to wages and fringe benefits.

Supplies, Materials and Equipment – Identify the cost of supplies, materials and equipment, and include in supporting data a brief description of the items planned to be purchased and basis of estimate.

Subcontracts – Identify items/services which are planned to be obtained from subcontractors and other outside sources, the items to be furnished, basis of estimate and the type of subcontract contemplated.

Other Direct Costs – Identify the type and amount of other direct costs to be charged directly to the contract, which are not included elsewhere. Include the basis of estimate and other descriptive data pertaining to the items.

Overhead and G&A – Identify the elements of each burden pool, amount of each element, distribution base, and indirect rate. Offerors are required to state the ceiling G&A rate they are willing to accept in each year.

SOW Paragraph 10.4 requires Offerors to perform various special studies, projects and analyses during the period of performance. Following is a brief description of the studies currently planned to be performed in GFY 03.

Nutation Study – The contractor shall provide the design, fabrication, and testing of a test tank to be used with the Southwest Research Institute's Spinning Slosh Test Rig (SSTR). The test tank will be used in the test rig to produce a more complete database of Nutation Time Constant parameters following test conditions for a set of spacecraft fuel tank configurations. The test tank will be designed around a flight-like bladder and will be removable so that studies may be made with a bare tank and

with various slosh control devices installed. ~~The contractor shall provide a written report detailing the results at the conclusion of the study effort.~~

Hydrazine Line Temperature Measurements – The contractor shall provide the design for the placement of two temperature sensors in strategic locations on a Delta II hydrazine line for one flight to obtain in-flight data that can be used to calibrate the Nutation Control System (NCS) hydrazine line temperature predictions and improve modeling. The contractor shall provide a written report detailing the results at the conclusion of the study effort.

For proposal preparation and evaluation purposes, Offerors may assume studies, projects and analyses of the same quantity, size and complexity as described above will be required in each following year of contract performance.

Form D – Mission Direct Support - The contractor may be required to provide additional support services described in SOW paragraphs 9.1 – 9.9. The best estimated quantities of each service is shown below. For proposal preparation and selection purposes, Offerors should assume the following number of units will be ordered by the Government via task orders in each year of contract performance.

		NO. OF UNITS IN EACH GFY	
SOW	UNIT	GFY 02	GFY's 03 - 11
9.1	Hrs.	875	1,750
9.2	Hrs.	100	200
9.3	Hrs.	150	300
9.4	Hrs.	400	800
9.5	Hrs.	4,800	9,600
9.6	24 Hrs.	120	240
9.7	24 Hrs.	120	240
9.8	24 Hrs.	6	12
9.9	50 guests	5	10
9.9	+25 guests	1	2

Offerors will submit a Form D for the Basic Period and each option specifying the number of units above, the fixed price per unit and total extended amount. The proposed unit prices in each year should include all direct costs, including shift differential costs, applicable indirect costs and anticipated profit. Offerors should submit detailed information that supports the reasonableness of the proposed prices. Information required to support the labor rates should include basis of estimate, skill mix, labor classifications, and labor rate development.

(f) Service Contract Act Compliance Disclosures. The Service Contract Act of 1965, as amended, is applicable to the contract expected to result from this RFP. The Department of Labor Wage Determination applicable to the contemplated contract is contained in Section J, Attachment J-5. Offerors are required to submit a total compensation plan, which demonstrates compliance with the wage rates and fringe benefits stipulated in the Wage Determination, applicable collective bargaining agreements, and disclosure requirements of NFS 18-52.231-71 "Determination of Compensation Reasonableness" and FAR 52.222-46 "Evaluation of Compensation for Professional Employees."

2. ADMINISTRATIVE DATA – In addition to the above, include the following in the Business Volume.

(a) Financial Capability. In the Business Volume set marked "Original," submit one copy of financial statements and accompanying notes for the two (2) most recently completed fiscal years. In addition, provide data that show the amount of established and/or available lines of credit, the financial institution extending the line and the dollar amount (if any) presently in use.

(b) Model Contract

(i) Acceptance of Contract Provisions – RFP Sections A through J, and attachments thereto, contain essentially the contract terms and conditions that will be in the resulting contract. The degree of acceptance of these terms, conditions, and clauses will be considered in the evaluation of the offeror's proposal. The offeror shall indicate any provisions or clauses that the offeror is unwilling to accept, state reasons for the objections, and propose alternate wording as appropriate. In the absence of any objections to the Contract Schedule or clauses, the offeror shall include a statement of acceptance in the Model Contract. In addition, in the Business Volume set marked "Original" submit a contract cover sheet signed by an individual authorized to bind the company. Submit Sections A – J with appropriate fill-ins completed. Attachments to Section J may be omitted if the offeror does not propose changes.

(c) Equal Employment Opportunity Compliance – An equal opportunity pre-award clearance will be conducted through the Department of Labor, Employment Standards Administration, Office of Federal Contract Compliance Programs. The offeror's certifications in K-6 and K-7 will be used to assist in this determination.

(End of provision)

L-12 SPECIFIC PROPOSAL INSTRUCTIONS - VOLUME V – PLANS AND OTHER DATA

This volume will be limited to plans and other data requested in other areas of the RFP. The plans and other data shall be submitted in one volume and shall be divided into the following major sections:

- Safety and Health Plan (Section J, Attachment J-8)
- Quality Manual (Section J, Attachment J-9)
- Representations, Certifications, and Other Statements of Offerors (Section K)
- Key Personnel Information (Section L, Attachment E)
- Total Compensation Plan
- List of Exceptions to RFP (if any)

(End of provision)

L-13 SAFETY AND HEALTH PLAN (NFS 1852.223-73) (~~MAY~~ SEPTEMBER 2001)

The offeror shall submit a detailed safety and occupational health plan as part of its proposal (see NPG 8715.3, NASA Safety Manual, Appendi~~x~~ices ~~H~~). The plan must include a detailed discussion of the policies, procedures, and techniques that will be used to ensure the safety and occupational health of ~~offeror~~ contractor employees and to ensure the safety of all working conditions throughout the performance of the contract. The plan must similarly address safety and occupational health for subcontractor employees for any proposed subcontract whose value is expected to exceed $500,000, including commercial services and services provided in support of a commercial item. Also, when applicable, the plan must address the policies, procedures, and techniques that will be used to ensure the safety and occupational health of NASA employees and the public. Also, when applicable, the plan must address the policies, procedures, and techniques that will be used to ensure the safety and occupational health of: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including other contractor employees working on NASA contracts), and (4) high-value equipment and property. This plan, as approved by the Contracting Officer, will be included in any resulting contract.

(End of provision)

L-14 EVALUATION OF COMPENSATION FOR PROFESSIONAL EMPLOYEES (FAR 52.222-46) (FEB 1993)

(a) Recompetition of service contracts may in some cases result in lowering the compensation (salaries and fringe benefits) paid or furnished professional employees. This lowering can be detrimental in obtaining the quality of professional services needed for adequate contract performance. It is therefore in the Government's best interest that professional employees, as defined in 29 CFR 541, be properly and fairly compensated. As part of their proposals, offerors will submit a

total compensation plan setting forth salaries and fringe benefits proposed for the professional employees who will work under the contract. The Government will evaluate the plan to assure that it reflects a sound management approach and understanding of the contract requirements. This evaluation will include an assessment of the offeror's ability to provide uninterrupted high-quality work. The professional compensation proposed will be considered in terms of its impact upon recruiting and retention, its realism, and its consistency with a total plan for compensation. Supporting information will include data, such as recognized national and regional compensation surveys and studies of professional, public and private organizations, used in establishing the total compensation structure.

(b) The compensation levels proposed should reflect a clear understanding of work to be performed and should indicate the capability of the proposed compensation structure to obtain and keep suitably qualified personnel to meet mission objectives. The salary rates or ranges must take into account differences in skills, the complexity of various disciplines, and professional job difficulty. Additionally, proposals envisioning compensation levels lower than those of predecessor contractors for the same work will be evaluated on the basis of maintaining program continuity, uninterrupted high-quality work, and availability of required competent professional service employees. Offerors are cautioned that lowered compensation for essentially the same professional work may indicate lack of sound management judgment and lack of understanding of the requirement.

(c) The Government is concerned with the quality and stability of the work force to be employed on this contract. Professional compensation that is unrealistically low or not in reasonable relationship to the various job categories, since it may impair the Offeror's ability to attract and retain competent professional service employees, may be viewed as evidence of failure to comprehend the complexity of the contract requirements.

(d) Incentive compensation plans will be evaluated to determine whether they would be sufficient to motivate excellent performance throughout the life of the contract. Any variations in plans between prime contractors and subcontractors will be evaluated based on the potential they raise for discord among the technical staff.

(e) Failure to comply with these provisions may constitute sufficient cause to justify rejection of a proposal.

(End of provision)

L-15 DETERMINATION OF COMPENSATION REASONABLENESS (1852.231-71) (MAR 1994)

(a) The proposal shall include a total compensation plan. This plan shall address all proposed labor categories, including those personnel subject to union agreements, the Service Contract Act, and those exempt from both of the above. The total

compensation plan shall include the salaries/wages, fringe benefits and leave programs proposed for each of these categories of labor. The plan also shall include a discussion of the consistency of the plan among the categories of labor being proposed. Differences between benefits offered professional and non-professional employees shall be highlighted. The requirements of this plan may be combined with that required by the clause at FAR 52.222-46, "Evaluation of Compensation for Professional Employees."

(b) The offeror shall provide written support to demonstrate that its proposed compensation is reasonable.

(c) The offeror shall include the rationale for any conformance procedures used or those Service Contract Act employees proposed that do not fall within the scope of any classification listed in the applicable wage determination.

(d) The offeror shall require all service subcontractors

(1) with proposed cost reimbursement or non-competitive fixed-price type subcontracts having a total potential value in excess of $500,000 and (2) the cumulative value of all their service subcontracts under the proposed prime contract in excess of 10 percent of the prime contract's total potential value, provide as part of their proposals the information identified in (a) through (c) of this provision.

(End of provision)

L-16 SERVICE OF PROTEST (FAR 52.233-2) (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from:

Mr. Roger MacLeod
NASA, /KSC
SEB-ELVIS
Kennedy Space Center, Florida 32899

(b) A copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

SECTION L ATTACHMENTS

List of Attachments

No.	Attachment
A.	PERSONNEL STAFFING
B.	PAST PERFORMANCE – OFFEROR'S INFORMATION RELEASE
C.	COST FORMS
D.	WORKLOAD INDICATORS
E.	KEY PERSONNEL INFORMATION

ATTACHMENT A

PERSONNEL STAFFING

PERSONNEL STAFFING

ELVIS SOW Section: 10.2

PRIME:
SUBCONTRACT:

Areas of Expertise	Number of WYEs	Classification	Education
Liquid Propulsion Engineer	2	Class III	MS
Solid Propulsion Engineer	2	Class II	MS
Avionics Engineer	1	Class II	BS
Structures Engineer	2	Class I	BS

Classification – Class I zero to two years experience, class II three to seven years experience, class III over 7 years experience in the expertise area(s)

PERSONNEL STAFFING

ELVIS SOW Section: _____

PRIME:
SUBCONTRACT:

Areas of Expertise	Number of WYEs	Classification	Education

Classification – Class I zero to two years experience, class II three to seven years experience, class III over 7 years experience in the expertise area(s)

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ATTACHMENT B

PAST PERFORMANCE – OFFEROR'S INFORMATION RELEASE

ATTACHMENT B

PAST PERFORMANCE – OFFEROR'S INFORMATION

Offerors shall send a letter to their listed references authorizing the references to provide past performance information to the government. The offerors shall also provide the ELVIS SEB a generic release that can be used, if necessary, in contacting other companies listed in its Contract List or otherwise identify during the course of the evaluation. The Offeror shall encourage its references to also fax the hardcopy questionnaire(s) to the KSC source selection office.

Transmittal Letter to Accompany Past Performance Questionnaire

FROM:

SUBJECT: Past Performance Questionnaire for Contract(s): _____.

1. We are currently responding to NASA Kennedy Space Center's (KSC's) Request For Proposal (RFP) 10-00-0001 for the acquisition of Expendable Launch Services Integrated Support (ELVIS). This RFP specifically requires that we, as an Offeror, do the following:

   Offerors shall send letters and questionnaires to their references cited in paragraph (c)(5) authorizing the government to obtain past performance information and indicate in their Past Performance volume that the letters have been sent to the references. The Government may contact the references directly.

2. We have identified the above subject contract(s) as relevant to this acquisition and you as our Point of Contact. As such, please take a few moments of your time to complete the attached questionnaire.

3. Please send a hardcopy or fax copy (not both) of the questionnaire directly to the NASA Kennedy Space Center Contracting Officer. Submit questionnaire directly to the Government not later than **October 22, 2001**. You are encouraged to send a facsimile copy to the NASA Kennedy Space Center source selection facility at fax number 321-867-2922 or mail the completed Past Performance Questionnaire directly to:

   NASA Kennedy Space Center
   Attn: Roger MacLeod, Contracting Officer
   Mail Code: SEB-ELVIS
   Kennedy Space Center, FL 32899

The outside envelope must be marked as follows:

NOTE: TO BE OPENED BY ADDRESSEE ONLY
SOURCE SELECTION INFORMATION – See FAR 3.104

SOURCE SELECTION SENSITIVE – FOR OFFICIAL USE ONLY

4. The information contained in the completed Past Performance Questionnaires is considered sensitive and can't be released to us, the Offeror. If you have any questions about the acquisition or the attached questionnaire, your questions must be directed back to the NASA/KSC Contracting Officer at 321-867-2879. Thank you for your timely assistance.

Sincerely,

Past Performance Questionnaire

(For a general description of past performance information, see FAR Part 42.15 "Contractor Performance Information")

I. CONTRACT INFORMATION

A. Name of Company Being Evaluated: _____

B. Address: _____

C. Contract Number: _____ D. Contract Type: _____

E. Contract Name: _____

F. Period of Performance: _____ Contract Value: _____

G. Description of Contract: (short narrative description)

_____

_____

_____

II. EVALUATOR

Name: _____

Title: _____

Organization: _____

Is your organization Federal/state/local Government? ☐ Yes ☐ No

Address: _____

_____

Email: _____ Telephone No.: _____ Fax No.: _____

III. During the contract performance being evaluated, this firm was the:

____ Prime Contractor; _____ Significant Subcontractor; _____ Team Member;
____ Other (describe)

_____
_____
_____

IV. EXPERIENCE RELEVANCY EVALUATION

Listed below are the major work elements within the SOW of ELVIS. Please provide your assessment of the extent of relevant experience associated with our SOW that is/was present in the contract for which you are a reference.

"Significant" experience means that a full range of services indicated under the work element were routinely provided by the contractor.
"Moderate" experience means that some of the services indicated under the work element were routinely provided by the contractor or that all services were provided but not on a continuous basis.
"Minimal" experience means that, although some aspects of the work element were performed, such work was of limited scope or frequency. "N/A" means that the work element was not performed under your contract. Check the appropriate box (es):

Launch/Space Vehicle Engineering/Analysis — S( ) M( ) Min( ) N/A( )
- ☐ Heavy Launch Vehicle
- ☐ Medium Launch Vehicle
- ☐ Small Launch Vehicle
- ☐ Payloads
- ☐ Other _____

Technical Facility Operations and Maintenance — S( ) M( ) Min( ) N/A( )
- ☐ Payload Processing Facility
- ☐ Launch Complex
- ☐ Other_____

Operation of Ground/Telemetry Stations — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Telemetry Acquisition Facility
- ☐ Satellite Ground Station
- ☐ Other _____

Customer Service — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Launch services support
- ☐ Technical services
- ☐ Commercial services
- ☐ Other _____

Preparation of Technical Documentation — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Technical reports and procedures
- ☐ Drawings and specifications
- ☐ Records and correspondence
- ☐ Other _____

Aerospace Quality Services — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Spacecraft operations
- ☐ Launch Vehicle manufacturing
- ☐ Quality surveillance services
- ☐ Audits and assessments
- ☐ Qualification testing
- ☐ Other _____

Management of the workforce — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Highly technical/diverse skills
- ☐ Engineering and technician
- ☐ Wage labor
- ☐ Diverse work sites
- ☐ Other _____

Safety — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Launch Vehicle safety assessment
- ☐ Range Safety
- ☐ Industrial safety
- ☐ Occupational health
- ☐ Other _____

Change and Configuration Management — S ( ) M ( ) Min ( ) N/A ( )
- ☐ Project/Program baseline
- ☐ Vehicle/system configuration
- ☐ Facility/Support Equipment configuration
- ☐ Other _____

V. OVERALL PERFORMANCE

In assessing the Contractor's performance, use the following rating definitions:

Exceptional (E)—The Contractor's performance is of exceptional merit; very minor (if any) deficiencies with no adverse effect on overall performance.
Above Average (AA)—The Contractor's performance has been very effective, fully responsive to the contract requirements; only minor deficiencies.
Satisfactory (S)—The Contractor's performance has been effective, fully responsive to contract requirements; reportable deficiencies, but with little identifiable effect on overall performance.
Marginal (M) The Contractor's performance meets or slightly exceeds minimum acceptable standards; reportable deficiencies with identifiable, but not substantial, effects on overall performance.
Unsatisfactory (U)—The Contractor's performance does not meet the minimum acceptable standards; deficiencies in one or more areas which adversely affect overall performance.

N/A—This factor does not apply or is only marginally applicable.

How would you rate the Contractor in the following areas (Place an '**X**' in the appropriate column):

1. Quality of Work/Schedule Performance: How would you rate the Contractor's performance in the following areas:

	E	AA	S	M	U	NA
To what extent did the contractor provide timely and effective Launch/Space Vehicle Engineering/Analysis, both on-site and off site, when responding to problems encountered?	☐	☐	☐	☐	☐	☐
To what extent was the technical facility operations and maintenance produced by the contractor's efforts satisfactory to the user?	☐	☐	☐	☐	☐	☐
To what extent was the operation of ground/telemetry stations support by the contractor's efforts satisfactory to the user?	☐	☐	☐	☐	☐	☐
To what extent was the contractor's technical documentation timely, accurate, and of appropriate content?	☐	☐	☐	☐	☐	☐
To what extent was the contractor effective in Aerospace Quality Surveillance Services	☐	☐	☐	☐	☐	☐
To what extent was the contractor effective in management of the technical workforce?	☐	☐	☐	☐	☐	☐
To what extent was change and configuration management effective?	☐	☐	☐	☐	☐	☐

Please comment to support the above rates (at a minimum "M" or "U" ratings must be supported):

_____
_____
_____
_____

3. Customer Satisfaction: How would you rate the Contractor in the following areas?

Place an 'X' in the appropriate column.	E	AA	S	M	U	NA
How cooperative was the contractor in working with to solve problems?	☐	☐	☐	☐	☐	☐
Were contractor recommended solutions effective?	☐	☐	☐	☐	☐	☐
Was the contractor responsive to the administrative issues of the contract?	☐	☐	☐	☐	☐	☐

Please comment to support the above rates (at a minimum "M" or "U" ratings must be supported):

_____
_____
_____
_____

4. Key Personnel. How would you rate the Contractor in the following areas?

Place an 'X' in the appropriate column:	E	AA	S	M	U	NA
Was the contractor able to match personnel skills with requirements?	☐	☐	☐	☐	☐	☐

Please comment to support the above rates (at a minimum "M" or "U" ratings must be supported):

Did the contractor provide the proposed key personnel? If so, how long did they remain on the contract?

Did the Contractor experience a high or low employee turnover rate? __high __low

5. Subcontractor management. How would you rate the Contractor in the following area?

Place an 'X' in the appropriate column:	E	AA	S	M	U	NA
To what extent did the contractor coordinate, integrate, and provide for effective subcontractor management?	☐	☐	☐	☐	☐	☐

Please comment to support the above rates (at a minimum "M" or "U" ratings must be supported):

6. Cost performance. How would you rate the Contractor in the following areas?

Place an 'X' in the appropriate column:	E	AA	S	M	U	NA
To what extent did the contractor meet the proposed cost estimates?	☐	☐	☐	☐	☐	☐
Did the contractor exhibit a propensity to submit unnecessary contract change proposals with cost or price increases?	☐	☐	☐	☐	☐	☐

Please comment to support the above rates (at a minimum "M" or "U" ratings must be supported):

VI.CONCLUSIONS

Would you recommend this Contractor for another contract? Why? Please add any comments you feel pertinent.

Does a corporate/partnership relationship exist between the firm being evaluated and the evaluator's organization?
___ Yes, ___ No. If so, please describe.

ATTACHMENT C
COST FORM

Excel Spreadsheets Attached.

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT
COST/PRICE PROPOSAL SUMMARY

FORM A

SOW		BASIC	OPTION 1	OPTION 2	TOTAL	REFERENCE
	CORE REQUIREMENTS -					
	FIXED PRICE AWARD FEE:					FORM B
3.0	PROGRAM MANAGEMENT					
4.0	SAFETY & MISSION ASSURANCE					
5.0	LAUNCH SITE SUPPORT ENGINEERING					
-	TECHNICAL INTEGRATION SERVICES:	-	-	-	-	
6.1	MISSION INTEGRATION COORDINATION SERVICES					
6.2	ENGINEERING TECHNICAL INTEGRATION SERVICES					
7.0	COMMUNICATIONS & TELEMETRY					
8.0	VAFB UNIQUE SUPPORT					
	SUBTOTAL - FIXED PRICE					
3.0 - 8.0	COST BASIS -Contractor Acquired Property/Travel					FORM B
	COST PLUS AWARD FEE:					FORM C
10.1	MISSION ANALYSIS					
10.2	VEHICLE SYSTEMS ENGINEERING					
10.3	RESIDENT OFFICES					
10.4	SPECIAL STUDIES					
10.5	IT SECURITY SUPPORT					
	SUBTOTAL - ESTIMATED COST					
	MISSION DIRECT SUPPORT					FORM D
9.1	ADDITIONAL HOURLY SUPPORT					
9.2	ADDITIONAL HOURLY SUPPORT - VAFB					
9.3	HR. SUPPORT - COMM. & TELE. - KSC					
9.3	HR. SUPPORT - COMM. & TELE. - VAFB					
9.4	REDUCED SUPPORT - COMM & TELE.- KSC					
9.4	REDUCED SUPPORT - COMM & TELE.- VAFB					
9.5	ON-CALL TROUBLESHOOTING & REPAIR					
9.6	GUARD SERVICES AT VAFB					
9.7	ACCESS CONTROL MONITORS AT VAFB					
9.8	SATELLITE UPLINK SERVICES					
9.9	NASA PUBLIC AFFAIRS SUPPORT					
	SUBTOTAL					
	MAXIMUM AVAILABLE AWARD FEE					
	TOTAL BASIC & OPTIONAL REQUIREMENTS					
2.0	PHASE-IN (FIRM FIXED PRICE)					-
	TOTAL PROPOSED AMOUNT					

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT
CORE REQUIREMENTS FOR SOW 3.0 - 8.0

FORM B

_ BASIC PERIOD
_ OPTION 1
_ OPTION 2

SOW		GFY	GFY	GFY	GFY	TOTAL	REFERENCE
	FIXED PRICE:						
3.0	ELV PROGRAM MANAGEMENT SUPPORT						
4.0	SAFETY & MISSION ASSURANCE						
5.0	LAUNCH SITE SUPPORT ENGINEERING						
-	TECHNICAL INTEGRATION SERVICES:	-	-	-	-	-	
6.1	MISSION INTEGRATION COORDINATION SERVICES						
6.2	ENGINEERING TECHNICAL INTEGRATION SERVICES						
7.0	COMMUNICATIONS & TELEMETRY						
8.0	VAFB UNIQUE SUPPORT						
	TOTAL FIXED PRICE						
3.0 - 8.0	COST-BASIS						
	CONTRACTOR ACQUIRED PROPERTY AND TRAVEL						
	Applicable Indirect Costs (List)						
	-						
	-						
	-						
	TOTAL COST BASIS						

EXPENDABLE LAUNCH VEHICCLE INTEGRATED SUPPORT
CORE REQUIREMENTS FOR SOW 10.1 - 10.5

FORM C

_ SOW 10.1 - MISSION ANALYSIS
_ SOW 10.2 - VEHICLE SYSTEMS ENGINEERING
_ SOW 10.3 - RESIDENT OFFICES
_ SOW 10.4 - SPECIAL STUDIES
_ SOW 10.5 - IT SECURITY SUPPORT

_ BASIC PERIOD
_ OPTION 1
_ OPTION 2

ELEMENTS	GFY	GFY	GFY	GFY	TOTAL	REFERENCE
DIRECT LABOR HOURS						
COSTS:						
DIRECT LABOR COST						
SUPPLIES, MATERIALS & EQUIPMENT						
SUBCONTRACT COST						
OTHER DIRECT COSTS						
OVERHEAD						
OTHER INDIRECT COSTS:						
-						
-						
SUBTOTAL						
GENERAL & ADMINISTRATIVE						
FACILITIES CAP. COST OF MONEY						
TOTAL ESTIMATED COST						

EXPENDABLE LAUNCH VEHICLE INTEGRATED SUPPORT
MISSION DIRECT SUPPORT - SOW 9.1 - 9.9

FORM D

_ BASIC PERIOD
_ OPTION 1
_ OPTION 2

SOW	DESCRIPTION	UNIT	GFY QT	GFY UNIT PRICE	GFY AMOUNT	GFY QT	GFY UNIT PRICE	GFY AMOUNT	GFY QT	GFY UNIT PRICE	GFY AMOUNT	GFY QT	GFY UNIT PRICE	GFY AMOUNT	TOTAL AMOUNT	REF.
9.1	ADD'L HOURLY SUPPORT	PER HOUR														
9.2	ADD'L HOURLY SUPPORT-VAFB	PER HOUR														
9.3	HRLY. SUPPORT - COMM & TELE.															
	- KSC	PER HOUR														
	- VAFB	PER HOUR														
9.4	REDUCED SUPPORT - COMM &TELE.															
	- KSC	PER HOUR														
	- VAFB	PER HOUR														
9.5	ON-CALL TROUBLESHOOTING & REPAIR	PER HOUR														
9.6	GUARD SERVICES AT VAFB	24-HR SHIFT/ ACCESS PT.														
9.7	ACCESS CONTROL MONITORS - VAFB	24-HR SHIFT														
9.8	SATELLITE UPLINK SERVICES	24 HOURS														
9.9	NASA PUBLIC AFFAIRS SUPPORT	50 GUESTS EA. ADD'L 25														
	TOTAL															

ATTACHMENT D
WORKLOAD INDICATORS

(Intentionally Left Blank)

EXPENDABLE LAUNCH VEHICLES INTEGRATED SUPPORT

WORKLOAD INDICATORS

Workload Indicators are provided to offerors for bidding purposes only and are considered estimates reflecting "business as usual" based on historical data and/or Governments best estimates of the scope of the requirements specified. In providing these best estimates in some cases the Government has averaged the level of support from a typically changing launch manifest. These indicators may be affected by offerors innovations as well as changing customer requirements. Additionally, workload indicators are affected by other Section J attachments.

I. CONTRACTOR SUPPORT BY SOW WBS

Note: This section follows the structure of the SOW, however not all sections contain data because it is either not available or not necessary.

1.0 Introduction

1.1 Objective

1.2 General Requirements

1.3 Contract Program Management

1.3.1 International Organization for Standardization (ISO) 9001 Compliance

1.3.2 Contract Risk Management

1.3.3 Contractor Performance Measurement And Reporting

1.3.4 Contract Business Services

For fixed price mission/project allocation reports assume up to 35 ELV missions/projects in flow at different phases.

1.3.5 Financial Reporting And Budget Forecasting

Cost Phasing Plans are required semi-annually. Multi-year/Multi-funded budget input is required annually.

1.3.6 Logistics Services

Approximately 1500 orders placed annually valued at an estimated $1.5M for logistics and administrative supplies, equipment, materials and services.

1.3.7 Voluntary Protection Program (VPP)

1.3.8 Export Control

The contractor shall expect one plan per mission to be reviewed annually.

The contractor shall expect to process one foreign spacecraft every two years and to host approximately 100 foreign nationals requiring export control limitations.

1.3.9 Personnel Reliability Program (PRP)

1.3.10 Contractor Office Workstations

The primary operating system used by NASA ELV organization is Microsoft Windows 2000.

Desktop software tools currently used by the NASA ELV organization include Microsoft Office applications (Excel, Word, PowerPoint, Access, Outlook), Milestones Professional, PGPFile and PGPMail, Adobe Acrobat Reader, Miscrosoft Internet Explorer, and Netscape Navigator.

1.4 Standards of Performance

2.0 Phase-In Provisions

3.0 ELV Program Management

3.1 Program Planning Support

Integrated master schedule is presented to the ELV Program/Project management each week.

3.2 ELV Project Monthly Review

3.3 Program Evaluation, Measurement, and Performance Data

Samples of the Mission/Project Financial Performance Profiles (SOW 3.4) are in the Tech Library

3.4 Program Financial Management Support

Approximately 25-30 active mission/project profiles maintained

Approximately 10 active contract logs

3.5 Secretariat Functions for PRCB, PDM, and Risk Management

3.6 Documentation Maintenance

Approximately 100 agreements documents averaging 3 typed pages in length to be stored and 15 new documents generated/revised annually.

3.7 Library/Records Management System

4.0 Safety and Mission Assurance

4.1 Safety

4.1.1 Mishap Investigating, Reporting, and Lessons Learned

4.1.2 VAFB Systems Safety Assessments

Based on past history the contractor can expect up to 4 missions processed at VAFB per year.

4.1.3 VAFB Procedure Reviews

The contractor shall assume 35-40 procedure reviews for non-hazardous operations and 30-35 for hazardous operations per mission at VAFB.

4.1.4 VAFB Safety Surveillance and Support of Operations

Based on past history the contractor can expect up to 4 missions processed at VAFB per year.

4.1.5 VAFB Facility Safety Inspections

4.1.6 VAFB Participation in Meetings, Reviews, and Working Groups

Based on past history the contractor can expect to support meetings, reviews, and working groups for up to 4 missions processed at VAFB per year.

4.1.7 VAFB Safety Training

The contractor can expect to supply a total of 250 to 275 hours of training per year.

4.2 Program Quality Assurance

4.2.1 ISO Audits

4.2.2 GIDEP Alert

4.2.3 Quality Assurance Surveillance of Launch Service Providers

4.2.3.1 Review of LSP S&MA Plans

4.2.3.2 Software Assurance

4.2.3.3 SFAO Website/Database

4.2.3.4 Quality Surveillance of LSP

4.2.4 Reviews

4.2.4.1 Design Reviews

See Section II TYPICAL ACTIVITIES IN A MISSION FLOW

4.2.4.2 Production Reviews

See Section II TYPICAL ACTIVITIES IN A MISSION FLOW

4.2.4.3 NASA Internal Pre-Launch Reviews

See Section II TYPICAL ACTIVITIES IN A MISSION FLOW

5.0 Launch Site Support Engineering

5.1 Launch Site Documentation Services

5.1.1 Launch Site Support Plan (LSSP)

Based on past history the contractor can expect to write and produce four LSSPs per year for VAFB missions and produce six LSSPs per year for KSC missions.

5.1.2 Program Introduction (PI) document for the Range

Based on past history the contractor can expect to write four PIs per year.

5.1.3 Program Requirements Document (PRD) for the Range

Based on past history the contractor can expect to write four PRDs per year for VAFB missions and six PRDs per year for KSC missions.

5.1.4 Mission Operations Requirements (OR) document for the Range

Based on past history the contractor can expect to generate four OR input packages per year for VAFB missions and six OR input packages per year for KSC missions.

5.1.5 Spacecraft Operations Requirements (OR) Document

Based on past history the contractor can expect to generate four spacecrafts ORs per year for KSC missions.

5.1.6 Base Civil Engineer Work Request/Request for Environmental Impact Analysis at VAFB

Based on past history the contractor can expect to four requests per year.

5.1.7 Safety Advisory Function

5.1.8 Review of LSP/Range-Provided Documentation

Based on past history the contractor can expect to conduct four spacecraft questionnaire reviews, eight spacecraft ICD reviews per year and four SC/PSP/OD/NIP/ICRD reviews per year for VAFB missions and six PSP/OD reviews per year for KSC missions.

5.2 Launch Site Integration Operational Services for VAFB

Based on past history the contractor can expect up to four missions processed at VAFB.

5.2.1 NASA/Commercial PPF Readiness and Range Support

5.2.2 Payload Transportation

5.2.3 Payload Operations in the PPF

5.2.4 Payload Operations at the Launch Complex

5.2.5 Post Launch

5.3 Launch Site Integration Operational Services for KSC

Based on past history the contractor can expect up to 12 missions processed at KSC in 24 months.

5.3.1 Payload Transportation

5.3.2 Payload Operations at the Launch Complex

5.3.3 Post Launch

5.4 Launch Operations Management Assistance

Based on past history the contractor can expect to provide launch operations management services for up to 20 missions per 24 months.

5.5 Launch Site Administrative and Customer Services

5.5.1 Launch Site Administrative Services

The FUP will be modified, published and distributed monthly.

Based on past history the contractor can expect to attend eight MIWGs, eight GOWGs, 4 TIMs, 4 Pre-Ship Reviews, four each PDR/CDR, four each LRR/FRR, two LSRRs per year. On average telecons will be four per a two-week period. LSP and payload customer meetings are held daily during processing activities at the launch site.

Launch Site Support Assignment Matrix will be updated after every Flight Planning Board manifest reissue.

5.5.2 Launch Site Customer Services

6.0 Technical Integration Services

6.1 Mission Integration Coordination Services

6.1.1 Integrated Mission Data, Documentation, and Schedules

Assume up to 50 documentation packages per mission. Includes working groups, technical interchange meetings, status, readiness reviews, and launch campaigns.

6.1.2 Administrative Services

See Section II TYPICAL ACTIVITIES IN A MISSION FLOW

6.1.3 Secretariat Functions

6.2 Engineering Technical Integration Services

6.2.1 Engineering Review Board Services

See Section II TYPICAL ACTIVITIES IN A MISSION FLOW

6.2.2 Administrative Services

See Section II TYPICAL ACTIVITIES IN A MISSION FLOW

6.2.3 Launch Engineering Team (LET) Services

Based on past history the contractor can expect to provide launch engineering team services for up to 20 missions per 24 months.

7.0 Communications and Telemetry

7.1 Operation & Maintenance of Communications and Telemetry Systems

7.1.1 Communications Systems

This task typically includes coverage for two launch vehicles and one spacecraft operations per day.

Daily tests typically consume two data circuits, one long-line circuit, 5 voice nets, and 5 video circuits with users located in Hangar AE LVDC and a payload processing facility.

VAFB Tower operations: Support a minimum of 6 tower assents/year with a minimum team of two personnel.

7.1.2 Telemetry Systems

This task typically includes two simultaneous tests from two separate launch vehicles or spacecraft with a total of four telemetry data streams.

7.1.3 Repairs for IPP

7.1.4 Configuration Management

7.2 Upcoming Launches Scheduling, Planning, and Status Reporting

7.3 Technical Points of Contact (POCs)

7.4 Development Projects

7.5 Telemetry Station Computers and Networks Support

8.0 Vandenberg Air Force Base Unique Support

8.1 Facilities, Facility Systems, and Support Equipment at VAFB

8.1.1 Operations and Maintenance

Support up to 4 proof load operations/year for customer equipment.

Fabricate or modify up to 12 crates or packing boxes/year and on the average fabricate one temporary 10' x12' x 8' equipment shelter/year

Support receipt of up to 100 line items of furniture/year, up to 20 office moves/year, and up to 4 customer office space reconfigurations/year

High Pressure Tube-Bank Operation and Maintenance Management: There is one GHE trailer and one GN2 trailer. The Contractor will use and maintain existing procedures for operation of these tube-banks at Vandenberg.

Building 836 Lab 2 crane and the Building 840 crane are maintained and operated on an as-needed basis.

There are 7 Forklifts (Ref. ELVIS Equipment List)

Support up to 3 Government audits of the processes and documentation of this equipment per year.

Large weights used for facility hoist proof loading are obtained from Base resources.

Support up to 4 spacecraft projects/year with facility electrical system modifications.

Machine Shop Support: up to 20 projects a year for designing, fabricating, modifying, or repairing project and customer equipment

Paint Booth Support up to 10 painting operations a year

Engraving Support up to 10 engraving operations a year

Support migratory nesting mitigation effort two weeks per year mainly at Buildings 836 and 840.

8.1.2 Maintenance Management

8.1.3 Sustaining Engineering

The software used at VAFB on the Computer-Aided-Design (CAD) System to maintain facility configuration drawings and communications equipment configuration documentation of special payload requirements is AutoCAD 2002.

8.2 Base Operations Services

8.2.1 Administrative Support

8.2.2 Conference Room Equipment

There are two ELV Video Teleconferencing Systems. One is in the ELV Office in the E&O Building on Cape Canaveral AFS, and the other is in the KSC Resident Office at VAFB. The Contractor will manage ViTS maintenance performing trouble-shooting and parts replacement as required. Replacement parts will be provided by NASA.

There are two NASA conference rooms at VAFB each with the capability for seating approximately 70 people. (Does not include the ViTS Room.) One conference room has a computer based projection presentation system. As a minimum, assume overhead projection equipment setup for all meetings. A comparable effort is required for the ELV Office in the E&O Building at KSC.

8.2.3 Graphics Services

8.2.4 Transportation Services

8.2.5 Shipping and Receiving

8.2.6 Janitorial Services

Refer to the Attachment J-3 for square footage to be covered at all NASA Facilities and Facilities' Systems.

Support during special surge situations such as launch campaigns and working group meetings. Assume an average of three working group meetings per month and an average of five launch campaigns per year.

8.2.7 Laboratory Services

The contractor shall expect to perform 100 samples/year.

8.2.8 Non-Destructive Evaluation (NDE) Services

The contractor shall expect to perform 100 dye-penetrant inspections/year.

8.3 Security Services

8.3.1 Permits and Badges

The contractor shall expect to issue approximately 100 permanent badges/year using a manual photography system. Pictures are taken, cut out, and laminated onto the badge stock. The equipment (Government Provided) is 10+ years old, but functional. These badges are not used in a scanning system for access control.

The contractor shall expect to support ~~6~~4 missions/year with an average number of temporary personnel of 100/mission.

8.3.2 Lock and Key Control

The contractor shall expect to re-key and/or re-core 20 locks/year and change 3 safe lock combinations/year. The contractor shall expect to control approximately 1000 keys and lock combinations. All keys shall be accounted for and inventoried at least annually.

No classified information is maintained on a routine basis. One combination safe exists for this purpose. The highest level of classified data to be secured is secret.

8.3.3 Security Inspections

Refer to the Attachment J-3 (verify section) for all NASA Facilities. Operational facilities are those that were manned at any time during the preceding work shift.

8.3.4 Guest Services

Restricted area badges are only required for a small number of personnel needing unescorted access into Air Force restricted areas. Less than 50 requests a year.

The contractor shall expect to process approximately 200 visit requests/year.

The contractor shall expect to process one foreign spacecraft every two years and to host approximately 100 foreign nationals. The contractor shall expect to provide foreign national escort services for an average of 100 shifts/year.

Historically, vans have been used for guest transportation on VAFB. There are no special licensing requirements to drive these vans at VAFB.

8.4 Mission-Direct Support at VAFB

8.4.1 Payload Support

8.4.2 Clean-Room Services and Cleanliness Requirements

Assume an average of four launch campaigns in the NASA facilities per year

Assume both spacecraft and related interface hardware to the launch vehicle will utilize available clean rooms.
Building 836 Lab 1 and Building 1610 are certified to Level 10K. Building 836 Lab 2 meets Level 10K standards.

8.4.3 Propellant Services

The contractor shall expect 2 groups of 5 people/year needing SCAPE training.
The contractor shall expect to transport servicing equipment 4 times/year.

8.5 Environmental Compliance

Average of one environmental assessment per mission.

Currently there is one permit active, additional permits may be required.

Typically four environmental compliance inspections per year.

Average of three to four meetings per week, which consist of environmental meetings, working groups, and supporting committees affecting NASA operations

Process 200 line items of hazardous waste per year. The contractor currently operates and maintains one hazardous waste accumulation point.

Air Quality: Building 831 paint booth is the only NASA installation that currently requires a PTO (Permit To Operate)

Asbestos: Building 836 Transite siding and floor tiles contain asbestos. Extensive surveys of asbestos-containing materials have been accomplished and are available.

The contractor shall manage all discoveries of historical, archeological, and cultural resources found during new construction or similar activities. While this has never occurred in NASA facilities, it is a common occurrence on VAFB.

Pathogen Protection: Plague, rabies, and Hantavirus have been found in VAFB wildlife.

9.0 Mission-Direct Services

9.1 Additional hourly support for Safety and Mission Assurance, Launch Site Support Engineering, and Technical Integration Services for Mission-Direct Support.

9.2 Additional hourly support for VAFB operations, troubleshooting, and repair activities for Mission-Direct Support.

9.3 Hourly Support for Communications and Telemetry Outside of Core Work Shift

Historically, a launch vehicle has required two PCM streams and two FM streams, 60 stripcharts, 4 wideband recorders, and complete operations support from the real-time data system for all telemetry displays.

Historically, spacecraft have required telemetry processing for one PCM stream that may be embedded in a launch vehicle telemetry stream.

9.4 Reduced Hourly Support for Communications and Telemetry Outside of Core Work Shift

Assume these services are required on the average 3 times per month.

9.5 Hourly On-Call Troubleshooting and Repair Support

9.6 Guard Services at VAFB

Provide continuous guard services for NASA and NASA sponsored-payloads while in NASA facilities. Historically, ~~64~~ payloads/year have required 24 hour per day guard services for 45 processing days per payload. Historically one guard has been on duty.

9.7 Access Control Monitors (ACM) at VAFB

Access Control Monitors (ACM) services provided continuously when payloads are in Bldg 1610 – contractor shall expect 2 payloads/year. Historically, part-time help has been hired specifically for this task as follows: four personnel to provide 24 hours/day, 7 days/week type of coverage.

9.8 Satellite Uplink Services for NASA Public Affairs Support

9.9 NASA Public Affairs Support

10.0 Vehicle Engineering And Analysis

10.1 Mission Analysis

Mission Analysis	
Flight Design	50% of All Missions In Flow
Flight Software	0% of All Missions In Flow
Control Dynamics	25% of All Missions In Flow
Structural Dynamics/Loads	43% of All Missions In Flow
Environments	43% of All Missions In Flow
Structural/Stress	50% of All Missions In Flow
Thermal	0%
Electromagnetic	33%
CFD/Aerodynamics	0 %

Function Workload Breakdown:

- 60%: Direct Mission Support including:
  - Independent Analysis,
  - Support of MIWG, GOWG, TIM, etc.
  - Review of relevant reports, documents, LSP deliverables, etc.

- Verification of mission unique requirements
- 20%: Advanced Study/Mission including:
  - Supporting trade studies,
  - Announcement of Opportunities (both proposal reviews and supplying data for the AO itself)
  - Studies with industry and academia relative to enhancing ELV performance
- 20%: Core/Fleet Vehicle including:
  - Reviewing fleet changes as required (qualification programs, etc.)
  - Supporting and preparing presentations for ERB meetings
  - Reviewing appropriate first flight and anomaly items

10.2 Vehicle Systems Engineering

Vehicle Systems	
Mechanical/Structural	30% of All Work for All Missions In Flow
Propulsion	33% of All Work for All Missions In Flow
Electrical	25% of All Work for All Missions In Flow
Ground Systems	60% of All Work for All Missions In Flow

Function Workload Breakdown:

- 20%: Mission Design, Integration, Engineering, and S/C Processing Activities
- 80%: LV Design, Production, Testing, and Launch Campaign Support

10.2.3 Electronic Drafting

Facility Models already developed under the PGOC contract will be available to the contractor through NASA including: Multi-Payload Processing Facility (MPPF), Payload Hazardous Servicing Facility (PHSF), Spacecraft Assembly and Encapsulation Facility #2 (SAEF-2), Vertical Processing Facility (VPF), and Hangar AE Clean Room Facility.

Two Intergraph CAD workstations will be available to be turned over to the contractor during transition period. Both are equipped with Microstation software while one also has VISIO. The licenses for Microstation and VISIO will be transferable to the contractor.

Projects in Work:

- SLC-2 (Delta II, VAFB) White Room Ops
- GALEX / Pegasus Processing Simulations
- GP-B Processing Space at VAFB Bldg. 1610
- SLC-41 (Atlas V) White Room for PKE RTG Ops
- SLC-37 (Delta IV) White Room for PKE RTG Ops

Potential Future Projects:

- Pegasus/Taurus: Payload Attach Fairings, Fairings
- Delta IV: PAFs, Fairings
- Atlas V: PAFs, Fairings
- SLC-17 (Delta II, III) White Room Ops
- SLC-36 (Atlas II, III) White Room Ops
- VAFB Bldg. 836
- VAFB Astrotech PPF
- VAFB SSI PPF

- Pegasus Hot Pad (CCAFS) Ops
- Pegasus Hot Pad (VAFB) Ops
- SLC-6 (Delta IV) White Room Ops

10.3 Resident Offices

Resident Offices	
Huntington Beach, CA	
Mech/Structures	60% of All Fleet Monitoring Work
Propulsion	100% of All Fleet Monitoring Work
Systems	100% of All Fleet Monitoring Work
Integration	100% of All Missions
Pueblo, CO	
Mechanical	100% of All Fleet Monitoring Work
Electrical	100% of All Fleet Monitoring Work
VAFB	
Mechanical	50% of All Mission Support Work
Electrical	50% of All Mission Support Work
Launch Control Elec/Software	100% of All Missions
Denver, CO	
Mechanical	50% of All Fleet Monitoring Work
Propulsion	100% of All Fleet Monitoring Work
Structures	100% of All Fleet Monitoring Work
Systems	100% of All Fleet Monitoring Work
Electrical	66% of All Fleet Monitoring Work

Function Workload Breakdown:

- 20%: Review technical reports, documentation, memoranda, schedules, drawings, etc. for insight, technical concurrence and coordination with KSC.
- 20%: Participate in meetings: Status, TIM, HAR, IPT, Design, Mission Integration, Post-flight Reviews, etc.
- 20%: S/C fit checks, Launch campaigns, Participate in development and qualification tests at LSP or Sub-contractors' facilities.
- 20%: Participation in Engineering Review Process, ERB, preparation of technical reports.
- 10%: Development and maintenance of insight into LSP engineering and operations through regular contact with peers through the LSP organization.
- 10%: Independent investigations (trend studies, hardware "walk-down", facility "walk-through", etc.)

10.4 Special Studies

10.5 Information Technology (IT) Support

The contractor shall refer to Attachment J-12 for description of IT functions.

11.0 Facility Upgrade/Modification/Repair Design and Construction

II. TYPICAL ACTIVITIES IN A MISSION FLOW

Activities	Frequency	SOW WBS
Mission Design, Integration, and Engineering Phase		
Spacecraft Preliminary Design Review (PDR)	1/mission	10.0
Spacecraft Critical Design Review (CDR)	1/mission	10.0
Mission Integration Working Group (MIWG)	4-6/mission	4.0, 6.0, 10.0
Integration Teleconferences	Bi-weekly	10.0
Technical Interchange Meetings (TIM)	2-3/mission	10.0
Ground Operations Working Group (GOWG)	4/mission	4.0, 6.0, 10.0
Spacecraft Fit Checks	1-2/mission	4.0, 10.0
Spacecraft Shock/Separation Tests	1-2/mission	4.0, 10.0
Spacecraft Pre-Ship Review	1-2/mission	4.0, 5.0, 6.0, 10.0
Vehicle Design Insight Phase		
Preliminary Design Review (PDR)	1/mission	4.0, 6.0, 10.0
Critical Design Review (CDR)	1/mission	4.0, 6.0, 10.0
Design Certification Review (DCR)	1/mission	4.0, 6.0, 10.0
Vehicle Production Insight Phase		
Hardware Assessment Reviews (HAR) • S1, S2, S3 Engine • Vehicle Subsystems Turnover Reviews such as Booster, S2, Interstage, Fairing, Solid Motors, RIFCA, Upperstage • Post-Production Hardware Reviews such as Booster, S2, Interstage, Fairing	~14/mission	4.0, 10.0
Quarterly Program Reviews (QPR) (S1 & S2 Engines, RIFCA, Solid Motors)	~4/mission	4.0, 10.0
Integrated Product Teams (IPT) • Stage 1 Engine	Weekly Telecons	10.0

• Stage 2 Engine	Weekly Telecons	10.0
• Stage 3 Motor	Weekly Telecons	10.0
• Solid Motors	Weekly Telecons	10.0
• Stage 1/Stage 2	Weekly Telecons	10.0
• Upperstage	Weekly Telecons	10.0
• Fairing	Bi-weekly Telecons	10.0
• Avionics	Weekly Telecons	10.0
• RIFCA	Weekly Telecons	10.0
• Ordnance	Bi-weekly Telecons	10.0

Launch Vehicle Components Testing
Pre-Vehicle On Stand

Stage 1 Propulsion System Checkout	1/mission	10.0, 7.0
Stage 1 TM System Checkout	1/mission	10.0, 7.0
Stage 1 Control System Checkout	1/mission	10.0, 7.0
Stage 2 Telemetry and Control System Checkout	1/mission	10.0, 7.0
Dual Composite System (Stage 1 & 2) Checkout	1/mission	10.0, 7.0
Simulated Flight Checkout	1/mission	10.0, 7.0
Stage 2 Qualifications	1/mission	10.0, 7.0

Engineering Review Boards

Delta II	~ 100 per year (projection for year 2001)	4.0, 6.0, 10.0
Atlas II	~ 20 per year (based on year 2000 average)	4.0, 6.0, 10.0
Pegasus	~ 40 per year (based on year 2000 average)	4.0, 6.0, 10.0
Taurus	~ 20 per year (based on year 2000 average)	4.0, 6.0, 10.0
Delta III	~ 20 per year (based on year 2000 average)	4.0, 6.0, 10.0
Atlas III	~ 20 per year (based on year 2000 average)	4.0, 6.0, 10.0

Vehicle On Stand Activities

Booster & Center Stage Erection	1/mission	4.0, 10.0
Stage 2 Engine Erection & Mate	1/mission	4.0, 10.0
Solid Motor Erection & Mate	1/mission	4.0, 10.0
Hydraulic Preparations	1/mission	4.0, 7.0, 10.0

Electro-mechanical Preparations	1/mission	4.0, 7.0, 10.0
Stage 1 Propellant Leak Checks	1/mission	4.0, 7.0, 10.0
Stage 2 Propellant Leak Checks	1/mission	4.0, 7.0, 10.0
Control Test	1/mission	4.0, 7.0, 10.0
Liquid Oxygen Leak Checks	1/mission	4.0, 7.0, 10.0
Simulated Flight	1/mission	4.0, 7.0, 10.0
Engine Sequence	1/mission	4.0, 7.0, 10.0
Fuel Qualification	1/mission	4.0, 7.0, 10.0
Spacecraft Erection & Mate to Launch Vehicle	1/mission	4.0, 10.0
Flight Program Verification & Power-On Stray Voltage Checks	1/mission	4.0, 7.0, 10.0
Power-Off Stray Voltage Checks, Ordnance Connection	1/mission	4.0, 7.0, 10.0
Spacecraft Fairing Final	1/mission	4.0, 10.0
Stage 2 Propellant Load, Range Safety and Beacon Checks	1/mission	4.0, 7.0, 10.0
Vehicle Closeouts & Class A Ordnance Install	1/mission	4.0, 10.0
Countdown/Launch		4.0, 6.0, 7.0 10.0
Spacecraft Launch Site Operations Phase		
Program Introduction to Range	1/mission	5.0
Spacecraft Processing Requirements Gathering To Build the Launch Site Support Plan	1/spacecraft	5.0
Develop Missile Systems Pre-Launch Safety Plan (MSPSP) with KSC and Range Safety	1/mission	5.0
Ground Operations Review (GOR)	1/mission	5.0
Customer Arrival, Orientation, Performance Evaluation Expectations Briefing	1/spacecraft	5.0

Payload Adapter Fitting Integration and/or Upper Stage Integration	1/spacecraft	4.0, 5.0, 10.0
Spacecraft Encapsulation & Move to Launch Pad	1/mission	4.0, 5.0, 10.0
Spacecraft Final Testing & Preps at Launch Pad	1/spacecraft	4.0, 5.0, 10.0

III. TYPICAL LSP DOCUMENTS TO BE REVIEWED

Document	SOW WBS
Mishap Reporting and Investigation	4.0
GIDEP Alert Documentation (LSP and Sub-contractors)	4.0
Non-conformance Report	4.0, 10.0
Significant Component Rejection History	4.0, 10.0
Open Failure Analysis Report	4.0, 10.0
Field Anomaly/Information Notices	4.0, 10.0
Acceptance Data Packages	4.0
Performance Assurance Implementation Plan	4.0
Q/A Audit Plan/Schedule	4.0
Q/A Audit Reports	4.0
Launch Vehicle Specifications	10.0
Vehicle Dynamic Loads Model	10.0
Trajectory Design Program	10.0
Flight Software Test Program/Simulation Models	10.0
Baseline Vehicle Safety Data Package	4.0
Launch Vehicle Mission Requirements Request	10.0
Launch Vehicle Detailed Mission Requirements	7.0
Launch Site Safety Plan	4.0
Mass Properties Margin Summary	10.0

Performance Margin Summary	10.0
Integrated Payload/Vehicle Safety Data Package	4.0
Coupled Dynamic Loads Analysis	10.0
Detailed Test Objective	10.0
Detail Mission Requirements	7.0
Program Requirements Document/ Operations Requirement Document	5.0
Mission Interface Control Document (ICD)	
• Spacecraft Description	N/A
• Mission Requirements	N/A
• Vehicle Description	10.0
• Ground Handling and Processing	5.0
• Spacecraft Interface Requirements	10.0
• Spacecraft to Blockhouse Wiring	10.0
• Compatibility Drawing	10.0
Compatibility Drawing	10.0
Fairing Clearance Study	10.0
Spacecraft InstAllation Drawing	10.0
Preliminary Mission Analysis	10.0
Integrated Test Procedures • Simulated Flight • Spacecraft Processing • Spacecraft Erection Preps • Spacecraft Erection & Mate • Flight Program Verification and Power-On Stray Voltage Checks • Power-Off Stray Voltage Checks and Ordnance Connection • Spacecraft Fairing Mate • Second Stage Prop Servicing • Vehicle Closeout and Class A Ordnance InstAllation • Countdown Manual	10.0
RF Link and Compatibility Analysis	10.0
Payload/Expended Stage Separation Analysis	10.0

Payload Attach Fitting Clearance Analysis	10.0
Mission Power Margin Analysis	10.0
Mission Success Criteria	10.0
Post-flight Analysis	10.0
Countdown Procedures	10.0
Fairing Environmental Thermal Summary	10.0
Pre-flight Controls & Stability Analysis	10.0

IV. TELEMETRY OPERATIONAL REAL-TIME SUPPORT BY VEHICLE

ATLAS Centaur

ICPACT (NASA Only)

SIM Flight (NASA Only)

Wet Dress Rehearsal

Launch Countdown Tasks (F-1)

Launch (if NASA mission at VAFB need both Hangar AE and VAFB Bldg. 836)

DELTA II at Delta Main Check Out (DMCO) Facility (need Hangar AE only)

First Stage Telemetry Test (Boeing procedure M516 T2)

RP-1 Propellant Leak Checks (M517 T1)

First Stage Control Test (M519 T1)

First Stage Control Test (M519 T2)

Second Stage Telemetry Test (M526 T2)

Second Stage Control Test (M526 T3)

Dual Composite (M554)

Simulated Flight Test (M555)

RIFCA Stand Alone Testing (M527 T1)

DELTA II and III Vehicle-On-Stand Test Support

Hydraulic Fill and Bleed (F-33 T5)

Hydraulic Preparations (F-20)

Electro-magnetic Qualifications (F-19)

First Stage Propellant Leak Checks (F-18)

Second Stage Propellant Leak Checks (F-17)

Control Test (F-15)

Liquid Oxygen (LOX) Leak Checks (F-13)

Simulated Flight (F-12)

Engine Sequence (F-11)

Fuel Qualifications (F-10)

Hydraulic Preparations (F-8 T2)

Flight Program Verification (F-6 T2)

Secure Code Load (F-6 T3)

S&A Rotation (F-5)

Third Stage NCS Checks (F-4 T4)

Second Stage Propellant Load (F-3 T3)

Mission Dress Rehearsal

Launch Countdown Activities (F-1)

Down Range Data Flows

Launch (if NASA mission at VAFB need both Hangar AE and VAFB Bldg. 836)

PEGASUS/TAURUS

SIM Flight 1

SIM Flight 2

SIM Flight 3

SIM Flight 4

SIM Flight 4A

Combined Systems Test

Fly Out

Fly In

Skid Strip Test

Launch (if NASA mission at VAFB need both Hangar AE and VAFB Bldg. 836)

ATHENA

Testing performed every day 2 weeks prior to Launch

Launch (if NASA mission at VAFB need both Hangar AE and VAFB Bldg. 836)

TITAN II

ICPACT

SIM Flight

Tanking

FED

F-1 Activities

Launch (if NASA mission at VAFB need both Hangar AE and VAFB Bldg. 836)

V. REPRESENTATIVE MAINTENANCE WORK RESPONSIBILITIES FOR VAFB FACILITIES, SYSTEMS, AND EQUIPMENT

REPRESENTATIVE CORE WORK ELEMENT/REPRESENTATIVE CONTENT	ROUTINE MAINTENANCE	ROUTINEREPAIR	UPGRADE/ MODIFY - TASK ORDER EXAMPLE	REPRESENTATIVE CORE WORKLOAD INDICATOR
Walls (paint touch-up, minor repair)	ELVIS	ELVIS	Repaint building; new wall(s);lead paint abatement	Paint 4,000 SF of wall per year Repair 500 SF of wall per year
Doors (paint, hardware repair, preventive Maintenance (PM), replace Door)	ELVIS	ELVIS	Add new door; lead paint abatement	Paint 12 doors per year Repair 2 doors per year
Windows (PM, paint, replace broken glass, mechanical repair, caulking)	ELVIS	ELVIS	Upgrade windows;lead paint abatement	Paint 0 windows per year Repair 25 windows per year
Roofs	USAF	USAF	Major repair/replacement	
Floors (Replace damaged tile and carpet, repair cracks/moulding	ELVIS	ELVIS	New carpet, new tile, asbestos abatement	Replace 200 SF carpet per year Replace 5 SF tile per year
Ceilings (Replace damaged ceiling tiles, paint)	ELVIS	ELVIS	Replace ceiling; Asbestos abatement	Replace 1,000 SF ceiling tile per year
Electrical wiring (add outlets, repair/restore circuits, PM, add lights)	ELVIS	ELVIS	Add new service panel; asbestos abatement	Approximately 40 manweeks per year
Lights (Replace lights, ballasts, bulbs)	ELVIS	ELVIS	lighting upgrade; asbestos abatement	Replace 20 lamps per year
HVAC/Controls (PM, Belt replacement, filters, minor control replacement)	ELVIS	ELVIS	Material cost>$2K; asbestos abatement	Replace filters once per year Change belts once per year
Andover	In IT Section	In IT Section	In IT Section	
Chillers (PM, freon replacement, minor component replacement)	ELVIS	ELVIS	Material cost>$2K	Add 40 LBs of freon per year
Roll-Up doors (mechanical repairs, PM)	ELVIS	ELVIS	Replace door	Repair 10 doors per year

REPRESENTATIVE CORE WORK ELEMENT/REPRESENTATIVE CONTENT	ROUTINE MAINTENANCE	ROUTINE REPAIR	UPGRADE/ MODIFY - TASK ORDER EXAMPLE	REPRESENTATIVE CORE WORKLOAD INDICATOR
Cypher Locks (change combination, minor replacement/repair)	ELVIS	ELVIS	N/A	Repair/replace 4 locks per year; change 2 combinations per year
Cranes (PM, electrical, mechanical repair, proof-loading)	ELVIS	ELVIS	Material cost>$2K	3 manweeks per year
Hangar doors (PM, minor repair)	ELVIS	ELVIS	Material cost>$2K	Negligible maintenance
Hazardous Prop Containment (PM, minor electrical repair)	ELVIS	ELVIS	Material cost>$2K	Negligible maintenance
Hazard-proof equipment (PM, minor electrical repair)	ELVIS	ELVIS	Replace equipment	Negligible maintenance
Furniture (reconfiguration)	ELVIS	ELVIS	New furniture configuration	4 office reconfigurations per year
UPS (PM, minor repair)	ELVIS	ELVIS	Replacement	Negligible maintenance
Air compressor (PM's, minor repair)	ELVIS	ELVIS	Replacement	Negligible maintenance
Welder (PM, minor repair)	ELVIS	ELVIS	Replacement	Negligible maintenance
Cutter (PM, minor repair)	ELVIS	ELVIS	Replacement	Negligible maintenance
Paint Booth (PM, minor repair)	ELVIS	ELVIS	Replacement	Negligible maintenance

1. **"Routine" refers to preventative inspection, preventative maintenance, troubleshooting, and minor repairs and replacements.**

2. **"Upgrade/Modify" refers to extensive refurbishment or system or large component replacement.**

NASA LAUNCH SERVICES MANIFEST

APPROVED FLIGHT PLANNING BOARD 5/14/01

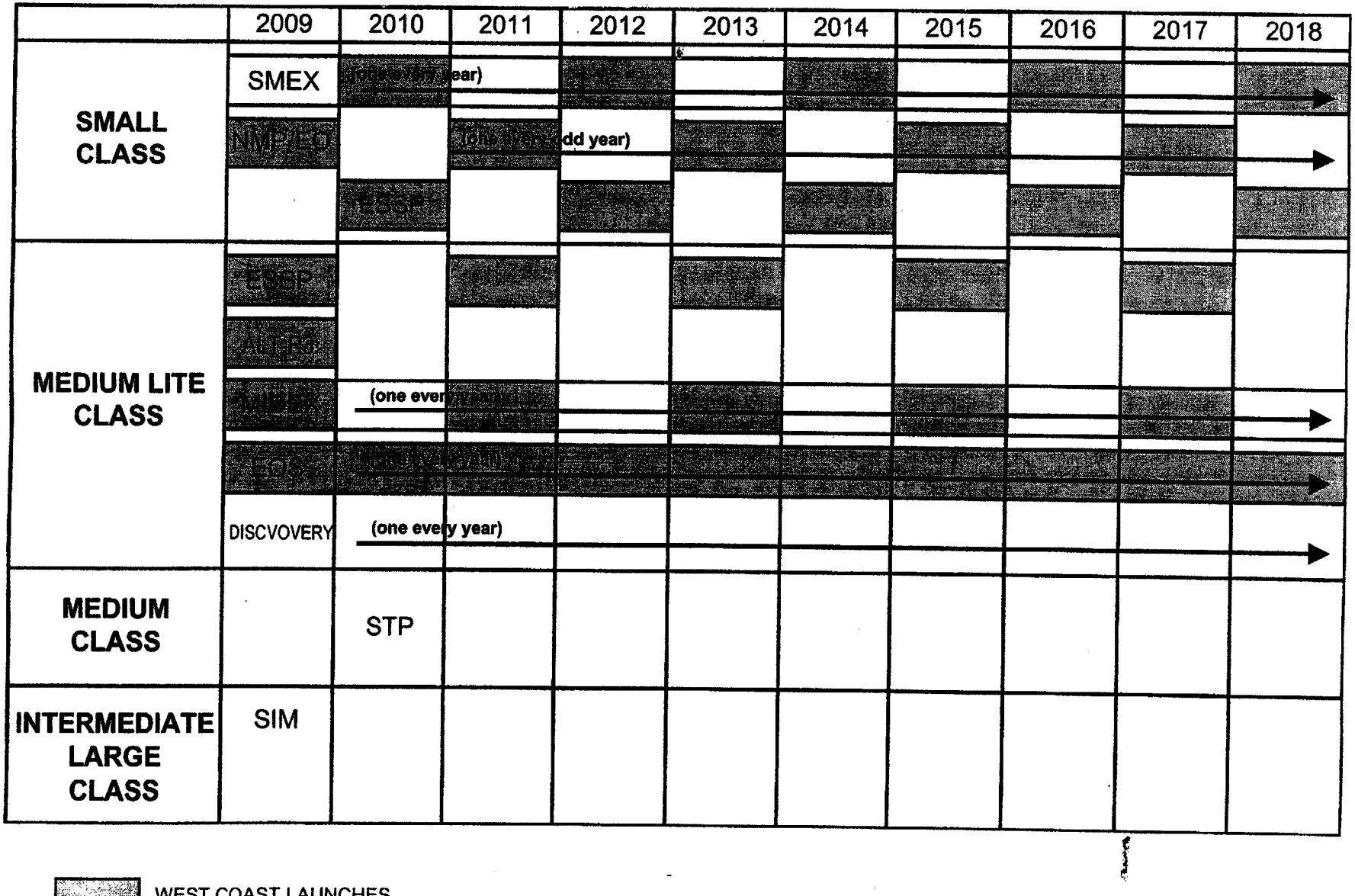
	CY '01	CY '02	CY '03	CY '04	CY '05	CY '06	CY '07	CY '08
•NEXT GENERATION LS (NG) •SECONDARY (S) •DELTA (D/S) •TAURUS (T/S)	☑ T/S QUIKTOMS - 7/22 D/S ○ ProSEDS - TBD	D/S △ CHIPS - 8/02	△ IC/S SPACETECH 5 - 5/03					
•SMALL CLASS (SC) •PEGASUS (P) •ATHENA I (AI) •TAURUS/ATHENA II (SH)	△ P HESS I - 6/7 □ AI KODIAK STAR 8/31	△ P GALEX - 1/19** ☑ P SCISAT - 6/30** □ P SORCE -7/31		△ SH PICASSO - 8/04* △ SC SPACETECH 6 - 2/04 SC △ SMEX-8 - 9/04	SH ☑ ESSP-5 - 4Q/05 △ SC SPACETECH 7 - 2/05 SC ☑ SMEX-9 - 9/05	SC ☑ ESSP-6 - 4Q/06 SC ☑ EOS-FO-2 - 4Q/06 SC ☑ SMEX-10 - 9/06	☑ SC EOS FO-3-3Q/07 SC ☑ SMEX-11 - 9/07	SC ☑ ESSP-7-4Q/08 ☑ SC EOS FO-4 - 3Q/07 SC ☑ SMEX-12 - 12/08
•MEDIUM CLASS (MC) •DELTA 7325/7320 (D3) •DELTA 7425/7426 (D4) •DELTA 7920/7925 (D) •DELTA 7920 H (DH) •TITAN II (T-II) - VAFB	▲ D ODYSSEY - 4/7 △ D4 MAP - 6/30 △ D3 GENESIS - 7/30 ☑/☑ D TIMED/JASON 8/10** D ☑ AQUA (EOS-PM) 9/20** D3 ☑ ICESAT - 12/15**	☑ T-II NOAA-M- NET 3/9 △ D4 CONTOUR - 7/1 △ D SIRTF - 7/15 D ☑ GPB - 10/02	☑ D3 NOAA N - 1/03 △ D MER A- 6/3 △ D MER B -6/27 ☑ D AURA (EOS CHEM) 7/10 D4 △ SWIFT - 9/03 ☑ MC CLOUDSAT/TBD 9/03	△ D DEEP IMPACT - 1/04 △ D MESSENGER - 3/10 D4 △ FAME - 10/04 D3 ☑ NOAA-N' - 12/04 D △ STEREO - 12/04	MC ☑ EOS FO-1 - 4Q/05 D3 ☑ NPP-BRIDGE - 12/05 MC △ DISCOVERY 9 12/05	△ MC GLAST - 3/06 D △ SPACETECH 3 6/06 MC △ DISCOVERY 10 12/06 MC △ SDO - 12/06 TBD ☑ MIDEX-5 - 12/06	MC △ MMS - 6/07 MC △ DISCOVERY 11 12/07 TBD △ MIDEX-6 - 12/07	MC △ DISCOVERY 12 12/08 TBD ☑ MIDEX-7 - 12/08
•INTERMEDIATE/ (IC) •ATLAS (IIA/ IIAS/AV) •DELTA (DIII&IV) •DELTA IV HEAVY (IVH)	IIA □ GOES-M- 7/12 IIA ○ TDRS I - 10/30	IIA ○ TDRS J - 10/02	□ DIII GOES-N - 1/11	□ DIII* GOES-O - 4/04 TBD △ PKB* - 12/04*	IC △ MARS RECON ORBITER - 8/05	□ DIII* GOES-P - 4/06	DIV △ MARS SMART LANDER-9/07**	△ DIV EUROPA ORBITER 1/08**

* FOR NASA PLANNING PURPOSES
** Under Review

△ = OSS ○ = OSF
□ = OES ✓ = VAFB LAUNCH

K. PONIATOWSKI
C.SALVAS MANI-11-LS FPB 3/14/01

NASA ELV LONG RANGE PLANNING
POTENTIAL MISSION (CY 2009 - 2018)



K. PONIATOWSKI
C. SALVAS MANI-12 LRPPM 5/31/01

ATTACHMENT E

KEY PERSONNEL INFORMATION

ATTACHMENT E
KEY PERSONNEL INFORMATION

(Complete one form for each proposed key person. The information shall not exceed two pages and does not count toward the page limitation per Article L-7.)

1. Name
2. Education
    a. Degrees, dates, majors, school
    b. Other education or training and dates
    c. Certifications or professional designations (Location)
3. Proposed assignment: Title and organizational element
4. Current position and beginning date
5. Current significant responsibilities or projects
6. Previous positions (last five years)
    a. Firm and period of employment
    b. Significant experience
    c. Specific projects
7. Professional activities and achievements (awards, publications, professional societies)
8. Unique qualifications. Summarize any relevant, unique experience, education or personal characteristics, which may not be evident from the above information.
9. Evidence of the individual's commitment to work for the offeror's organization

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PART IV - REPRESENTATIONS AND INSTRUCTIONS
SECTION M - EVALUATION FACTORS FOR AWARD TO OFFERORS

M-1 EVALUATION OF OPTIONS (FAR 52.217-5) (JUL 1990) - MODIFIED

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement and phase-in period. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

M-2 SOURCE EVALUATION PROCEDURES

(a) This competitive negotiated acquisition shall be conducted in accordance with Federal Acquisition Regulation (FAR) Part 15.3, "Source Selection", as supplemented by NASA FAR Supplement (NFS), Part 1815.3, same subject. The source evaluation board procedures at NFS 1815.370, "NASA source evaluation boards" applies. The proposal submission instructions set forth in Section L are designed to provide guidance to the offeror concerning the type of documentation that is necessary for proposal evaluation. The information required to be submitted in Section L will be evaluated under the corresponding factors and subfactors. Offerors are required to meet all solicitation requirements, such as terms and conditions, representations and certifications, and technical requirements, in addition to those identified as factors and subfactors to be eligible for award. Proposals submitted will be evaluated in accordance with criteria defined in this Section M. Proposals will be evaluated in accordance with the following three factors; Mission Suitability, Past Performance and Price/Cost. Only the Mission Suitability Factor will be numerically weighted and scored. However, offerors are cautioned not to minimize the importance of adequate response to Past Performance and Price/Cost. The Contracting Officer may reject proposal(s) as being unacceptable at any time after receipt of written proposal materials. If rejected, the Contracting Officer will make a determination that the proposal is unacceptable, in accordance with NFS 1815.305-70 and document the reasons therefore. Notwithstanding FAR provision 52.215-1, Instructions to Offerors - Competitive Acquisition, paragraph (f), award shall be made to a single offeror whose offer responds to all items included in the solicitation. Failure to provide for any item including any option shall render the bid nonresponsive or may cause the offeror's proposal to be rejected.

RELATIVE IMPORTANCE OF FACTORS

All evaluation factors other than Cost /Price, when combined, are approximately equal to Price/Cost.

M-3 EVALUATION FACTORS

MISSION SUITABILITY FACTOR

(a) Evaluation of the Mission Suitability Factor will focus on the offeror's demonstrated understanding of the requirements, the offeror's proposed technical and management approaches to meeting the requirements, and the offeror's ability to perform as proposed. The Government will use the adjective ratings, definitions, and percentile ranges in accordance with NFS 1815.305(a)(3)(A) to evaluate the Mission Suitability subfactors and the total Mission Suitability factor.

(b) Proposal risk associated with cost, schedule, and performance of technical aspects of the proposal will be evaluated and considered in determining the numerical and adjective ratings and the strengths and weaknesses. The evaluation of risk will consider the probability of success, impact of failure, and alternatives available to meet the requirements.

(c) The Mission Suitability Factor consists of three subfactors as follows:

Subfactor-1 - Management Approach

The offeror's approach to overall management, organization, and integration of the requirements will be evaluated. Specifically, the organizational approach, management and supervisory controls used to conduct business, the structure of the corporate and sub-contractor/teaming partners, evidence of business and technical interfaces to NASA and payload customers, and decision-making levels of authority for conducting business will be included in the evaluation.

The offeror's understanding and approach to performance-based contracting including: proposed techniques, processes and measurements that ensure acceptable levels of performance will be evaluated. The offeror proposed award fee pool will be evaluated for its ability to encourage excellent performance for both Fixed Price and Cost Reimbursable areas of the contract.

The offeror's understanding and capability to successfully manage and administer this hybrid Fixed Price/Cost-Reimbursable type contract, including effective business system development and use will be evaluated.

The offeror's approach to ensure successful contract phase-in including roles, responsibilities, major transition events and ability to maintain continuity of services will be evaluated.

The offeror's approach to identifying, mitigating, and managing programmatic risk areas during performance, including probability of success, impact of failure, and alternatives available to meet the solicitation requirements will be evaluated.

The offeror's Quality Manual will be evaluated for thoroughness in accordance with the applicable American National Standard ANSI/ISO/ASQ Q9001-1994/2000 revision All organizations that are certified or in compliance with Q9001-1994 will need to transition Q9001-2000 by December 2003.

The offeror's proposed key positions, and the identified key personnel to fill those positions will be evaluated. The qualifications of the key personnel and demonstrated commitment of that individual to work for the offeror's organization will be considered.

The offeror's approaches to hiring and retaining a knowledgeable and talented workforce with the skills necessary for successful performance will be evaluated.

The offeror's demonstrated understanding of the provisions and requirements of the Service Contract Act, labor-management relations, total compensation equity. The Government will evaluate the Total Compensation Plan as specified in L-15, NFS 18-52.231-71 "Determination of Compensation Reasonableness" and L-14, FAR 52.222-46 "Evaluation of Compensation for Professional Employees will be evaluated.

Subfactor-2 - Technical Approach

The offeror's approach to implement and perform the requirements as stated in the SOW will be evaluated.

The offeror's proposed implementation of NASA's oversight requirements for LSPs will be evaluated. The evaluation will consider the offeror's understanding of the oversight requirements, implementation of the requirements, the types of skills required, and the role of the offeror. The understanding of the launch vehicle certification process and the types of skills required for its successful implementation and completion will be evaluated. The understanding of the engineering review process and as well as the types of skills required for its successful implementation and completion will be evaluated

The offeror's approach to satisfying the mission integration and analysis requirements will be evaluated. This includes the method to capture and satisfy all mission integration requirements and the role of the offeror in the mission integration activities. The offeror's understanding of LSPs analyses methodology used in all mission analysis areas in the SOW and how the offeror would develop launch vehicle models in each of these areas will be evaluated. Also, the offeror's understanding of the methodology and types of skills needed to review LSP-provided analyses/documentation to ensure that critical mission requirements are met will be evaluated.

The offeror's understanding of program policies and approach to ensure safety requirements of the LSPs and payload customers at the PPFs will be evaluated. This includes knowledge of hazardous processes, professional engineering practices and principles, industrial safety programs, and applicable regulations

for hazardous processing of ELVs, spacecraft and ground support equipment; process to identify and resolve safety concerns and conflicting requirements with KSC, Air Force, LSP, and spacecraft contractors; skill in the identification, assessment and effective resolution of safety issues in situations involving time constraints and rapidly changing parameters; and the process to provide safety instruction to all levels of NASA, LSP, and spacecraft contractor personnel.

The offeror's approach to implement an effective quality assurance program will be evaluated. This includes the understanding of program policies, process controls, risk identification and assessment. Also, the offeror's capability to implement a surveillance program to ensure that the LSPs contractual requirements are met; the ability to identify, assess, and effectively resolve quality issues in situations involving time constraints and rapidly changing parameters during mission integration and launch processing activities; and, the offeror's understanding of methods needed to assess the flight readiness of the mission-assigned vehicles and to identify any constraints within the fleet of vehicles will be evaluated.

The offeror's approach to certifying the readiness of VAFB facilities to support payload processing, and launch activities will be evaluated. This includes evaluation of the proposed activities required to achieve readiness of the payload processing facility systems and the communications and telemetry systems for payload and vehicle testing and launch.

The offeror's approach for utilizing Information Technology in the performance of contract requirements will be evaluated. This will include evaluation of proposed information systems and data sharing with NASA, maintaining interoperability and access between contractor systems/applications and Government users/customers, and the approach to implement the requirements of NPG 2810.1 Security of Information Technology.

The offeror's proposed staffing plan, the proposed skill mix, educational levels, and staffing levels matched to each element of the SOW will be evaluated. The evaluation will include assessment of the offeror's rationale for skills and staffing levels and the understanding the degree of effort necessary for successful performance of the functions required by the SOW.

Subfactor 3 - Safety and Health

The offeror's safety approach used to establish and implement the Safety and Health Plan will be evaluated. This includes an evaluation of the offeror's understanding of program policies, occupational health, industrial safety, operational safety, systems safety, process safety, safety risk identification and assessment, and external and internal reporting. Also, this includes an evaluation of the offeror's knowledge of Safety and Health compliance requirements, including but not limited to Federal, State, Local, NASA Agency-wide, and installation specific policies, and procedures and how they are effectively implemented into the offeror's safety management approach.

The offeror's Safety and Health Plan as requested in Article L-14 will be evaluated per NPG 8715.3, NASA Safety Manual, Appendix H.

M-4 MISSION SUITABILITY FACTOR AND SUBFACTOR WEIGHTS

The Mission Suitability sub-factors will be evaluated to determine the relative merits of the Offeror's proposal. In accordance with NFS 1815.304-70(b)(1), the Mission Suitability factor will be weighted and scored on a 1000 point scale.

The weights (points) associated with each Mission Suitability subfactor are as follows:

(Subfactor-1)	Management Approach	350
(Subfactor-2)	Technical Approach	550
(Subfactor-3)	Safety And Health	100
	TOTAL MISSION SUITABILITY FACTOR	1000

The total Mission Suitability factor, and all subfactors, will be evaluated using the adjectival rating, definitions and percentile ranges at NFS 1815.305(a)(3)(A).

The maximum points available for each subfactor will be multiplied by the assessed percent for each subfactor to derive the score for the particular subfactor. For example, if a subfactor has a possible 200 points and receives a percent rating of 80, then the score for the subfactor is 160 points.

M-5 PAST PERFORMANCE FACTOR

(a) Information provided by the offerors in past performance will be evaluated as to the offeror's ability to perform the contract successfully. For the purpose of evaluation of past performance information, offerors shall be defined as business arrangements and relationships such as joint ventures, teaming partners, and major subcontractors. Each firm in the business arrangement will be evaluated on its performance under existing and prior contracts for similar products or services. The currency and relevance of past performance information, source of the information, context of the data, and general trends in offeror's performance will be considered in the evaluation. The Offeror's performance under previously awarded relevant contracts will be assessed. The Government may consider information provided by the offerors, by references provided in accordance with L-10 "Specific Instructions -- Past Performance Factor", paragraph (d), and information provided by other sources.

(b) The evaluation of Past Performance will be conducted in accordance with the FAR 15.305 (a) (2) and NFS 1815.305 (a)(2). This factor is not numerically weighted or scored. The government will evaluate each offeror (including its major subcontractors) and assign one of the following adjectival ratings: Exceptional, Above Average, Satisfactory, Neutral, Marginal or Unsatisfactory. Offerors without a record of relevant past performance or for whom information on past performance is not available will not be evaluated favorably or unfavorably on past performance.

(c) Each performance evaluation and risk assessment will consider the number and severity of problems, the effectiveness of corrective actions taken, and the overall work record. The assessment of performance risk is not intended to be a simple arithmetic function of an offeror's performance on a list of contracts, but rather the information deemed most relevant and significant will receive the greatest consideration. Relevant past performance is the demonstrated ability to accomplish work that is comparable and related to the objectives of this procurement.

The past performance evaluation will include an assessment of the following:

1. Management/Contract Performance

   The evaluation will consider how well the offeror has met completion dates, the level of customer satisfaction, and the timeliness and quality of deliverables. This includes any unique schedule requirements that had to be met, interim deliverables or milestones such as periodic technical and business reports, and completion of valid customer direction such as task and mission assignments.

2. Technical Performance

   The evaluation will consider the offeror's compliance with technical requirements and performance standards for previous and present work. For services and support, the quality of service or support shall be considered. Consideration will be given the extent to which contract objectives (safety, management, technical, occupational health, security, and overall mission success) have been achieved on relevant efforts by the offeror. Particular attention will be given to Launch/Space Vehicle Engineering Assessment (Safety &Mission Assurance/Vehicle Engineering), Flight Mission Analysis (Independent Verification & Validation/Mission Support), Facility Management and Operation (Processing/Telemetry).

(d) In making the selection, the source selection authority will determine the relevance of past performance information. This comparative assessment of past performance information is separate from the responsibility determination required under FAR Subpart 9.1. The Government will evaluate the offeror's performance history in order to indicate the likelihood of successful performance of the contract requirements.

(e) Submitted past performance questionnaire information for the offeror and all proposed major sub-contractors/teaming arrangements will be evaluated. The references identified by the offeror may be contacted for additional information.

(f) As applicable, this evaluation will also take into account past performance information regarding predecessor companies or subcontractors that will perform major or critical aspects of the requirement when such information is relevant to this acquisition.

M-6 PRICE/COST EVALUATION FACTOR

(a) The price/cost evaluation factor is used to assess what each offeror's proposal will cost the Government should it be selected for award. The offeror's price/cost proposal will be evaluated to determine whether the proposed amounts are realistic for the work to be performed, whether they reflect an understanding of the requirements, and whether they are consistent with the various elements of the Mission Suitability proposal. This factor is not numerically scored or weighted.

A price analysis will be conducted in accordance with FAR Subpart 15.4 to ensure the Government pays a fair and reasonable price. Proposals will be evaluated to determine if the prices are unbalanced, as defined in FAR Subpart 15.404-1(g), and included in the risk assessment.

(b) For the purposes of proposal evaluation and source selection, the proposed amounts of the phase-in period and both options will be added to the proposed amount of the basic contract period. Indefinite delivery, indefinite quantity items to be ordered on a task order basis will be evaluated as follows:

(i) Mission Direct Support - The price(s) of Mission Direct Support will be evaluated to ensure the Government pays a fair and reasonable price. The Government-specified best estimated quantities multiplied by the proposed unit prices in each year will be included in the total proposed amount for proposal evaluation and source selection.

(ii) Facility Modifications, Design and Construction - The successful offeror will be required to provide facility modifications, design and construction services described in SOW paragraph 11.0 on a task order basis. Specific projects have not been identified at this time. The Government estimate to perform the projects is $19 Million. For source selection purposes, this amount will be added to each prime offeror's total proposed amount to project probable cost to the Government of the ELVIS contract

(c) Offerors should refer to FAR 15.401 for a definition of "cost realism" and to FAR 15.404-1(d) for a discussion of "cost realism analysis" and "probable cost" for other than the fixed price effort. Both the proposed cost and the probable cost will be presented to the Source Selection Authority. Probable cost to the Government will include G&A at the proposed ceiling rate. Proposal risk will also be considered in the evaluation. The analysis will include the level of confidence in the probable cost assessment of each proposal.

(d) Also included in the evaluation will be an analysis of the offeror's administrative data, which is comprised of financial capability to perform a contract of this magnitude, model contract, (e.g., acceptance of contract terms and conditions, and representations and certifications), and Equal Employment Opportunity pre-award clearance.

[END OF SECTION]