KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-1-68
FOR RELEASE: Immediate

January 3, 1968

APOLLO/SATURN 204

UNDERGOES PREFLIGHT TESTS

KENNEDY SPACE CENTER, Fla. -- The Apollo/Saturn 204 launch vehicle, topped by the first flight-ready Lunar Module, is undergoing major prelaunch tests in preparation for the unmanned Apollo 5 mission, scheduled to take place no earlier than January 18.

A combined KSC-contractor launch team conducts the checkout, headed by Launch Director Rocco Petrone and Launch Operations Manager Paul Donnelly.

Similar to the Lunar Module configuration that eventually will ferry Apollo astronauts to and from the moon's surface, LM-1 will be launched from Cape Kennedy's Complex 37 into a near-earth orbit.

The uprated Saturn 1 and its LM-1 Grumman-built payload underwent tests that verified compatibility between space vehicle electrical and mechanical systems, Complex 37 ground support equipment and the Air Force Eastern Test Range.

The space vehicle recorded simulated prelaunch activities through in-flight milestones, while on both external power (plugs-in) and internal power (plugs-out).

A third major highlight, the Flight Readiness Test, was conducted as an all-systems verification of the total space vehicle, paving the way for hypergolics to be loaded aboard the spacecraft and launch vehicle upper stage.

Additional testing will continue through to about six days before liftoff, when the Countdown Demonstration Test begins. The CDDT is a dress rehearsal for the actual launch countdown, which gets underway after a 32-hour recycle.

- more -

During the nine-hour flight, the LM's ascent and descent stage engines will be fired twice, an abort simulated and all other on-board systems thoroughly monitored.

The LM will deploy from its adapter at approximately T plus 50 minutes, and the descent engine will be burned the first time some 3 1/2 hours after liftoff. During an actual manned lunar landing, the astronauts would fire the LM's descent stage engine to power their gradual descent to the moon's surface, and would activate the ascent stage engine for rendezvousing and docking with the command module in lunar orbit.

A LM abort would take place during a real lunar flight if the two-man crew decided to return to the orbiting command module before descending to the moon's surface. They would perform this maneuver by firing the LM's ascent stage engine, which will pull that stage away from the descent stage.

Engineers on the ground will send a radio signal to the orbiting LM-1 to initiate the simulated abort, and will monitor its planned separation.

One of the most critical systems that must be checked and maintained prior to launch is the LM's environmental control system, according to Larry Cervellino, special assistant to Grumman Aircraft's project manager at the Spaceport, George Skurla.

Spacecraft temperature must be maintained on the ground, according to Cervellino, so that the ECS does not overheat during liftoff and orbital insertion. Once in orbit, a heat exchanger takes over to sustain a 75-degree temperature.

The first LM flight follows nearly five years' research and development. The design was conceived years before the Lunar Orbiter and Surveyor spacecraft returned hundreds of highly-detailed lunar photographs.

LM-1 will be launched from Complex 37, last used more than 1 1/2 years ago for the Apollo/Saturn 203 mission.

During the LM-1 preflight preparations, the Spaceport's probing Acceptance Checkout Equipment is automatically monitoring thousands of spacecraft systems, and radio linking these minute measurements from pad computers to data reduction and readout equipment at the Manned Spacecraft Operations Building. NASA/Marshall Space Flight Center is responsible for launch vehicle development. The Manned Space Flight Center has responsibility for the spacecraft.

The Apollo 5 space vehicle stands about 181 feet, or some 43 feet shorter than the standard uprated Saturn 1 space vehicle configuration. This height difference is due to the fact that the Apollo 5 launch vehicle will not be topped by the usual command-service module. (The 32-thousand-pound LM and its adapter will be capped by a protective covering which will detach following orbital insertion.)

LM-1 does not contain an ablative heat shield and will burn up during reentry. It also will not be equipped with the four landing pads similar to the type that eventually will be used for the manned lunar touchdown.

Key NASA launch personnel for the upcoming mission include: Don Phillips, test supervisor; Bert Grenville, assistant test supervisor; Gene Sestile, launch vehicle test conductor; and William Criddle, spacecraft test conductor. Contractor stage and spacecraft test conductors are: first stage: Ken Stewart, Chrysler; upper stage, John Latherow, Douglas; Instrument Unit, Justin Hall and Donald Heins, International Business Machines and lunar module, James Harrington, Grumman.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-2-68
FOR RELEASE: Immediate

January 3, 1968

SEVERAL SPACEPORT FACILITIES

COMPLETED DURING 1967

KENNEDY SPACE CENTER, Fla. -- Several major facilities at the Spaceport were completed during 1967.

In the Industrial Area, additions were completed to the Flight Crew Training Building, the Occupational Health Facility, the Manned Spacecraft Operations Building, and the Heating Plant. The interim Visitor Information Center was completed in July. The only major project still under construction in the Industrial Area is the addition to the Headquarters Building.

At Complex 39, major construction projects included the press site, Pad B - the second pad of Complex 39 - the Propellant Laboratory Complex, and the resurfacing of two parking lots. High Bay 2 in the Vehicle Assembly Building where the Apollo/Saturn V spacecraft is assembled, and firing room 3 in the Launch Control Center are being activated.

In addition, the Flight Crew Training Building, finished in July, now houses a second Apollo mission simulator, a documentation center, an operational area and storage space.

Examination rooms, laboratories and administrative offices were completed at the Occupational Health Facility in August, tripling the size of the facility.

At the Manned Spacecraft Operations Building, a Lunar Module activation project involving the completion of a high pressure gas distribution system was completed in March.

Additions and alterations were made to the heating plant to accommodate a 16 million BTU boiler relocated from the VAB. The addition is essentially complete and will become operational pending testing of the boiler.

-more-

The interim Visitor Information Center opened to the public August 1, consists of two buildings connected by a covered portico. The VIC features free lectures, exhibits and films on space exploration and technology, and serves as a terminal for conducted bus tours of the Space Center.

Two wings being built at each end of the Headquarters Building are 70 percent finished and will provide 120,000 square feet of engineering and administrative space for KSC personnel now working in trailer offices. The project is scheduled for completion in March.

At Complex 39, the press site for viewing Saturn V launches was completed in April and inaugurated November 9 for Apollo 4. In addition to a covered bleacher viewing area, the site also includes a communications terminal building and parking areas for vans owned by news media organizations.

Basic construction on Pad B at Launch Complex 39 was finished in September. Although there are about 20 minor activation tanks presently being worked on, major ground support equipment systems are complete and are being used in the checkout of Mobile Launcher 3.

The Propellant Systems Components Laboratory Complex was finished in August. In includes a propellant components lab, operations building, gaseous nitrogen charging station, de-ionized water plant, propellant-transporter repair and maintenance facility, propellant-trailer parking areas and storage facilities.

Two parking lots located behind the VAB low bay area were upgraded in November to provide an all-weather surface. The parking lots accommodate about 900 cars.

About 80 percent of the construction effort in High Bay 2 of the VAB is expected to be completed this year. Interior architectural work is generally finished, and installation of moveable platforms will be 50 percent complete by the end of the year. Three high rise elevators were installed in September. Electrical and mechanical systems will be checked out early next year. Construction in Firing Room 3 of the LCC consists of installation of communications and operational television systems.

-end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-4-68
FOR RELEASE: Immediate

January 4, 1968

NASA SECRETARY RECALLS TRAVEL WITH JFK

KENNEDY SPACE CENTER, Fla. -- A young lady who once served President John F. Kennedy hopes to be on hand here when the space age commitment he made becomes reality.

In 1961, the late President committed this nation to landing men on the moon. One for whom this presidential proclamation would have special meaning was Antoinette E. Hickey.

That year she was a member of the delegation that accompanied Mr. Kennedy to a meeting with Russian Premier Khrushchev in Vienna. Today, as secretary to Miles Ross, Deputy Director for Center Operations, Toni is a member of the Spaceport team.

When the day for the manned lunar journey arrives, Toni will view the liftoff with a special personal interest.

The sparkling miss from Altoona, Pennsylvania, finds her Spaceport duties "exacting and exciting. It is especially exciting when preparing for a launch like Apollo 4."

It is a space vehicle of this type which will carry American astronauts to the moon.

There was a different kind of excitment, she said, in accompanying President Kennedy and Secretary of State Rusk to meetings in Europe, Asia and South America. As a member of the U.S. State Department's executive secretariat, she straveled to 13 foreign countries in 1961 and 1962.

- more -

In addition to the Vienna trip in 1961, Toni was a member of the Rusk delegation at the Southeast Asia Treaty Organization meeting in Bangkok, Thailand. The following year she accompanied President Kennedy on his state visit to Mexico, and served the Secretary of State at the Organization of American States conference in Punta del Este, Uruguay.

A capacity for fast accurate work has been a key to success for Toni, in rocketry as well as diplomacy.

In 1963 she transferred to the headquarters of the National Aeronautics and Space Administration in Washington. With NASA, Toni continued to travel. It was on a trip with Dr. George E. Mueller, associate administrator for manned space flight, that she first came to KSC.

This year Toni returned on a permanent basis--in time to help prepare for and witness the maiden flight of Apollo 4.

Toni replies with a genuine "wow" when asked about her reaction to the liftoff of America's biggest rocket, a 363-foot giant that develops 7.5 million pounds of thrust when it leaves the ground.

Toni graduated from Catholic High School in Altoona in 1960 and completed business administration courses at George Washington University in the nation's capital.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

SAS #21

RELEASE NO: KSC-5-68
FOR RELEASE: Immediate

January 4, 1968

SPACE EDUCATION LECTURES

CONDUCTED AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- Kennedy Space Center Visitor Information Center has added something new--"space education demonstrations"--available to all who visit the VIC.

Conducted as part of the Spaceport's educational program, the demonstrations feature both manned and unmanned NASA space activities.

As Hal Mehrens, Chief of KSC's Educational Programs Branch, explained:

"We initiated these programs to help inform the general public on Space Age developments--to give them a greater understanding of the 'how, when, where and why' of NASA's programs."

Administered by the Center's Educational Office, this program is the only one of its kind offered by any NASA field center.

Four lectures are given each day, Monday through Friday, at 10 and 11 a.m., and 1:30 and 3 p.m. There is no charge.

Topics covered include explanations of both manned and unmanned satellites; man in space (basic needs for survival, food, hygiene, and shelter in space); power for spacecraft, and a lunar journey.

Scale models of spacecraft and rockets are used, and various experiments are conducted. Demonstrations on how messages are received from spacecraft are conducted.

Responses to the program, indicated by comment cards distributed to audiences, have been overwhelmingly enthusiastic.

-more-

"We started a two-week pilot program", Mehrens explained, "on the general format of student lectures given in the Training Auditorium at the Center."

"We believed the success of the student program indicated that an adult program would be equally successful. Audience response has proved we were right."

The 30-minute demonstrations are given by LTV lecturers Richard V. Coup and Elpidio Hernandez.

-end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-7-68
FOR RELEASE: Immediate

January 4, 1968

INCREASE OF VISITORS RECORDED IN NASA TOUR PROGRAM

KENNEDY SPACE CENTER, Fla. -- NASA's public tour program accommodated 515,255 visitors to the Kennedy Space Center in 1967. This represents an average of 1,416 visitors per day, an increase over the 1966 daily average of 1,091. Based on 1967 attendance, a 20% increase is forecast for 1968. The escorted bus tours are conducted by Trans World Airlines for NASA.

Since the inception of the tour program in July 1966, a total of 690,886 persons have visited the Spaceport, an average of 1,316 a day. The five highest attendance months were: August, 1967 - 78,377; July, 1967 - 78,074; March, 1967 - 60,717; August, 1966 - 59,302; and June, 1967 - 54,848. During these five record months, daily attendance averaged 2,150 visitors.

The Visitor Information Center, opened August 1, 1967, has become the focal point for the visitation program. Visitors have available without cost lectures, exhibits and films. The lecture program was started in October 1967, to enhance understanding of basic scientific space principles and major NASA programs. Films have been shown in the VIC since August 1, 1967 and depict the various roles of NASA Centers, with special interest features on the latest launches and space achievements.

The busiest period during 1967 occurred between December 26-30, when 24,865 visitors took tours. The attendance taxed the capacity of the VIC and tour stops at the Vehicle Assembly Building, and either the Mission Control Center at Cape Kennedy or the Flight Crew Training Facility.

Sunday drive-through tour attendance decreased over 50% last year from the previous year. Approximately 398,000 visitors took the Sunday tours in 1966, compared to 187,000 in 1967. The decrease is attributed to the enthusiastic response to the bus tours.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #51

RELEASE NO: KSC-9-68
FOR RELEASE: Immediate

January 16, 1968

KSC RECEIVES PROPOSALS ON TOURS, VIC OPERATION

KENNEDY SPACE CENTER, Fla. -- Three companies have submitted proposals for the operation of NASA Tours at Kennedy Space Center and the NASA Visitor Information Center. Those submitting proposals were: ABC-Gladieux of Toledo, Ohio; Management Services Institute of Oak Ridge, Tennessee; Trans World Airlines at KSC with Greyhound as a sub-contractor.

The new contract, expected to take effect on April 1, 1968, with options for extension up to ten years, includes the operation of the public bus tours and the Visitor Information Center including a gift shop and snack bar. Requests for proposals were issued in late November 1967. A Source Evaluation Board will now evaluate each proposal. An award is expected to be made by the Kennedy Space Center in time for the new contract to begin April 1.

The tours have been operated by Trans World Airlines since they began in July 1966. TWA is presently working under an extension of last year's contract. The extension covers operations through March 1968.

NASA Tours are open to the public on a daily basis. Since 1966, over 700,000 patrons have toured the NASA spaceport and adjacent Cape Kennedy.

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-10-68

FOR RELEASE: Immediate

January 16, 1968

GENERAL BOGART TO SPEAK TO LOGISTICS ENGINEERS

KENNEDY SPACE CENTER, Fla. -- Lt. Gen. Frank A. Bogart, U.S. Air Force (Ret.), Deputy Associate Administrator for Manned Space Flight (Management), NASA, will speak at the January 18 dinner meeting of the local chapter of the Society of Logistics Engineers.

General Bogart has been with NASA since December 1964 when he retired from the military service. His talk will be entitled, "Logistics - Everybody's Business."

The dinner meeting, and a reception preceding dinner, will be held at the Convention Center of the Cape Kennedy Hilton Hotel in Cape Canaveral. The reception will be at 5:30 p.m. followed by dinner at 6:30.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #51

RELEASE NO: KSC-11-68
FOR RELEASE: Immediate

January 16, 1968

JOHN R. ATKINS NAMED SAFETY DIRECTOR

KENNEDY SPACE CENTER, Fla. -- John R. Atkins has been named Safety Director of the National Aeronautics and Space Administration's Kennedy Space Center by KSC Director Dr. Kurt H. Debus.

Atkins, formerly Chief of the KSC Safety Office under the Director of Installation Support, will report directly to Dr. Debus on safety matters.

A native of Detroit, Atkins joined NASA's Gemini program in June 1964 in the Spacecraft Test Conductor's Office at KSC. His office develops safety standards, criteria and policies pertaining to spacecraft, launch vehicles and related safety activities.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #51

RELEASE NO: KSC-13-68
FOR RELEASE: Immediate

January 17, 1968

COMPUTERS ARE HER BUSINESS

AT SPACEPORT'S CONTROL CENTER

KENNEDY SPACE CENTER, Fla. -- Geraldine Kaplan, a 22-year-old NASA Data Systems engineer, believes there would be more women involved in engineering and scientific fields if they were offered more encouragement "in high school and particulary in college."

Geraldine, a 1966 graduate of the University of Miami, is a member of the team of technicians working with the computers used during Saturn V launches at Complex 39.

Urged by her parents to follow studies in engineering and influenced by a brother, also an electrical engineer, Miss Kaplan feels she is doing something worthwhile in the job she has working in the space program.

She especially felt it during the highly successful launch of Apollo 4 November 9.

"You feel like you're doing something when you see the crowds out there, the secretaries - they are a part of it even if they typed up a letter," said Geraldine. "It's rewarding to see it move, and know it's going to be successful after all the work."

One of an increasing number of women entering this profession, Geraldine talks about her job at the Launch Control Center knowledgeably.

"Our computers support our launch countdown sequences, and at this time data is being logged on magnetic tape, similar to your home recording tape. This data that is recorded - logger - is evaluated after the launch through post processing programs which we have. It's a post processing package, in particular, in which the data is taken off the tape and formatted in a usable form."

- more -

The data on the magnetic tapes is a record of all the commands sent to the launch vehicle and a chronological log of the condition of all on-board systems. With this information engineers can often determine the cause of malfunctions that may develop during a mission.

Miss Kaplan, currently working on a special project to determine the durability of computer recording tapes, is convinced ".... there are places here for people interested in any phase of science. Any interest you want, I believe you can find it in this space program."

Now a resident of Cape Canaveral, Geraldine attended high school in the Miami area but was born in Webster Groves, Missouri, near St. Louis.

She has been at the Spaceport since February.

While Geraldine thinks "it's hard for women to come into a program which has a majority of men," she does believe there is a place for women with scientific background and engineering experience.

She added, "It's ability that counts--true?"

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-14-68
FOR RELEASE: Immediate

January 17, 1968

LADY ENGINEER AT SPACE CENTER

HOPES FOR ANOTHER DEGREE

KENNEDY SPACE CENTER, Fla. -- There are many aerospace electrical engineers who love to bowl and fly airplanes--but few who also love to cook and sew.

Jeanne H. Johnson, an aerospace technologist in telemetrics at KSC, says with enthusiasm that she has enjoyed her multiple role as housewife, student and working engineer during her two years of marriage.

Jeanne, an auburn-haired, bright-eyed girl who puts no limitation on her ambition, just turned 24 years old and already looks forward to a second university degree in languages.

"I would like to have as liberal an education as I can get," says Jeanne.

A 1967 graduate of the University of Minnesota--one of three women in her class who graduated with engineering degrees--Jeanne explains she chose the aerospace industry because it "offered a wider choice" --and she does not intend to narrow the avenues of opportunity by specializing.

Jeanne, who once "stopped by" the nation's Spaceport while on vacation was immediately granted an interview. She continued her vacation with a job offer. She now works in the Planning and Programming Office, Telemetry Branch.

Jeanne's hometown is Excelsior, Minn., a Minneapolis suburb where her father, also an electrical engineer, managed his own airport.

That might explain why she is so excited about learning to fly. Or perhaps it will make her feel closer to her husband, Ralph, and airborne military policeman who recently left for a 13-month tour of duty in Vietnam.

-more-

What influences a girl to choose a career in engineering, a field in which even men find the competition a keen challenge?

"My dad was an EE, but I suppose my brothers had a great deal to do with my becoming interested. They both graduated with degrees in aeronautical engineering."

Jeanne, who has seen the practical and the academic side of engineering, definitely does not consider her sex a handicap.

"I've been very well accepted here and enjoy my job very much. I particularly like it because I'm expected to accept the same responsibilities in the job as the men."

A girl who takes her work seriously but smiles easily, Jeanne admits that the fact she is a lady engineer can not be completely overlooked.

"They kid me about it once in a while, but it's always in good fun."

-end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 H51

RELEASE NO: KSC-15-68
FOR RELEASE: Immediate

January 17, 1968

APOLLO APPLICATIONS OFFICE

PLANNING FOR FUTURE

KENNEDY SPACE CENTER, Fla. -- With the successful completion of future Apollo lunar landings, NASA's major space flight emphasis will shift to the Apollo Applications program. And Col. Thomas W. Morgan, KSC Apollo Applications manager, has a 25-man office paving the way now for the day when AAP space vehicles move from the drawing boards to Spaceport launch pads.

Among the hardware for AAP are things like the orbital workshop, in which astronauts will conduct lengthy experiments in space, and the Apollo Telescope Mount, with which man will scan the universe from the vantage point of earth-orbit.

Morgan's AAP office must develop plans to meet program requirements here at KSC, the jump-off place for AAP.

To accomplish this goal, the AAP office levies requests on KSC directorates for launch pad and other ground support modifications needed to maintain schedules and standards of acceptability.

For example, the AAP office, in conjunction with engineers from the line organizations, monitors flight hardware design at contractor plants throughout the nation to verify compatability with KSC facilities.

Another function is to coordinate the activities of universities, government agencies and contractors in developing experiments for AAP flights.

Particularly challenging, says Col. Morgan, a 25-year Air Force veteran now assigned to NASA, are the exacting requirements imposed upon launch crews by the precise, simultaneous countdowns required for rendezvous-docking missions and long duration manned flights.

Early AAP launches will use uprated Saturn I vehicles but the Saturn V's greater payload capability will be used also.

- more -

All Apollo Applications launches are scheduled to originate from Cape Kennedy, Col. Morgan said.

This means that all KSC directorates will function along the same lines they follow while supporting current NASA programs.

Morgan compares his office to a football quarterback who calls signals, while likening the directorates to the actual ball carriers. "We will depend very heavily on the help provided by Design Engineering, Installation Support, Launch Operations and the other organizations and their experienced staffs," he said.

Col. Morgan joined the KSC Apollo Applications Office two months ago, having come from the Air Force's Manned Orbiting Laboratory Systems Program Office, Los Angeles Air Force Station, California.

He served as director of operations for the MOL program, a position which afforded him a firsthand look at both the launch vehicle and space station aspects of long-duration earth orbital missions.

Col. Morgan and his family lived in Brevard County from 1958 to 1963, while he was associated with the first Atlas and Thor missiles.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2 A.3 #51

RELEASE NO: KSC-17-68
FOR RELEASE: Immediate

January 26, 1968

KAPRYAN NAMED DEPUTY DIRECTOR OF LAUNCH OPERATIONS

KENNEDY SPACE CENTER, Fla. -- Walter J. Kapryan has been appointed Deputy Director of Launch Operations by Dr. Kurt H. Debus, Center Director.

Prior to assuming his new duties as deputy to Launch Operations Director Rocco Petrone, Kapryan was Assistant Apollo Spacecraft Program Manager at KSC. In this position he represented the Manned Spacecraft Center's Apollo Program Manager, assuring close coordination between the two centers in spacecraft operations.

During the early phases of the Gemini Program, Kapryan was responsible within the Gemini Program Office for test planning and determining requirements for spacecraft checkout equipment to be located at Kennedy Space Center.

In 1963 he established and headed the MSC Gemini Program Office at KSC. He participated in the preparation and countdown of all 10 manned Gemini flights as well as the Apollo Saturn IB and Saturn V missions.

Kapryan's first assignments with NASA were with the Langley Research Center, joining that organization in September 1947 when Langley was headquarters for the National Advisory Committee for Aeronautics. He joined the NASA Space Task Group at Langley in March, 1959. Shortly thereafter he was appointed project engineer for the Mercury Redstone I spacecraft and came to the Cape in 1960 with that spacecraft.

Kapryan was born in Flint, Michigan in May 1920. He was raised in Detroit where he graduated from Denby High School in 1938.

Kapryan attended Wayne University in Detroit prior to entering the Air Force in 1943 where he became a First Lieutenant as a B-29 flight engineer.

He has received several NASA awards and honors, among them a superior achievement award in 1965 for his contributions to the success of the Gemini program, and in January 1966 he received the Group Achievement Award for his part in the success of the Gemini 7/6 mission.

- more -

He resides in Indialantic with his wife, Eloise, and their youngest daughter, Vicki, a freshman at Brevard Junior College. The Kapryans have a married daughter, Mrs. Charles Michulka, who lives in Houston.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-18-68
FOR RELEASE: Monday, January 29

January 26, 1968

EXPLORER I TENTH ANNIVERSARY

KENNEDY SPACE CENTER, Fla. -- Ten years ago -- January 31, 1958 -- the U.S. officially entered the Space Age when its first satellite, Explorer I, achieved orbit.

The Kennedy Space Center, which played a major part in the success of Explorer I, will observe the anniversary of the historic event.

The anniversary comes while KSC is engrossed in preparations to achieve the immediate goal of the space program -- a manned lunar landing.

The National Aeronautics and Space Administration wrote a fitting climax to 10 successful years in space November 9 by launching the free world's largest rocket, the Saturn V. It was more than 100 times more powerful than the Jupiter-C that hurled Explorer I into orbit.

KSC Director Dr. Kurt H. Debus was in charge of the Explorer I countdown.

Many of the members of the Explorer I launch team hold key positions at the Spaceport applying a decade and more of rocketry knowledge in their jobs associated with NASA's Apollo Program.

Among them is Robert Moser, now chief of KSC's Test Planning Office. He was test conducter for RS-29, which became the Explorer mission.

Moser remembers the launch having been originally scheduled for January 29, but because of jet stream, high altitude wind conditions, it was decided to postpone in the hope the winds would subside.

On the morning of the 29th, weather observers reported that a maximum jet stream velocity of 170 mph out of the west existed at about 37,000 feet.

Scientists at the Army Ballistics Missile Agency (ABMA) in Huntsville, Alabama, predicted only a marginal chance of success, expressing doubt that the rocket would withstand the impact of the winds at the 36,000-ft. level.

- more -

Thunderstorms were also forecast in the area of Complex 26, where the Jupiter-C, a modified Army Redstone rocket with spin-stabilized upper stages, stood ready for firing.

It was feared lightning might detonate sensitive igniters in the vehicle's upper stages. The upper stages and the satellite were designed and prepared by Jet Propulsion Laboratory of Pasadena, California.

The launch was postponed 24 hours.

The following day jet stream winds increased to more than 200 miles per hour and forced a second postponement.

At this point, a critical problem faced Maj. Gen. J. B. Medaris, then commanding general of the Army Ordnance Missile Command. Should he risk success of the flight in view of the wind outlook, or scrub and reschedule?

A new mixture called hydyne was being used to fuel the rocket. The fuel was highly corrosive and a five-day reliability limit on every seal in the fuel system had been imposed.

If the hydyne remained in the rocket's tanks long enough to weaken the seals it would be necessary to replace each one, perhaps causing an indefinite postponement.

Dr. Debus, Gen. Medaris, Moser and the launch crew were aware of the importance of this launch, as Sputnik II, the second Soviet satellite launched in November, 1957, orbited the earth. They awaited later word on the jet stream winds.

Urged by Dr. Debus to wait one more night for favorable weather conditions, Gen. Medaris withheld his order to scrub. At 3 a.m. on the 31st, balloon ascents that measured wind speeds indicated a decline in velocity.

The 4 a.m. report revealed another unexpected drop to 157 miles per hour at an altitude of between seven and eight miles.

Dr. Debus relayed the information to Gen. Medaris and recommended going ahead with launch preparations.

His reply: "Start the count."

The count proceeded until 9:57 p.m. on the 31st when Moser ordered a brief hold.

A hydrogen peroxide drip was detected in a flexible hose which had just been released from the rocket. A quick check by Dr. Debus confirmed that the liquid was surplus fuel and that no leak existed.

The countdown resumed and continued without incident until X-1 minute and 40 seconds when a report came that a jet vane deflection had occurred which might affect the rocket's steering.

The hold, and some brief apprehension, lasted only four seconds, however, and Dr. Debus decided to "Go ahead".

At 10:47:56 p.m. January 31, 1958, the 64,000-pound vehicle stirred into motion and began its historic mission to carry a yet-unnamed cargo into orbit around the earth.

Approximately 96 minutes after liftoff, the Jet Propulsion Laboratory tracking station in California acquired signals from the satellite's radio transmitters confirming the preliminary indications that the 30.8-pound miniature moon had achieved orbit.

The Pentagon was advised the mission was successful and Secretary of the Army Wilber Brucker called Gen. Medaris to extend congratulations. Gen. Medaris was then told, "Explorer is the name".

Cylindrical in shape, the satellite was 80 inches long, 6 inches in diameter and carried an instrument package of a little more than 10 pounds.

Launched as a part of the United States contribution to the International Geophysical Year (IGY) scientific research program, Explorer I relayed data to ground stations that confirmed the existence of the Van Allen Radiation Belts. The belts were named after Dr. James A. Van Allen, whose experimental instrument package was carried aboard the satellite.

Explorer I also confirmed the ability to control temperature within an artificial satellite, and helped to determine that micrometeorites offer no serious hazard to orbiting vehicles.

Although silent since May, 1958, Explorer I is still travelling through space.

The ABMA team was headed by Dr. Wernher von Braun, now director of the Marshall Space Flight Center.

Among those in the blockhouse at the time of the launch were: Dr. Debus, Gen. Medaris, Moser, Dr. Hans F. Gruene, Robert F. Heiser, Karl Sendler, James R. White, Daniel C. McMath, Jr., Dr. Jack Froelich.

Reuben L. Wilkinson, Albert Zeiler, Robert E. Gorman, Terry Greenfield, Bailey E. Stimson, Isom A. Rigell, William O. Chandler, Jr., Carl A. Whiteside, Milton Chambers, Carner N. Dowling.

Grady F. Williams, Frank M. Childers, Jose L. Gonzalez, Bobbie W. Clark, Bobby Griffin, Peter Minderman, Jack A. Griffith, William M. Bogart, James K. Davidson, Walen McKim.

LaFayette C. Taylor, Phil Tardani, Capt. Ballard Small, John Small, Al Wolf, Leonard Piasacki, Richard P. Dodd, Charles Thoman, C.D. Sweat, and Gordon L. Harris.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #52

news release

RELEASE NO: KSC-27-68
FOR RELEASE: Immediate

February 15, 1968

SPACEPORT'S GIANT CRANES
ARE MECHANICAL WONDERS

KENNEDY SPACE CENTER, Fla. -- The big cranes in the Vehicle Assembly Building (VAB) here are mechanical wonders, but they would be practically useless without the skilled touch of the some 21 men directly involved in their operation.

Dick Brantley, Launch Complex 39 support operations manager for the National Aeronautics and Space Administration, said a person usually gets a strange feeling the first time he goes up near the top of the 502-foot-tall building, where the giant Saturn V vehicle is assembled.

The general foreman for the Bendix Corporation in the VAB Elevator Section, D. W. LeMaster, said a man must have a minimum of 40 hours operational training in the crane and pass a written examination as beginning qualification steps.

The man then undergoes an operational examination under the auspices of an operating engineer. If he passes this, he must participate in one vehicle stacking operation with a qualified operator before he becomes qualified.

All the men must be able to operate, maintain and repair the cranes and act as ground controllers.

The cabs of the two 250-ton cranes are above the 400-foot mark in the high bay of the VAB, but the height at which the men operate has no bearing on their performance. Actually, they seldom see the work they're doing.

Their eyes stay on the instrument panel in the cab which gives precise readings on the location of the hoist and their ears stay tuned to the ground controller's voice coming over the two-way radio.

The delicate controls allow the operator to make any increment of movement from 1/64-inch to any desired height.

- more -

On one gauge, one revolution of the hand represents an increment of 5/8-inch.

"When you're stacking a bird," LeMaster said, "you don't have any room for error. There has never been a delay in the support operation due to the cranes."

A single 175-ton crane is used in the support and erection of all three stages in the transfer aisle from the low bay to the high bay and for removing the Saturn V second and third stages from checkout cells in the low bay.

The 250-ton cranes pick up the stages from the transfer aisle and place them in position in a high bay on the mobile launcher.

A 175-ton and a 250-ton crane are used jointly to take stages off of transporters when they arrive at the VAB.

The 175-ton crane moves in a north and south direction, while the 250-ton cranes move east and west.

The distance between the bridge rails of one of the 250-ton cranes is 114 feet. The rails are 600 feet in length.

On the job, there are always two qualified operators in the cab and two men on the level of operation acting as ground controllers. The best in radio communication is provided so there will be no misunderstanding between the two locations.

LeMaster said all three cranes are sometimes in operation at the same time.

In addition, these men operate eight jig cranes, two to each high bay. These two-ton cranes are used for installation of fins and fairings and retro rockets on the Saturn V first stage.

"They're an all-around group," said LeMaster, "electricians, electrical technicians, mechanics -- and operators."

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #52

news release

RELEASE NO: KSC-19-68
FOR RELEASE: January 31, 1968

January 31, 1968

FIRST U.S. SATELLITE'S

POSITION FIXED IN 1968

KENNEDY SPACE CENTER, Fla. -- The first U.S. satellite, Explorer I, launched 10 years ago tonight, will be passing over Casablanca at 10:47 EST this evening - the same hour of its launching from Complex 26 at Cape Kennedy - and will pass over the Nile River in Egypt at 10:58 P.M. - the same time it was first injected into orbit.

Positions reported by the Goddard Space Flight Center will be as follows:

10:47:56 PM EST 33 degrees North latitude, 9 degrees West longitude

10:58 PM EST 25 degrees North latitude, 33 degrees West longitude

- end -

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-20-68
FOR RELEASE: Immediate

January 29, 1968

EXPLORER I - SATURN V - BOTH HISTORIC EVENTS

KENNEDY SPACE CENTER, Fla. -- The historic launchings of the Explorer I Satellite ten years ago and the first Apollo/Saturn V space vehicle less than three months ago both ushered in new eras of space exploration, but that is where the similarity ends.

By comparison, the Saturn dwarfs the Jupiter-C in height, weight, propulsion, and payload capability. Checkout and launch comparisons between the two vehicles reveal the technological advances to date.

The mammoth Saturn V measures 363 feet tall and 33 feet in diameter, compared with 70 feet high and 5 feet 10 inches wide for the Jupiter-C.

Arriving by plane 42 days prior to its launch on January 31, 1958, the modified Jupiter-C was first taken to Hanger D in what is now the Cape Kennedy Industrial Area for preflight tests and checkout.

There the launch vehicle underwent weight and center of gravity tests, calibration checks and various other systems checks. At that time all checkouts were performed manually.

A total of 75 measurements were taken on the Jupiter-C, while measurements on the Saturn V totaled 2,894.

Approximately 84 days passed from the time the Army Ballistic Missile Agency was given the mission of orbiting a satellite until actual launch.

With the first Saturn V it took over a year of preparation for launch. In addition to the vehicle, support facilities and ground support equipment also had to be checked out.

- end -

Following 27 days of tests in Hanger D, the Jupiter-C was moved to Pad 26. There the main stage was erected and preflight tests were conducted. After a spin test of the upper 3-stage cluster, Jet Propulsion Laboratory and Missile Firing Laboratory personnel joined the upper stages to the main stage.

Because of their size, the Saturn V first and second stages are shipped to KSC by barges and the third stage is flown in by a specially designed airplane called the Super Guppy.

The stages are moved into the Vehicle Assembly Building, where the Saturn V is assembled and all checkout test measurements are processed through computers in a firing room in the Launch Control Center.

The Apollo 4 vehicle and spacecraft were moved to Pad A aboard the transporter in a vertical, launch ready position.

Computer data links that were disconnected for the rollout were again hooked up between the space vehicle, control and monitor links were verified, and propellant loading tests and spacecraft systems verification checks were completed.

A week before the launch, a countdown demonstration test was conducted. This was a complete dress rehearsal of the actual countdown, including propellant loading. The test ended just before engine ignition.

Prior to entering the actual 49-hour countdown, a final readiness test was conducted to ensure all elements of the mission were ready.

On the day of the Jupiter-C launch, the 12-hour countdown was started by turning on critical power and making preparations for fueling. Part of the countdown included checks to "Put up 'NO SMOKING' signs on Pad" and "announce 'NO SMOKING' on public address system prior to fueling".

Fueling was not a remote control process for the Jupiter-C as it was for the Saturn V. Fuel and alcohol were manually loaded from tank trailers that had backed up to the space vehicle on the pad.

It took approximately one hour to load 29,350 gallons of liquid oxygen, 912 gallons of hydrogen peroxide, 128 gallons of water, 87 gallons of alcohol, and 3,315 gallons of fuel aboard the Jupiter-C.

Fueiing operations for the Saturn V took about four hours to load 214,200 gallons of RP-1 and 346,000 gallons of liquid oxygen.

When it came time to launch the Jupiter-C, there were about 55 people in the blockhouse performing launch operations tasks. About 450 personnel in Firing Room #1 of the Launch Control Center were required for the Apollo 4 mission.

A single engine developing 83,000 pounds of thrust in the Jupiter-C first stage launched the first United States satellite on its historic mission. Less than 10 years later, five engines on the Saturn V first stage developed 7.5 million pounds of thrust to start a 285,000-pound payload on its trajectory into deep space.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #52

RELEASE NO: KSC-21-68
FOR RELEASE: Immediate

January 29, 1968

EXPLORER I ANNIVERSARY

PLANNED AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- A small ceremony is planned by KSC on January 31, the tenth anniversary of the launch of America's first satellite, Explorer I.

A hardy band of veterans -- perhaps 200 strong -- who were involved in the historic launch will attend a commemorative ceremony at Complex 56, the Cape Kennedy site where a model of the launch vehicle -- the Jupiter-C -- now stands.

The area is next to Pad 26 Air Force Museum which contains artifacts of the space age.

Many of those expected to attend still are actively engaged in the business of launching or building rockets or spacecraft, some here at KSC and others throughout the aerospace industry.

Invitations have gone out to individuals at KSC, AFETR, and among the contractor ranks.

The ceremony will start at 9:30 a.m.

Dr. Kurt H. Debus, Director of the Army Missile Firing Laboratory at the time of Explorer's launch and now Director of KSC will speak.

Messages from some of those who were involved in the launch but unable to attend the ceremony will be read, along with messages from national officials and prominent space figures.

The guests will visit the blockhouse which they will remember as the place where the historic mission was begun. They will then go to the mission briefing room in the Manned Spacecraft Operations Building at KSC to watch a film depicting the Explorer launch.

- more -

The ceremony will conclude with the cutting of a cake bearing on its top a model of the Jupiter-C which launched Explorer I and opened the space age in the United States.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A, 3 #32

RELEASE NO: KSC-22-68
FOR RELEASE: Immediate

January 29, 1968

TWO SATURN V'S IN VAB

AT KENNEDY SPACE CENTER

KENNEDY SPACE CENTER, Fla. -- The pace of activity is quickening at KSC as crews in the Vehicle Assembly Building simultaneously prepare two Apollo/Saturn V's for launch.

Erection of the AS-502 space vehicle was completed in December, just a few weeks after the successful launch of AS-501 on November 9, a flight that was termed a "storybook" success.

Plans call for the 502 vehicle to be moved from high bay 3 of the Vehicle Assembly Building to the launch pad in February. There, it will undergo a Flight Readiness Test and Countdown Demonstration Test prior to launch during the first quarter of the year.

Test Supervisor Jim Harrington said there have been no significant problems. "It looks like a very good vehicle", he said.

"One of the major objectives of this launch" said Harrington, "will be to test the structural integrity of the new quick opening hatch on the command module of the spacecraft system during reentry."

The third Apollo/Saturn V -- 503 -- is being assembled in high bay 1 of the VAB. Test Supervisor Bill Schick's team has successfully completed erection of the S-IC stage. This took place December 30, following refurbishment of Mobile Launch 1 which was used for the Apollo 4 launch.

Schick, who was assistant test supervisor on Apollo 4 said, "Overall, things are going smoothly on the 503. We have no real problems right now."

Assembly and checkout of the 502 is monitored from firing room 2 of the Launch Control Center; the 503 from firing room 1.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

9A.3 #52

RELEASE NO: KSC-24-68
FOR RELEASE: Immediate

February 8, 1968

LEON TOUPS RECEIVES THE HUGH L. DRYDEN MEMORIAL FELLOWSHIP

KENNEDY SPACE CENTER, Fla. -- Leon H. Toups, KSC Launch Complex 39 Chief of the Planning and Control Branch, has been selected for the Hugh L. Dryden Memorial Fellowship. The award will be made on March 5 at the Goddard Memorial Dinner in Washington, D.C.

Toups was nominated for the honor by Albert F. Siepert, KSC Deputy Director for Center Management.

The Fellowship, a $2,000 tuition aid, is awarded annually by the National Space Club to a NASA engineer or scientist who is held in high professional regard for his past achievements and whose career suggests he will continue to make significant professional contributions in the aerospace field. It was established in 1966 to provide for post-graduate education in science, astronautics, and space adminstration.

As Chief of the Planning and Control Branch, Toups is responsible for budget planning and control, reliability and quality control, logistics support, documentation control and scheduling for the mechanical ground support equipment at Launch Complex 39. His office is the interface with the design, installation and operations contractors.

Launch Complex 39 is the site of the assembly, checkout, and launch of all Apollo Saturn V space vehicles, scheduled to carry astronauts on their journey to the moon.

Toups joined Kennedy Space Center in April 1965 as assistant manager of civil service-contractor activities relating to the first stage of the Saturn V and the engineering and development effort for Saturn V mechanical ground support equipment. He began his aerospace career with the Air Force where he was a First Lieutenant attached to the 6555 Aerospace Test Wing at Cape Kennedy from June 1962 to October 1964.

Toups lives in Titusville with his wife, Mary Lynn and their two children, Vicki Lynn, age 4 and Michael, age two.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-28-68
FOR RELEASE: Immediate

February 15, 1968

DELTA SERVICE TOWER IMPROVED

AT LAUNCH PAD

KENNEDY SPACE CENTER, Fla. - - The service tower on Launch Complex 17A will be extended 14-1/2 feet soon to accommodate the new long-tank Delta space vehicle.

Wayne McCall, Chief of the Delta electrical and RF systems, said these extensions were only part of a $2.4 million construction project scheduled for completion in April.

The first long-tank Delta will be erected on 17A this fall, and will be used to launch an Intelsat III communications satellite.

McCall said the new version of the Delta is required to meet the demands of upcoming missions.

"A greater total impulse is demanded for the trajectory and orbit of heavier satellites," McCall said. "The long-tank delta will burn about 220 seconds, compared with 150 seconds for the earlier model."

To raise the height of the service tower, it will be jacked up and the structural addition moved under it and attached.

The extension to the launch tower, which has been made, was placed in the middle.

A new drive system for the service tower will accompany the extension, and the launch tower will get a service elevator.

The launch deck will be completely rebuilt with 1-1/2-inch steel compared with 1/2-inch metal now being used, McCall said, and changes in the flame deflector's water pattern are being made to further reduce heat buildup.

-more-

Other modifications include a 750-square-foot addition to the blockhouse for ground instrumentation and construction of storage areas for liquid oxygen, fuel (RJ-1) and medium pressure gaseous nitrogen.

Upon completion of the modifications, the launch complex will be turned over to NASA's Unmanned Launch Operations Directorate, headed by Robert H. Gray. Hugh A. Weston, Jr., Chief of the ULO Delta Operations Branch, will be in charge of the long-tank Delta program.

Design and supervision on the construction project is being carried out for NASA by the U.S. Army Corps of Engineers. The prime contractors are Allied-Webb, a joint venture.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-41-68
FOR RELEASE: Immediate

February 27, 1968

TWO FIRMS TO BID FOR NASA BUS TOURS

KENNEDY SPACE CENTER, Fla. -- Two companies have been selected by the National Aeronautics and Space Administration to participate in competitive negotiations for the selection of a contractor to operate the visitor services program at this Center.

The program includes daily bus tours of Cape Kennedy Air Force Station and the NASA installation, and the operation of a Visitor Information Center which offers free lectures, motion pictures, and exhibits descriptive of the space program.

The two firms are Management Services, Inc., of Oak Ridge, Tenn., and Trans World Airlines, Inc. TWA has been operating the tours since their inception in July, 1966.

The firm which is finally selected will continue the program under a concession type arrangement. The new contract, scheduled to become effective April 1, 1968, will run for 10 years.

A third proposal, submitted by ABC Gladieux, of Toledo, Ohio, was also evaluated by a Source Evaluation Board.

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #52

RELEASE NO: KSC-43-68
FOR RELEASE: Immediate

February 29, 1968

KSC SPURS FLORIDA SMALL BUSINESSES

KENNEDY SPACE CENTER, Fla. -- KSC awarded over 12,000 contracts for more than $15,000,000 to Florida Small Business concerns in FY 67.

The KSC procurement office has a list of almost 1,000 Florida firms, many of them small businesses, who are contacted regarding new work. In addition to this, the office posts new purchase requests almost daily which are specially designated as "set aside" contracts reserved for small business firms.

Tom Davis, KSC small business advisor, assists firms in qualifying for KSC contracts and in making them aware of what contracts are available.

In the three-county area of Brevard, Orange, and Volusia small business firms did $7,900,000 business with KSC in FY 67.

In addition to the direct contracts with KSC, many small businesses are subcontractors to larger Florida firms who received $227 million in contracts in FY 67.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 1/32

RELEASE NO: KSC-48-68
FOR RELEASE: Immediate

March 1, 1968

TOURIST FACILITIES IMPROVED

KENNEDY SPACE CENTER, Fla. -- To accommodate increasing numbers of visitors, the Center will rearrange part of its Visitor Information Center and improve rest rooms available to patrons of the daily bus tours.

Tour attendance in February reached 58,944, or 41 percent above the same month of 1967. In the previous month, 34,381 visitors took the TWA-conducted tours compared with an attendance of 29,016 in January, 1967.

The operating contractor, Trans World Airlines, will relocate administrative personnel and activities from the East building of the Visitor Center and house them in nearby trailers. Areas within the East building for souvenir sales and automated snack service will be enlarged. Sanitary facilities will also be enlarged. Benches will be provided for patrons awaiting tour buses.

A rest room trailer will be located on the north side of the Vehicle Assembly Building at Launch Complex 39. Buses stop at this site to permit visitors to enter an enclosed viewing area inside the building. A parking area near Launch Pad B will be stabilized to provide an alternate stop for tour buses.

Recent checks of attendance at the Visitor Center indicate that the total number of visitors present is from 20 to 25 percent higher than the number who purchase tickets for bus tours. Consequently, when the bus system accommodates 3,000 persons on any day, and this figure was reached several times in February, there may have been 4,000 visitors at the VIC during that day.

The facility was designed to accommodate up to 5,000 daily. Free space lectures and motion pictures are provided on week days. Space exhibits are available throughout the week.

- end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-49-68
FOR RELEASE: Immediate

March 1, 1968

SPACE CENTER LECTURER

CHOSEN FOR COLOMBIA PROJECT

KENNEDY SPACE CENTER, Fla. -- Kennedy Space Center Spacemobile lecturer Elpido Hernandez, a native of Puerto Rico, has been selected by the Center's Educational Programs Office as its representative for one month in Bogota, Colombia.

Hernandez, an employee of LTV, has conducted Spacemobile programs in Florida and Georgia, plus lecturing in the Training Auditorium and at the Visitor Information Center at KSC since he arrived in the United States August 9, 1967.

Hal Mehrens, Chief of the Educational Programs Branch, said Hernandez will be telling the story of NASA to the people of Colombia and will be training Colombian nationals in the presentation of the program.

After getting his passport and briefings in Washington, Hernandez is scheduled to fly to Panama, pick up a Spacemobile and drive it to Colombia over the Pan American Highway.

"It's going to be quite an experience," Hernandez said.

"Upon completion of the work there," Mehrens said, "he will have the responsibility for carrying out NASA's Spacemobile program in Puerto Rico and the Virgin Islands.

"He will support the space related science and technology programs of the State Department of Education in San Juan."

Mehrens said Hernandez was selected from all Spacemobile lecturers for the Colombia project because of his bilingual ability and training.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3#52

RELEASE NO: KSC-50-68
FOR RELEASE: Immediate

March 1, 1968

SPACEPORT DESIGN ENGINEERS PREPARING THREE LAUNCH PADS

KENNEDY SPACE CENTER, Fla. - - Design engineers at the Kennedy Space Center are occupied in preparing Complexes 39, 37 and 34 for manned flights in the National Aeronautics and Space Administration's Apollo program.

Steve Harris, chief of the Technical Management Branch of Launch Complex 39 Engineers Managers Division, said:

"We're complete with the basic facilities in ground support equipment, but we do have modifications being pursued and implemented in bringing the system to a man-rated configuration.

"On the mobile launcher, for example, there are modifications to swing arm No. 9, which complements modifications to Complexes 37 and 34 and satisfies Apollo safety requirements.

"While the mobile launcher is in a parked position, the modifications will allow more rapid mating with the spacecraft and exit by the astronaut crew."

Harris said another modification provides for a slide wire to the periphery of the pad. It will be connected at the 300 foot level.

The engineer said his office is implementing modifications to take advantage of the experience gained from the launch of the first Saturn V. The modifications will provide more protection to equipment damaged during liftoff.

"The interface tower and elevator control room were hardened," he said, "and the tail service masts have been provided mechanical hoods to protect umbilicals from the flame.

- more -

"These types of modifications will decrease overall refurbishment time and costs."

Jim Phillips, in charge of facility design on Complexes 34 and 37, said:

"We're constantly faced with engineering and safety changes, but we're on schedule for the important first manned Apollo flight.

"There have been many changes to accommodate the Block II Apollo spacecraft, such as the quick opening hatch facilities, additional water sprays, and a 1,200 foot slide cable.

"There were also fuel and oxidizer pipe changes made for the spacecraft."

"Each mission will require new services to accommodate different payloads and experiments."

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #52

news release

RELEASE NO: KSC-51-68
FOR RELEASE: Immediate

March 1, 1968

EIGHTEEN ASTRONAUTS

TRAINING AT SPACEPORT

KENNEDY SPACE CENTER, FLA. -- Eighteen astronauts are currently in full training in the Manned Spacecraft Center's Flight Crew Training Building at the Kennedy Space Center.

Riley McCafferty, Chief of Flight Crew Operations Branch at the Center, said both prime and backup crews for the first two manned Apollo missions are here weekly utilizing the mission simulators and participating in systems briefings on functional and operational aspects of the spacecraft.

Second backup crews for both missions also are in training here.

Using the two command module simulators, lunar module simulator, the newly arrived emergency egress trainer (a joint MSC-KSC venture) and other equipment here are the following astronauts:

First manned Apollo mission, prime crew, Walter M. Schirra, Jr., Donn F. Eisele and R. Walter Cunningham; backup crew, Thomas P. Stafford, John W. Young and Eugene A. Cernan; and second backup crew, Ronald E. Evens, John L. Swigert, Jr., and William R. Pogue.

Second manned Apollo mission, prime crew, James A. McDivitt, David R. Scott, and Russell L. Schweickart; backup crew, Charles Conrad, Jr., Richard F. Gordon, Jr., and Alan L. Bean; and second backup crew, Edgar D. Mitchell, Fred W. Haise, Jr., and Alford M. Worden.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-52-68
FOR RELEASE: Immediate

March 1, 1968

YOC STUDENT SPORTS

STAR, WILLING WORKER

KENNEDY SPACE CENTER, Fla. -- James Brooks is a youth who can size things up and get the job done.

This is shown by his work at the Kennedy Space Center and his achievements in school and on the basketball court.

His supervisor in Launch Vehicle Operations, James Posey, said the youth is a "very conscientious, willing worker.

"James is capable of sizing up what is to be done and, with a minimum of supervision, of carrying it out."

James works some 16 hours per week at KSC in the Youth Opportunity Corps program at a variety of tasks.

His biggest interest at the moment is helping the Monroe High School Wildcats, Cocoa, win the district championship in basketball.

He is the leading scorer on the team, averaging 17.6 points per game from his guard position. He said he is 6 feet, 1 inch tall, "and growing."

He maintains a "B" average in school and his favorite subjects are Math and English.

After he graduates in June, he plans to attend college on a basketball scholarship, majoring in engineering.

- more -

"Then," he added, "I hope to become a professional basketball player."

Of his work at KSC, James said: "I get to meet a lot of people and I learn from being with them. I expect this will help me in college and after I graduate.

"I enjoy seeing the rockets, and I would like to see the next Saturn V launch close-up."

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #52 NL

RELEASE NO: KSC-54-68
FOR RELEASE: Immediate

March 5, 1968

BENDIX GETS KENNEDY SPACE CENTER CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration today announced the award of a $30,189,159 contract to the Bendix Corporation Launch Support Division located at the Kennedy Space Center.

The award represents the fourth-year continuation of the contract given to Bendix for launch support services at the Spaceport. This continuation brings the total contract award to $76,344,333 for the four years ending October 1, 1968.

Under the cost plus award fee/incentive fee contract, Bendix performs operations and maintenance work at the Saturn Apollo Complexes at KSC and Cape Kennedy and in the industrial area of the Spaceport. In addition, Bendix supplies technical support for technical shops, precision cleaning, physical sampling, propellant logistics, life support, and ordnance. It also performs engineering, reliability and quality assurance, and technical support management services for the Center under this contract.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

2A.3 #52

RELEASE NO: KSC-53-68
FOR RELEASE: Immediate

March 6, 1968

NEW SPACE CENTER EMPLOYEES RECEIVE ORIENTATION TOUR

KENNEDY SPACE CENTER, Fla. - - Some fifty NASA civil service employees had their first complete look at what the nation's Spaceport is like today and learned about Kennedy Space Center operations in a morning-long session.

Following a thorough interview and indoctrination period earlier in their processing during which each employee was introduced to his job and his new role in the space program, the group gathered at the Center's training auditorium for a broad-view presentation.

The program began at 8:30 with an orientation by a representative of KSC's Personnel Staffing and Examining Branch, and was concluded with a two-hour tour of facilities at the Space Center and Cape Kennedy.

Many of the new employees, seeing America's moon rocket for the first time at close range, were awed at the size of the 363-foot tall Saturn V which is being prepared for launch later this month from Pad A at Complex 39.

The new employees, some transferring from other NASA Centers and others just joining the space program from different areas of the U.S., represent a number of professional and technical fields.

Joining the Center will be 17 engineers, 17 technicians, 15 clerical personnel, one personnel management specialist and one student trainee.

A film produced at the Space Center entitled "Space Quest", a review of the past year's events and accomplishments at the Spaceport, was shown at the orientation.

The group also visited Complex 19, site of Gemini Program manned launches, and made stops at the Vehicle Assembly Building and the Launch Control Center.

-end-

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 1/53 VL

news release

RELEASE NO: KSC-61-68
FOR RELEASE: Immediate

March 14, 1968

SPACE CENTER MEDICAL OFFICER HAS DUAL ROLE

KENNEDY SPACE CENTER, Fla. - - Dr. Alan C. Harter is a man who wears two hats.

He is Chief of the Launch Site Medical Operations Branch at the Kennedy Space Center, which falls under the Medical Operations Office of the Directorate of Medical Research and Operations, Manned Spacecraft Center.

He is also staff medical officer for KSC and serves in an advisory capacity to Dr. Kurt H. Debus, KSC director.

Dr. Harter's No. 1 concern is maintaining the health of the flight crews while they are in training at KSC. He is the chief medical officer during examinations 10 days, four days and one day before launch.

Also, he monitors the flight crew at the time of launch and at KSC following recovery.

During altitude chamber runs in the High Bay of the Manned Spacecraft Operations Building, he monitors the condition of the astronauts.

In addition, he is responsible for the physical condition of the three Bendix rescue technicians stationed in the observation air lock adjacent to the altitude chamber in case of an emergency.

As KSC staff medical officer, Dr. Harter is involved in every type of hazardous operation, such as emergency egress procedures and propellant loading.

"At times of high hazard, two other physicians who serve under me, and I, are on standby around the clock," he said. The other two are Drs. John T. Teegen and J. M. Joiner.

- more -

Dr. Harter came to KSC in August, 1966, following a one-year NASA sponsored fellowship at Harvard in public health. Prior to this he had been in private practice in internal medicine at Lenox, Mass.

"As a physician in the Air Force reserve," he said, "I was sent to the School of Aerospace Medicine, Brooks Air Force Base, San Antonio, Texas.

Asked why he chose aerospace medicine, Harter explained that there was a large gap to be traversed between biology and engineering.

As an environmental physiologist, he said, "I really believe we are on the threshold of conquering a great number of the killer diseases, such as heart disease and leukemia.

"Now, if someone doesn't start thinking about the 'man', we will kill him with his own technology through such things as air and water pollution. There is less and less margin for error.

"However, the same technology that is providing our space capability can also provide a greater medical capability."

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

L

RELEASE NO: KSC-62-68
FOR RELEASE: Immediate

March 14, 1968

LAB AT SPACEPORT CHECKS POST-LAUNCH PAD CONDITIONS

KENNEDY SPACE CENTER, Fla. - - "Design engineers need to know how well pad facilities stand up under the extreme conditions of each Saturn launch -- and that's where we come in!"

Dick Upson, Chief of the Laboratory Branch, Measurement Systems Division at the Kennedy Space Center, said: "We supply the equipment they need to get that data."

"When a Saturn V rumbles to life," he said, "it shakes the ground for miles around, sending vibrations up and down the 445-foot Mobile Launcher."

"Flames from the first stage heat the pad to around 2,200 degrees F.," Upson added.

"How these awesome forces affect the ground equipment at the pad is what our design people must know, and we help them by setting up systems to measure the forces and their effects," he said.

The branch provided systems to measure and record some 1,200 pieces of ground data for the launch of the first Saturn V, AS-501.

He explained that, as part of the Measurement Systems Division, his Branch designs, calibrates and repairs all Saturn ground measurement systems for KSC.

"Calibration is a big part of the job," he said, "done by the Components Certification Section. They take every system -- whether new or old -- and carefully check it out before it's delivered to our customer."

The meteorological laboratory, also part of the section, is involved in measuring systems for wind velocity, direction, temperature and humidity.

-more-

"Special" tests are sometimes performed within the Branch's laboratories. These have run the gamut from nut and bolt impact tests on hard hats, to stress tests on "soft release" pins, to heat-resistance tests on special tape that protects cable and wire at the pad.

"We have the capability to run a variety of tests in our labs," Upson reported, "and we're always happy to help out when we can."

Analysis of post-launch and test data is performed by the Wave Analysis section, which publishes the results and makes them available to "customer" organizations.

"In summary, we'll supply systems to measure almost anything that is critical," Upson concluded, "wind, lightning, toxic vapors, stresses, sounds, pressures -- and if necessary, we'll design prototype equipment to suit the need."

Federal Electric Corporation employees support the work of the Branch.

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

RELEASE NO: KSC-63-68
FOR RELEASE: Immediate

March 14, 1968

VANGUARD I ORBITED 10 YEARS AGO

KENNEDY SPACE CENTER, FLA. -- "Have Ball, Will Orbit."

Veterans of the Vanguard program now in Kennedy Space Center's Unmanned Launch Operations recalled this slogan printed on Vanguard I, which was orbited 10 years ago -- March 17, 1958.

ULO Director Robert H. Gray, who was launch director for Vanguard I for the Naval Research Laboratory at the Cape, said a four-pound, 6-1/2-inch-diameter satellite and the 53-pound third stage were orbited.

The satellite achieved an orbit of 505 by 2466 statute miles at an inclination of 34 degrees. The orbital period was 133 minutes.

Vanguard I discovered that the earth is slightly pear-shaped and examined the composition of the upper atmosphere.

Vanguard transmitted until May, 1964, and is expected to remain in orbit about another 200 years. Sputniks I and II, which preceded Vanguard, have re-entered, leaving Vanguard the oldest satellite in orbit.

The Vanguard vehicle arrived by truck at Hangar S on November 22, 1957, and was erected February 6, 1958. First stage static firing was February 11.

The first launch attempt March 7 was scrubbed due to a propellant pump leak. The following day a "no-go" range safety ceiling, a technical malfunction and fog combined to cause a postponement.

Pressurization problems during attempt No. 3 on March 12 at T-4 minutes resulted in another delay.

- more -

Even before this flight, the Vanguard team had been attempting to launch the United States first satellite. Some two months before, however, Explorer I had been launched by a Jupiter C rocket.

Just after midnight, on March 17, Gray said, "We were shooting for T-0 at 7 a.m. Then we got word that we wouldn't be able to launch between 6:50 and 7:10 a.m. because of possible interference with Explorer I which would be passing overhead.

"As it turned out, we had a 10-minute hold, but we still had to wait another five minutes on our competitor before we could launch."

Gray and John Neilon, assistant director for ULO, said "quite a commotion" was stirred when it leaked out that a St. Christopher's Medal had been attached to the gyro package on Vanguard I.

"It was denounced in several pulpits," Neilon said, and "Congress even had something to say about it," Gray added.

The launch team was happy after third stage ignition was confirmed, Gray said, but had to await a call from the West Coast to determine if the spacecraft had actually orbited.

"The predicted orbit should have taken 120 minutes," he said, "but it went slightly higher than expected. It was pretty grim for almost 15 minutes after the 120-minute mark, but when the spacecraft signals were picked up, we were extremely delighted."

Standing 72 feet tall, the Vanguard vehicle had a diameter of only 45 inches.

The first two stages burned liquid fuel and the third stage operated on solid propellants. The three stages generated a total thrust of 36,800 pounds.

A second Vanguard orbited a 20-pound payload February 17, 1959, to examine weather conditions.

The third and last Vanguard, orbited September 18, 1959, mapped the earth's magnetic field and returned data on the lower edge of the Van Allen Radiation Region.

"The Vanguard program was the first established for space research and to orbit scientific spacecraft," Gray said.

"Much of the early information gained in developing Vanguard has been of great benefit in our programs today.

"For instance," he said, "the technique of spin-stabilization developed in Vanguard is the same as used in the Delta program and Vanguard's third stage motor was used on Delta 24 times. The original Delta second stage was similar to Vanguard."

Neilon, who was manning a radar station during the launch of Vanguard I, said equipment for reduction of telemetry data developed for the Vanguard program has been improved and is being used now.

Also, Neilon said, the techniques used in precise location radar for range safety and determining impact area were the prototypes of today's methods.

In addition to Gray and Neilon, the Vanguard personnel now working in the Spaceport area include:

John D. Gossett, chief of the Centaur Branch; Donald C. Sheppard, chief of the Spacecraft and Vehicle Support Operations Branch; Hugh A. Weston Jr., chief of the Delta Branch; Herbert Kilberg, chief of the Metros Missions Section.

Arthur J. Mackey Jr., chief of the Telemetry Lab; Allen W. Niles, chief of the Facilities Liaison Office; Lester E. Rudy, Range Trajectory; Mason R. Comer Jr., staff engineer; Jerry Tritto, propulsion engineer for Agena; Andrew A. March, facilities technician.

William B. Moriarty, manager, STS; Paul J. Rowe, facilities technician; Fred G. Thorne, engineering technician, Delta; John R. Zeman, assistant for data systems, MDC; Regina O. Vietor, secretary to the director of ULO.

Helen R. Evans, secretary to the chief of the Facilities Liaison Office; Tom Noda, New Mexico State University support work; Tom Whiskey, RCA; and H.W. Calhoun, Jet Propulsion Laboratory.

J.B. Schwartz, deputy manager of KSC's Western Test Range Operations Division (ULO), was also on the Vanguard team.

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53 VAL 2

news release

RELEASE NO: KSC-64-68
FOR RELEASE: Immediate

March 14, 1968

COST REDUCTION AT SPACEPORT REACHES 10 PERCENT OF GOAL

KENNEDY SPACE CENTER, Fla. - - The Kennedy Space Center Cost Reduction Program, aiming at a $14 million cut in operating costs in fiscal year 1968 has achieved 10 percent of its goal.

Cost Reduction Officer Ray Smith said that NASA Headquarters has accepted $1.4 million in KSC cost reduction actions through December 1967. He urged Spaceport employees to double their efforts in support of the campaign.

The largest single report accepted by NASA Headquarters -- $614,000 for procurement of a follow-on system directly from the manufacturer rather than through a prime contractor -- was submitted by William F. Diehl of the Apollo Program Office.

Raymond J. Phillips, Unmanned Facilities Branch of the Support Operations Directorate, leads the Center in total individual submissions with nine.

Not far behind is Charles G. Gadow, Supply Branch of Installation Support, with eight submissions.

Edwin V. Odisho of the Resources and Financial Management Office, and Hunter S. McCluer, Unmanned Facilities Branch, had six submissions each.

A total of 42 cost reduction reports was submitted to Headquarters. These include: Spacecraft Operations, John N. Dickinson, $95,460 for "Spacecraft Antenna System;" Design Engineering, George W. Walker, $85,367 for "Shop Bill of Material;" Information Systems, Richard E. Duckett, $47,370 for "Data Evaluation Guide;" Quality Assurance, John R. Hammond, $433 for "Handling and Distributing Alerts."

###

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

RELEASE NO: KSC-128-68
FOR RELEASE: Immediate

March 27, 1968

KENNEDY SPACE CENTER CHORUS TO SING ON EASTER SUNDAY

KENNEDY SPACE CENTER, Fla. -- When the sun rises at 6 o'clock in the morning on Easter Sunday, it will be greeted in full song by the Kennedy Space Center Chorus.

The 45-member ensemble will provide the musical background for the sunrise Easter service to be held on the riverfront lawn of the Brevard Hotel in Rockledge.

Easter Sunday is April 14.

The service is sponsored by the Central Brevard Ministerial Association headed by the Rev. William F. Lee of Merritt Island Presbyterian Church.

Churches throughout Central Brevard will participate in the service.

Speaker for the occasion will be the president of Stetson University, Dr. Paul F. Geren.

This will be the first sunrise service in which the KSC Chorus has participated, according to its director, Arthur Benington, choir director of the Eastminster Presbyterian Church in Indialantic.

The song program has not yet been decided but will include "Now Let Every Tongue Adore Thee" by Bach, and the spiritual "There's Balm in Gilead."

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #53

news release

RELEASE NO: KSC-129-68
FOR RELEASE: Immediate

March 27, 1968

VARIETY OF VISITOR PROGRAMS OFFERED AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- Kennedy Space Center is offering a wide range of visitor programs and outdoor facilities to accommodate people on the move.

Whether it's a tour of the Spaceport or a fishing trip, public facilities are available on KSC's 88,000 acres.

Much of this property has been converted into the Merritt Island National Wildlife Refuge, where the public can enjoy nature studies, bird watching, fishing and group camping.

Curtis Wilson, manager for the Bureau of Sport Fisheries and Wildlife, U.S. Fish and Wildlife Service, said the refuge is open one hour before daylight until one hour after sunset.

The area north of the Haulover Canal between the Kennedy Parkway and the ocean is open at all times and other areas are opened up when there is no Apollo/Saturn V rocket on the pad.

"The closed areas are clearly marked with signs," Wilson said.

The wildlife manager said many garden clubs and school and scout groups enjoy nature studies in the refuge.

"There is a wide variety of plants, reptiles, mammals and amphibians," he said, "and we hope to soon have several new nature trails open."

For bird watchers, there are 224 different species found regularly at the refuge and 31 other species found occasionally.

- more -

"The Dusky Seaside Sparrow is found no where else in the world," Wilson said. "It is a rare species and is in danger of extinction. Man, by changing the bird's habitat, is its biggest threat."

There are three fishing camps on KSC grounds that have boats, motors, bait, tackle and other fishing necessities.

The Beacon 42, Captain Bill and Allenhurst fishing camps are situated near the Haulover Canal and provide access to the Mosquito Lagoon and the Indian River.

Surf fishing is available on the ocean side of the refuge.

The fish caught in the ocean, Indian River and Mosquito Lagoon include spotted sea trout, redfish, blue fish, pompano and whiting.

In the ponds within the refuge, fresh-water anglers catch bass, blue gill, shellcrackers and some catfish.

The Dummitt Cove Camp Ground, located about two miles south of the Haulover Canal, can be reserved by conservation-oriented groups wishing to camp out.

"Many 4-H Clubs and FFA and Scout groups use this camp ground," Wilson said. "It has a central water supply and electrical source. There are a dozen charcoal grills and we are in the process of building picnic tables."

Wilson said groups wishing an escorted tour of the refuge should contact his office, 267-2640, Titusville.

For those who have never visited KSC, two types of informative tours are offered.

Daily bus tours originate at the Visitor Information Center (VIC) located five miles east of U.S. Highway 1 on the NASA Causeway.

The tour route includes the industrial and launch areas of KSC and Cape Kennedy, with stops for photography and a visit to the mammoth Vehicle Assembly Building. Nominal fees are charged for the tour.

Before and after going on tour, the public can browse through the many exhibits related to rocketry and the United States space program at the VIC.

Visitors are also able to view space films in VIC theaters and to purchase souvenirs, publications and photographs.

For those out for a ride, Sunday "Drive-Thru" tours are permitted from 9 a.m. until 3 p.m. One can begin either at KSC's Main Gate or at the south end of the Cape Kennedy Air Force Station.

A free pamphlet will describe the various points of interest at the two locations, including Saturn launch facilities and the pads from which Gemini and Mercury astronauts were launched.

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

RELEASE NO: KSC-130-68
FOR RELEASE: Immediate

March 27, 1968

ASTRONAUT FLIGHT TRAINING EXTENSIVE AT SPACE CENTER

KENNEDY SPACE CENTER, Fla. -- Astronauts get a detailed space flight training program before ever leaving the pad through the combined efforts of the Manned Spacecraft Center (MSC), Houston, and Kennedy Space Center.

MSC provides the management and operational personnel whereas KSC provides the facility support.

They use two Apollo command module and a lunar module simulator located in MSC's Flight Crew Training Building at KSC to perfect their flying techniques in all types of flight situations.

"The inside of the crew station in the simulator is a replica of the spacecraft to the extent that every instrument and switch is in the exact and operable position," said Riley McCafferty, Chief of MSC's Flight Crew Operations Branch.

"Also provided are the controls and levers with the exact forces required to actuate the equipment."

Mission plans, rendezvous and docking maneuvers, malfunctions, and numerous other conditions that astronauts might face are programmed into computers and fed into the simulators.

At the beginning of the training program, engineers provide classroom type briefings for the astronauts which lead to simulator time at each briefing completion. During this period, the majority of the time is spent on systems work.

As the program continues, simulator work increases and they begin evaluating the effects of trajectories and other prescribed aspects of the mission.

- more -

The briefings then place strong emphasis on the systems as related to the flight plan and mission rules. Work is stepped up in specific procedures such as rendezvous and reentry, and to finalize procedures for any major objective of the flight.

The simulators are checked out with MSC in Houston by data lines in preparation for integrated KSC-MSC training.

Once MCC-Houston integration is complete, launch/abort simulations, simulated network simulations, and reentry simulations are run with MCC-Houston through time of launch, finalizing all aspects of the flight.

Each simulator consists of an instructors station, crew station, computer complex, systems peripheral equipment, infinity optics equipment, and visual peripheral equipment.

Engineers sit at the instructors station to run the simulation. Each instrument and switch position is repeated at the instructors station.

Also, various readouts on such aspects as time of day, altitude, and spacecraft attitude aid the instructor.

Each switch position in the crew station has a position indicator to allow the instructor to know what the pilots are doing.

The use of the optical devices onboard the spacecraft, which are required for navigation, are in full operable condition for viewing the infinity optics out-the-window, providing realistic observation.

The digital computer complex provides computations for simulating all the spacecraft systems and theoretical trajectories.

By the use of magnetic tape and reset points, the computers provide hundreds of varieties of mission profiles and thousands of varieties of malfunctions.

Also in the computer complex is the overall systems control, which combines and interrelates to each other time, mission profiles, trajectories, spacecraft, and the capability to provide guidance and navigation visually by controlling the visual system.

Systems peripheral equipment consists of digital conversion equipment which handles analog to digital conversions, input-output of discretes, and various interfaces required between the instructors station, crew station, computers, and visual equipment.

Infinity optics equipment provides a realistic environment, simulating all aspects of flight as viewed night or day from the pilot's eye position in the couches or through the various optical devices carried onboard. The major components of a typical visual display for each window are:

(1) A 28 inch fiber-plastic celestial sphere embedded with 996 ball bearings of various sizes is required to simulate representative star sizes. The star simulations are from the first through the fifth magnitude, inclusive.

(2) A mission effects projector provides earth and/or lunar scenes to the pilot, dependent upon mission or spacecraft attitude. If the spacecraft were positioned relative to the moon, the moon scene would realistically appear through the system; if it were relative to the earth, the system would provide a realistic horizon; or, if the pitch of the spacecraft were continued down, the pilots could look at and identify various locations on the earth. In some areas details of known cities are provided; but, generally, the definition is limited to rivers, islands, and general geographic locations.

(3) The rendezvous and docking system provides a realistic target during maneuvers. In the final phases of a rendezvous, this system provides a realistic image, starting with a blinking light and, as the spacecraft closes in, the blinking light becomes an image which continues to grow in size and detail. This continues through the point where docking is simulated through a closed loop TV utilizing a gimballed model and cameras on carriages to represent the relative closing in effects.

These systems are under the control of the computer program and are positioned in accurate relationship to each other and the mission profile being simulated.

"By means of turning lights on and off of these three systems," McCafferty said, "we are capable of superimposing all three in realistic positions or one, two, or three of these, as the scene out-the-window would dictate."

There is a maze of glasswork, consisting of highly sophisticated lenses, mirrors, and image splitters, required to transmit these scenes to the pilots.

The visual peripheral gear consists of servos and servo amplifiers which drive the optics from the signals provided by the computer complex.

Also, this equipment serves as a test and setup area for calibration of the optical systems and television components.

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

RELEASE NO: KSC-131-68
FOR RELEASE: Immediate

March 27, 1968

APOLLO 6 LAUNCH WILL BE TEAM EFFORT

KENNEDY SPACE CENTER, Fla. -- The launch of the Apollo 6 space vehicle will be the end result of a closely coordinated team effort between NASA and its aerospace contractors.

NASA employs these contractors to assist in checking out, assembling, testing and launching of the 363-foot-tall Saturn V rocket.

Each contractor reports to the Kennedy Space Center element having primary interest in his performance.

Launch Operations (LO), under the direction of Rocco Petrone, is the major effort in preparing the space vehicle and facilities for launch. Walt Kapryan is LO deputy and Paul C. Donnelly is chief of LO's Test Operations Office.

LO initiates, supervises, and coordinates the preparation of preflight and launch operations test plans and is responsible for the execution of those plans.

Test and checkout procedures prepared by KSC define the detailed sequence of events in a specific test and are generated for each test associated with preparation and launch of the Saturn V.

Two principal departments under LO that are directly associated with the launch of Apollo 6 are:

Launch Vehicle Operations, directed by Dr. Hans F. Gruene.

Spacecraft Operations, directed by John J. Williams.

Prelaunch checkout at KSC is conducted by stage contractors under the technical supervision of LO.

The Boeing Company Atlantic Test Center, directed by F. L. Coenen, is the major contractor for the 7.5 million-pound Saturn V first stage.

- more -

North American Rockwell (NAR) Space Division-Launch Operations is responsible for the one million-pound-thrust second stage. The General Manager for NAR at KSC is Buz Hello.

The contractor at KSC for the 200,000-pound-thrust third stage is the Douglas Missile and Space Systems Division of the McDonnell-Douglas Corp. The divisions's Acting Senior Director is S. D. Truhan.

International Business Machines Corp. at KSC, managed by A. G. Belleman Jr., is responsible for the instrument unit.

NAR supplies the command and service modules for the Apollo spacecraft, while Grumman Aircraft Engineering Corp., managed at KSC by G. M. Skurla, is responsible for the lunar module test article.

After the vehicle was assembled and checked out and mated with the spacecraft, all testing was combined, first stage through the spacecraft.

The integrated testing verified and reverified that all systems were working properly.

The one major pre-launch milestone in which the vehicle is actually fueled for flight is the Countdown Demonstration Test.

The Mission Director for Apollo 6, William C. Schneider, is assigned from NASA Headquarters and operates from both KSC and the Manned Spacecraft Center (MSC) until time of launch when he is located at Mission Control Center in Houston.

The Launch Director, Petrone, exercises control of activities at the launch site and delegates certain responsibilities to the Launch Operations Manager, Donnelly, and the Space Vehicle Test Supervisor, Jim Harrington.

Harrington coordinates activities of Launch Vehicle Conductor Jack Baltar, Spacecraft Test Conductor Dick Proffitt and Superintendent of Range Operations Joe Gleason, KSC technical support personnel and other support elements.

Government members and contractor counterparts work together as a team for the conduct of pre-launch checkout and launch countdown operations.

Contractor test conductors respond to the direction of the Test Supervisor and NASA systems engineers are responsible for each stage and major system.

Test conductors for the major contractors include:

J. Arnold Gaillard, Boeing, Saturn V first stage; Dave Mitchell, NAR, second stage; Cleo Clark, Douglas, third stage; Ed Chandler, IBM, instrument unit; Dan Jensen, NAR, command and service modules; and Charles Bartola, Grumman, launch test article for lunar module.

The Apollo Program Office, headed by Rear Adm. R. O. Middleton, establishes the test and operations requirements, plans, and schedules from the overall program standpoint. Edward Mathews is Deputy Director.

KSC's Safety Office, directed by John Atkins, develops, issues and enforces safety standards pertaining to launch vehicles, spacecraft, launch complex, ground support equipment, explosive materials and other hazards.

Raymond L. Clark, director of Technical Support at KSC, guides the maintenance and operations of test and launch complex facilities and equipment.

Under Technical Support, Karl Sendler, director of Information Systems, supervises telemetry, data acquisition, handling and distribution, commercial and scientific automatic data processing and calibration. Robert E. Gorman, head of Support Operations, directs maintenance and operation of test and support equipment, propellant logistics services, technical support shops and laboratories and technical communications.

The Director of Design Engineering, G. Merritt Preston, manages the design and development of equipment and facilities in the Apollo program. Included within this design concept are the functions for monitoring fabrication, installation, acceptance, testing, modification and major refurbishment. Launch Complex 39 Engineering Manager is D. D. Buchanan.

Frederic M. Miller, Director of Installation Support, supervises programs for disaster control planning, health, security and law enforcement, photographic, reproduction and publication services and KSC logistics. D. W. Hardin is Chief of Test Support Management at the Launch Control Center for Installation Support.

Other key contracts in the Apollo 6 flight include:

Air Products and Chemicals, Inc.--materials, equipment, facilities and engineering services for studies, design, construction and test of cryogenic service systems.

Bechtel Corp.--installing, aligning and repairing machinery, welding, specialized fabrication, cleaning, testing and inspecting high and low-pressure pneumatic gas lines.

Bendix Corp.--launch support services for Complex 39, ordnance storage, technical shop operations, propellant systems components laboratory and converter-compressor operation.

Dow-Catalytic--engineering services, including planning, estimating, and preparation of design criteria, documenting design programs and preparing reports on facility concepts and layouts.

Federal Electric Corp.--supporting the Center in protype tracking, operating central recorder station, mobile receiving stations, transmitter information facility, launch control information centers, central timing station, calibration and scientific computer operations.

General Electric Co.--services and materials for checkout, reliability and integration of launch equipment, including pneumatic, electrical, water and propellant systems; vehicle ground support equipment, vehicle measurements, firing systems and environmental control systems at the launch complex.

Ling-Temco-Vought--technical services, including technical information, with Technicolor Corp., as subcontractor for photography and McGregor and Werner for reproduction services.

Melpar--engineering and servicing in the malfunction investigation laboratory.

Trans World Airlines--maintaining production engineering shops, field services, roads and ground, heavy equipment, mechanical and electrical utilities, mail and postal services, supply operations and janitorial services. Wackenhut Corp. is the subcontractor providing security and fire protection.

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

news release

RELEASE NO: KSC-132-68
FOR RELEASE: Immediate

March 27, 1968

SPACEPORT WEATHERMEN STAY ON ALERT FOR LIGHTNING

KENNEDY SPACE CENTER, FLA. - - Weathermen at Kennedy Space Center are constantly on the lookout for lightning.

They are particularly watchful when a rocket is on the pad, but there is a general threat of lightning to sensitive equipment at other times.

E. A. Ammon, Staff Meteorologist at KSC for the U.S. Weather Bureau, said a high charge of lightning "can not only disrupt the program, but can permanently damage sensitive electrical equipment such as computers."

Jim Nicholson, a newcomer to KSC with the Weather Bureau, has as one of his functions coming up with ideas to minimize the adverse weather effects, such as lightning.

"Measurement of the stability of the atmosphere and the water content are two of the best methods of detecting possible lightning situations," Nicholson said. "And lightning only occurs in clouds with vertical air movement."

When a threat of lightning exists, key persons at KSC are alerted so precautionary measures can be taken.

####

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

RELEASE NO: KSC-133-68
FOR RELEASE: Immediate

March 27, 1968

MOVE TO NEW HEADQUARTERS WING SET AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- The first move into the new east wing of the Headquarters Building is scheduled for the weekend of March 30-31.

Installation Support personnel will be the first to move into the new quarters, which should be fully occupied in 12 weekend moves.

The new west wing is scheduled for occupancy in about three months. A total of approximately 1,100 employees will occupy the new wings.

The personnel will transfer from other wings of the Headquarters Building and from trailers, Splinter Village and facilities on Cape Kennedy.

Some contractor personnel also will move in.

The east wing will contain a snack bar, operated by the Council for the Blind, and a food vending machine area.

There will be a medical dispensary on the second floor. The Mail Room and Post Office will relocate in the new wing in larger quarters.

Some 300 new parking spaces will be available to accommodate the new occupants.

The new wings are about 10 feet shorter than the Headquarters Building, measuring north to south.

Each wing has a single north-south corridor instead of two, as in the present wings.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

RELEASE NO: KSC-134-68
FOR RELEASE: Immediate

March 27, 1968

NASA SCIENCE ADVISORS ATTEND WORKSHOP SESSIONS AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- The Science and Technology Advisory Committee (STAC), which serves as a consultant group to the National Aeronautics and Space Administration's manned space flight program, is attending a series of workshops at the Space Center today and tomorrow.

Dr. George E. Mueller, NASA Associate Administrator for Manned Space Flight, also is attending the sessions. Dr. Charles Ward Townes of the Physics Department of Massachussetts Institute of Technology is STAC chairman.

The committee is made up of leading members of the scientific, medical and engineering fields. It advises Dr. Mueller on the scientific and technological content of manned space flight programs, and on methods to obtain maximum use of the scientific and engineering talents and knowledge required in the achievement of manned space flight goals.

The workshops deal mainly with the Saturn V space vehicle which will launch U.S. astronauts to the moon, and include discussions on the Apollo Applications Program and lunar information obtained by the Surveyor spacecraft which soft landed on the moon and returned valuable photos to earth.

Among those attending the seminars are:

Dr. Lee DuBridge, phyisicist of the California Institute of Technology; Dr. Francis Clauser, Department of Aeronautics, Johns Hopkins University; Dr. Gordon McDonald, Institute of Physics, University of California; Dr. Leo Goldberg, Harvard College Observatory; Dean John Whinnery, College of Engineering, University of California; Dr. William Sweet of Massachussetts General Hospital; Dr. William Shockley of Shockley Transistor Clevite Corporation, Palo Alto, California; Dr. William G. Shepherd, Department of Engineering, University of Minnesota, and anatomist Henry Stanley Bennett.

# # #

PUBLIC INFORMATION OFFICE, COCOA BEACH - 783-7781, KSC - 867-2467

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

news release

RELEASE NO: KSC-135-68
FOR RELEASE: Immediate

March 27, 1968

VIET NAM VETERAN ASSIGNED TO KSC POST

KENNEDY SPACE CENTER, Fla. -- Lt. Col. L. S. Fields, USAF, recently returned from combat duty in Viet Nam, has been assigned to the staff of the KSC Technical Management Systems Office as technical assistant for configuration management.

He will serve as principal assistant and advisor to G. Merritt Preston, Director of Design Engineering, on configuration management matters.

Colonel Fields will be responsible for development of an orderly configuration management program.

His job deals with policies affecting changes in launch facilities to accommodate any configuration changes required in NASA's Saturn launch vehicles.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #53

RELEASE NO: KSC139-68
FOR RELEASE: Immediate

March 29, 1968

TWA SELECTED TO CONDUCT NASA TOURS

KENNEDY SPACE CENTER, Fla. -- The John F. Kennedy Space Center, NASA,has selected Trans World Airlines to operate its Visitor Information Center and conduct daily escorted bus tours.

Competitive negotiations with TWA and another offeror, Management Services, Inc. of Oak Ridge, Tennessee have been in progress for several weeks. TWA will operate as a concessionaire beginning May 1, 1968, for a 10-year period, during which either party may cancel the arrangement upon six months notice.

KSC will monitor the operations to ensure consistent and proper treatment of the public.

A subsidiary of Greyhound Bus Lines will function as the subcontractor with responsibility for supplying buses and conducting the bus tours. The contractor will begin operations with a fleet of specially equipped buses with low-backed, suburban type seats to facilitate visitor viewing. Additionally, Greyhound will supplement this fleet with interstate carrier buses when peak attendance emergencies require additional vehicles on short notice.

TWA has conducted the tours since the inception of the program July 22, 1966, and has toured more than 800,000 persons including citizens of 50 foreign nations.

In the new arrangement, TWA will also staff and operate the Visitor Information Center which was dedicated August 1, 1967, and will integrate the VIC and tour activities. The Visitor Center is open daily, free to the public, except Christmas Day. A space lecture demonstration, motion pictures, and exhibits are available to the public without cost. TWA will also sell snacks, souvenirs and tour tickets.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

RELEASE NO: KSC-150-68
FOR RELEASE: Immediate

April 11, 1968

APOLLO APPLICATIONS PROGRAM PANEL HOLDS SESSIONS AT KSC

KENNEDY SPACE CENTER, Fla. -- An Apollo Applications Program (AAP) panel met yesterday and Tuesday at the Spaceport to discuss communications and instrumentation systems connected with AAP flight hardware and ground support equipment.

The panel consisted of AAP representatives from KSC, the Marshall Space Flight Center in Huntsville, Alabama, and the Manned Spacecraft Center, Houston.

KSC will conduct all the launch operations associated with the Apollo Applications Program. The flight hardware is designed and developed at the NASA centers at Huntsville and Houston.

Also attending the discussions, which dealt mainly with intercenter interfaces, were representatives of contractor firms involved in meeting AAP systems requirements for the Saturn 1 Workshop/Airlock, the Apollo command/service module, and other payloads.

Chairman of the meetings was Robert B. Krause, senior KSC member of the panel.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #54

RELEASE NO: KSC-151-68
FOR RELEASE: 10:00 a.m.

April 11, 1968

NASA-AIR FORCE AGREEMENT
JOINT PHOTO OPERATION

Air Force's Eastern Test Range and NASA's John F. Kennedy Space Center have agreed to consolidate their photographic operations under one contractor to achieve savings estimated at more than $1 million the first year.

Presently each agency draws its photographic support from separate contractors - Radio Corporation of America as a subcontractor to Pan American Airways provides this service to Air Force Eastern Test Range, and Technicolor Corporation as a subcontractor to Ling-Temco-Vought, Inc. provides this service to the Kennedy Space Center.

Under the new proposal a single contractor, to be selected by a competitive bid, would report directly to the contract manager, Eastern Test Range. Air Force and NASA will each provide a technical manager to monitor the contractor's performance in meeting each agency's requirements.

The agreement grows out of a several-months' joint study which sought to reduce the cost of photographic support of launch operations from its present annual level of about $7 million. Recent reductions in earlier estimates of the total photographic workload on both agencies have made it possible to consider the economies of a consolidated operation.

A single contractor operation is expected to begin January 1, 1969. About nine months is required for negotiation of the new contract and for the orderly transition from the present to the planned operation.

Savings in the operation will be achieved by consolidating all motion picture film processing at the Patrick Air Force Base laboratory and in processing all still photos at the KSC lab. Motion picture production for both agencies will also be done at KSC.

Field operations will be centralized at Cape Kennedy from where photographic crews will be assigned to NASA and military launch complexes depending on requirements established by the technical representative of either agency.

- more -

A cadre of specially qualified personnel will handle the normal Apollo/ Saturn test operation requirements for NASA with extensive cross servicing from other members of the photo pool during peak launch operations.

Similarly, cross-servicing arrangements for such peak Air Force requirements as Titan III launches will be guaranteed under the single contractor concept.

# # # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

RELEASE NO: KSC-154-68
FOR RELEASE: Immediate

April 12, 1968

SWEDES VISIT SPACEPORT ON FLORIDA TOUR

KENNEDY SPACE CENTER, Fla. -- Seven Swedish men visited the Spaceport and Cape Kennedy yesterday as part of a two-month tour of Florida under the auspices of Rotary International.

They viewed the launch pads on the Cape and inspected the KSC facilities where the giant Apollo/Saturn V space vehicles are assembled, checked out, and launched in the U.S. program to land men on the moon.

They were accompanied by Pat Blumer, group manager with Southern Bell Telephone in Titusville and past president of the Titusville Rotary, and Ed L. Smith, Jr., of the Smith Funeral Home, also a member of Rotary.

The visit of the Swedes to the United States is sponsored by the Rotary Group Study Exchange (GSE). GSE is an educational program designed to give outstanding young business and professional men opportunities to study the peoples and customs of other countries.

Nations having Rotary clubs are divided into districts. Each district has a "sister" district somewhere in the world. The local Rotary's sister district is in Sweden. Next year a group of local Rotarians will visit the district in Sweden.

Individual Rotarians are overnight hosts as the visitors travel from place to place in the country they visit.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #54

news release

RELEASE NO: KSC-155-68
FOR RELEASE: Immediate

April 12, 1968

FRENCH ENGINEERS TOUR SPACEPORT AND CAPE

KENNEDY SPACE CENTER, Fla. -- Twenty-eight French engineers, some of them accompanied by their wives, toured the Spaceport and Cape Kennedy today.

They are members of the Society of Civil Engineers of France, with headquarters in Paris. They visited the Cape Kennedy launch pads and viewed the facilities of KSC's Launch Complex 39, where the Apollo/Saturn V is assembled, checked out and launched.

The 363-foot tall Apollo/Saturn V space vehicle will be used in NASA's efforts to land U. S. astronauts on the moon and return them safely to earth.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #54

news release

RELEASE NO: KSC-193-68
FOR RELEASE: Immediate

April 22, 1968

OVER 40,000 TOUR SPACEPORT DURING EASTER HOLIDAYS

KENNEDY SPACE CENTER, Fla. -- NASA Tours patronage from Palm Sunday, April 7, through yesterday reached the 40,888 mark, surpassing the figure for a similar period last year by over 15 percent.

The largest single day during the period was April 15, the Monday following Easter when 4,124 persons took the NASA Tours of Kennedy Space Center and Cape Kennedy. Many additional tourists stopped at the Visitor Information Center at Gate #3 of the Spaceport to look at the exhibits and attend the Space Science lectures.

For the two week period from April 7 through April 21, tour patronage passed the 3,000 mark on six of the 15 days.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #54

news release

RELEASE NO: KSC-194-68
FOR RELEASE: Immediate

April 22, 1968

GEORGIA CONGRESSMAN TOURS SPACEPORT AND CAPE KENNEDY

KENNEDY SPACE CENTER, Fla. -- Representative Benjamin B. Blackburn (R-Ga.) took a first-hand look at the nation's Spaceport and the NASA Cape Kennedy launch facilities today.

The Atlanta congressman, a member of the House Banking and Currency Committee, was briefed by Albert F. Siepert, KSC Deputy Director, Center Management, on the Vehicle Assembly Building (VAB), the Launch Control Center, and other facilities of Launch Complex 39 where Apollo/Saturn V space vehicles are assembled, checked out and launched.

Representative Blackburn also was briefed on NASA's program to land astronauts on the moon and return them safely to earth.

He viewed an Apollo/Saturn V being assembled in the VAB. This is the type of vehicle which will launch the astronauts on their lunar missions.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

news release

RELEASE NO: KSC-198-68
FOR RELEASE: Immediate

April 23, 1968

RICE NEW CHAIRMAN OF STABILIZATION BOARD

KENNEDY SPACE CENTER, Fla. -- James E. Rice, Counsel for procurement matters in the Office of Chief Counsel at the Kennedy Space Center, has been named Chairman of the Project Stabilization Board, a joint NASA-Department of Defense effort.

Rice said the board, composed of one member each from NASA, the Army Corps of Engineers and the Air Force, decides on the reasonableness of hourly wage rates in construction work performed for these Government agencies.

"Every time a new labor-management agreement on construction is negotiated," Rice said, "the board performs a wage review to decide if the rates are reasonable."

The board, which meets monthly, was formed in 1961 when it was decided that a common ground should be established between labor, management and Government.

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

news release

RELEASE NO: KSC-199-68
FOR RELEASE: Immediate

April 22, 1968

KENNEDY SPACE CENTER, Fla. -- More than 400 students from four Florida elementary schools toured facilities at the Nation's Spaceport and Cape Kennedy today.

The pupils visited during a period in which NASA Tours attendance figures are far exceeding the totals for this time last year.

The schools were Ocean Breeze Elementary, Indian Harbor Beach; Holmes Elementary, Miami; Long Branch Elementary, Jacksonville, and Bethune Elementary, Haines City.

Following a lecture-demonstration which covers satellites, launch vehicles and manned spacecraft, the students toured the launch facilities at the Spaceport on Merritt Island and adjacent Cape Kennedy.

The lecture-demonstration program, administered by the Space Center's Education Office, is the only program of its kind offered by any National Aeronautics and Space Administration field Center.

The lectures are presented without charge to students, educators and special education groups on a pre-scheduled basis.

During the tour the students also visit the Vehicle Assembly Building where the giant Saturn V moon vehicles are prepared for launch at the Space Center's Complex 39.

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

news release

RELEASE NO: KSC-197-68
FOR RELEASE: Immediate

April 23, 1968

ENGLISH NAMED EQUAL OPPORTUNITY OFFICER

KENNEDY SPACE CENTER, Fla. -- George L. English, Chief of the Manpower Utilization Branch of the Management Systems Office, has been designated as Deputy Equal Employment Opportunity Officer for the Kennedy Space Center.

Dr. Kurt H. Debus, KSC Director, said it is the policy of NASA and this Center to promote and insure equal opportunity for all qualified persons, without regard to race, creed, color, national origin, politics, marital status, physical handicap, or sex, who are now employed or seeking employment with NASA.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-200-68
FOR RELEASE: Immediate

April 24, 1968

PORTABLE HEART RECORDER IN USE AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- The "Little Black Box" is in use at Kennedy Space Center.

As foreboding as it sounds, the Little Black Box represents a medical advance that will allow doctors to receive reliable tracings of a person's heart activity while he is at his job.

The instrument is a portable electrocardiograph, complete with tape recorder that will run for eight hours and three sensors that are placed on the chest in the heart area.

The small box is carried near the waist, supported by a shoulder strap.

The device was demonstrated recently at a medical-safety meeting of NASA and contractor personnel.

Vic Christensen, Chief of Medical Services for NASA at KSC, was wearing the gear, while Dr. H. Glenn Gardiner, TWA Medical Director, explained how it operated.

"When we take the tape recording back to the medical department," Gardiner said, "it gives a visible oscilloscope picture to study and gives tracings the same as larger, stationary electrocardiograph.

"Also, it provides a permanent record on the person's condition."

The doctor said the instrument is being used in the firing room and plans call for extensive use of it with other personnel.

- more -

He said Dr. Kurt H. Debus, KSC Director, favors the use of such equipment, but that they are quite expensive and ways are being sought to reduce the cost.

"One of the big reasons we are anxious to use it in such places as firing rooms," Gardiner said, "is because we are still in the infancy of manned space flight."

"If we miss the opportunity of getting the information now, there will never be another chance. We need studies now to compare with later launches."

One is the principal areas to be explored by the Little Black Box is how stress affects individuals in different jobs.

Gardiner said that stress in itself can be considered a stimulus and is not harmful unless the person is simply subjected to more than he can stand.

"There is a lot more we need to learn about stress," he added.

Also at the meeting, the safety and medical personnel discusses problems involved in making KSC as safe a place to work as possible.

Emphasis was placed on the continuing need for emergency first aid training for as many employees as possible who could render aid at the scene of the accident and for a quick response time by ambulances.

Christensen said on one occasion, an ambulance in the VAB was at the scene of an accident on the pad more than three miles away in only four minutes and 20 seconds after it was reported. He said the ambulance crews were extremely capable.

Other attending the meeting were Dr. Alan C. Harter, Staff Medical Officer for KSC and Chief of the Manned Spacecraft Center's Medical Operations Branch at KSC; Dr. Albert Puskus, Space Division Flight Surgeon for North American Rockwell.

Richard D. Bard, Douglas safety; O. C. Solkovy, Catalytic-Dow safety; J. W. Hook, General Electric safety; David Williams, General Precision/Link staff administrator; L. W. Phillips, NAR safety; J. O. Ridlehoover, Bendix safety and security.

J. W. Maller, Grumman safety; E. L. Mendenhan, Boeing Health and safety; F. R. Evans, Ling-Temco-Vought safety; G. H. Hooks, McDonnel - Douglas safety; D. A. Jones, International Business Machines (IBM) personnel; W. G. Frederickson, IBM safety; G. R. Bose, Federal Electric safety; and J. T. Pittman, Chrsyler safety.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

news release

RELEASE NO: KSC-201-68
FOR RELEASE: Immediate

April 24, 1968

OVERBEY NAMED DEPUTY SAFETY

KENNEDY SPACE CENTER, Fla. -- Dr. Kurt H. Debus, Director of the Kennedy Space Center, has named Charles A. Overbey to the position of Deputy to Safety Director John Atkins.

Overbey is the former Chief of the Test Support Management Office in Installation Support.

Atkins said Overbey has 24 years of broad experience in design, test and operation of rockets and aircraft, including 10 years experience with the Civil Aeronautics Administration where he was primarily responsible for approving engineering modifications and test plans and for accident investigation.

A graduate of Auburn University in Aeronautical Engineering, Overbey is the author of a book entitled "Aircraft and Missile Design and Maintenance."

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 54

news release

RELEASE NO: KSC-202-68
FOR RELEASE: Immediate

April 24, 1968

ROSS L. JONES JOINS KSC COUNSEL OFFICE

KENNEDY SPACE CENTER, Fla. -- Ross L. Jones, former Assistant Staff Judge Advocate for the Air Force's Civil Law Division in Europe, has joined the Kennedy Space Center Chief Counsel's office as Assistant Counsel for procurement matters.

Jones, who received a Bachelor of Science degree from Texas Technological College and a Law degree from the University of Texas, is responsible for legal review of matters involving the initiation, placement and administration of all types of KSC procurement actions.

Serving in Wiesbaden, Germany, he was a member of the Civil Law Committee of the Interservice Legal Conference and received the Air Force Commendation Medal (First Oak Leaf Cluster) for outstanding performance of duties.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

2A.3 #54

RELEASE NO: KSC-204-68
FOR RELEASE: Immediate

April 25, 1968

KSC'S LAUNCH VEHICLE OPERATIONS TESTS, CHECKS OUT, FIRES SATURNS

KENNEDY SPACE CENTER, Fla. -- Launch Vehicle Operations (LVO) at the Kennedy Space Center, directed by Dr. Hans F. Gruene, is responsible for the check-out and launch of the giant Saturn rockets used in the Apollo program.

As a division of the Launch Operations Directorate headed by Rocco Petrone, LVO initiates, supervises and coordinates the preparation and execution of preflight and launch operations test plans related to the launch vehicle.

The following is a representative cross-section of key personnel in LVO whose work gives an overall view of the typical functions performed by the organization.

Jack Baltar, Launch Vehicle Test Conductor and a resident of Merritt Island in the Test and Operations Management Office, is responsible for integrating the entire vehicle on a day-by-day basis throughout the various tests and the actual countdown.

Saturn V Chief Test Conductor R. E. Youmans, Titusville, handles real time testing and scheduling for the launch vehicle.

This includes tests from arrival until pad inspection after launch. Some of the major tests before launch are plugs in, plugs out, overall swing arm tests, ordnance installation, flight readiness test and countdown demonstration test.

As Saturn V Technical Integration Manager, Ted Oglesby, Merritt Island, oversees the LVO-Boeing integration effort which includes preparation of the LVO portion of the Saturn V launch mission rules document and associated documentation, launch vehicle safety circuits and descriptions, and preparation of integrated test procedures and LVO master schedules.

- more -

Frank G. Bryan, Cocoa Beach, and Carroll R. Rouse, Merritt Island, are assistant to the Chief Engineer in the Electrical Systems Branch.

Bryan oversees the preparation of the vehicle countdown procedure and approves changes to them.

He insures proper troubleshooting and problem solving by calling on the appropriate LVO engineering personnel and by directing integrated troubleshooting.

Rouse, who joined Dr. Kurt H. Debus' launch team in 1956, monitors the operation and maintenance of ground electrical support equipment for the Saturn programs.

He also insures design compatibility between ground support equipment and the vehicle.

Bill Wheeler, Titusville, Chief of the Propellants and Power Section, handles the electrical aspect of all propellant loading.

Currently, he is working on a modification that will allow the Saturn V second stage to be fast-filled with liquid oxygen. This involves major changes in the automatic electrical loading system.

In the Guidance and Control Systems Branch, Digital Equipment Systems Engineer Ross Harper, Titusville, works with ground computers in the Launch Control Center and in the mobile launcher that are used in the checkout of the Saturn V vehicle.

Dave Moja, Titusville, Electrical Systems Operations Engineer, is involved in integrating every electrical segment on the launch vehicle, including checkout equipment, on board electrical systems, ground support equipment, propellant control and swing arms.

In the Launch Instrumentation Systems Division, Jack Conaway, Mims, assistant for the Saturn V program, is involved in integrated testing of vehicle measuring, telemetry and radio frequency systems. In addition, this equipment supports other tests by reading out parameters and other data.

Measuring systems Engineer John McBrearty, Cocoa, works with North American Rockwell, the Saturn V second stage contractor, in developing plans for testing the stage's measuring systems.

Should a problem occur while carrying out the measuring plan, he, in coordination with other systems engineers, would determine the area where the problem exists and then correct it.

Arthur Grunenfelter, Titusville, Chief of the Digital Data Acquisition System (DDAS) Section, is responsible for the monitoring of the system to assure that it is working at the high level of reliability required for launch.

"To keep the DDAS operating to the highest degree of reliability," he said, "we concur in contractor originated changes or recommend design changes, assure that failures which have occurred during operation are 'closed out' and are on the alert for potential problems that may impact schedules."

In the Mechanical and Propulsion Systems Division, Fuels Section Chief Russell Rhodes, Indian Harbor Beach, assesses the problems that cropped up during preparation for the first and second flights of Saturn V's in order to resolve them before the next launch.

Bob Newall, Titusville, Saturn V First Stage Section Chief, handles the propulsion and mechanical part of the checkout and launch of the first stage. The work involves assessing the checkout performance of systems such as F-1 engine propulsion systems, and stage and ground pneumatics and hydraulics systems.

Bob Abbott, Orlando, Chief of the Saturn V Vehicle Quality Surveillance Branch of the Quality Surveillance Division, is responsible for assuring that the overall vehicle, electrical support equipment and ground support equipment meet the rigid quality requirements prescribed for launch readiness.

Space System Quality Control Specialist Bill Wright, Cocoa Beach, reviews contractors' test and checkout procedures and selects those which will have mandatory inspection points for Quality Division personnel.

He also develops and maintains current the quality surveillance plan and the necessary directives, instructions and procedures for its implementation.

Jim Mizell, Titusville, Chief of the Requirements and Planning Section of the Planning and Technical Support Office, takes care of all technical requirements that necessitate support from KSC with resources external to LVO, such as operational TV or chemical analysis.

In any organization as large as LVO, competent administrative personnel are required to support the technical side. Such an employee is James Posey, Titusville, LVO Administrative Specialist.

Posey is involved in such functions as employee training, suggestions, access badging, test problem reporting during integrated tests of vehicles, furnishing problem status information on all open problems during testing, and coordinating reproduction, use of motor vehicles and forms.

Jerry Dickinson, Titusville, Systems Engineer in Data Processing, is concerned primarily with processing and diagnosing computer data after launch in order to determine the performance of the vehicle. He is also a coordinator between engineers and computer programmers.

As a Data Analysis Engineer for Launch Vehicles, Remer Prince, Titusville, works with computer programs used in checking out the Saturn rockets.

"Our office is responsible for any software changes or problems encountered in automatic checkout," he said.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #54

news release

RELEASE NO: KSC-205-68
FOR RELEASE: Immediate

April 25, 1968

KSC SUPPORT OPERATIONS CHIEF FACES VARIED TASKS

KENNEDY SPACE CENTER, Fla. -- Robert E. Gorman has to come up with the right answers in a hurry.

On another occasion, he may have to work on a contract package for six months before it is completed.

Overall, it's dedication and versatility that pays off the Kennedy Space Center's Director of Support Operations, who serves under Raymond L. Clark, Director of Technical Support.

Gorman is responsible for providing direct support required for launch and testing operations at KSC and Cape Kennedy.

Gorman's support element began operation in 1963 with only a few people. Now, it has grown to 200 Civil Service employees and approximately 3,500 contractor personnel.

"It has been a real management challenge to come up with ways and means of supporting our manned and unmanned vehicle launch teams in a satisfactory manner.

"It's a fast type of operation. We are often the last to get a requirement and we have to come up with the answers in a hurry."

To a large degree, Gorman credits the success of his operation to the dedication of the personnel.

"They have to cover a wide gamut of functions and a variety of hardware-type activities," he said. "Many of them have to have a general knowledge of all types of systems, such as electrical, hydraulic and pneumatic."

- more -

Working with these personnel, Gorman said, "We are constantly trying to improve methods of doing the work and keeping information flowing to the vehicle operations personnel.

"We try to improve relations between everyone that is working on a project."

He said his group has developed new techniques in cable shops that have been adopted by industry and, "We are in the process of developing better protective clothing for handling hazardous propellants."

Gorman said the newness of space work motivated him to go to work with KSC Director Dr. Kurt H. Debus in 1952 at the Army's Missile Firing Laboratory, Redstone Arsenal, Huntsville, Alabama.

He came to KSC in July, 1955, as a member of the Launch Operations group. He has held his present position since 1963.

"The establishment of KSC as a separate center," he said, "really brought out the need for a Support Operations element for both manned and unmanned launches.

"In the beginning we were at a low level of effort, but the pure development of growth and size of the Saturn V program has increased the support required across the board."

Some of the major support functions performed by his organization are:

--Communications and Timing.

--Photo Systems.

--Launch Facility Support Systems (such as crawlers, launch and service structures, altitude chambers, and high pressure gas facility).

--Supporting shops and laboratory, including malfunction investigations Lab.

--Propellant Logistics and Life Support equipment.

Gorman, a member of the American Institute of Aeronautics and Astronautics, was graduated from Kansas State University in 1944 with a Bachelor of Science Degree in mechanical engineering.

Before joining the Missile Firing Lab in 1952, he was a mechanical engineer for the NACA at Langley Field, engaged in the design of wind tunnels, test fixtures and models.

He and his wife, Shirley, reside in Eau Gallie with three of their children, Mary Jean, Patricia and Mike. A fourth, Edward, is in college.

Gorman enjoys golf when he can work it into his busy schedule, which includes church, YMCA and school activities.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

RELEASE NO: KSC-206-68
FOR RELEASE: Immediate

April 25, 1968

APOLLO/SATURN 205 HARDWARE AT KSC, FLIGHT CREWS TRAINING

KENNEDY SPACE CENTER, Fla. -- All of the launch vehicle elements for the Apollo/Saturn 205 manned mission this fall have arrived at Kennedy Space Center and the command and service modules are expected early next month.

Once at KSC, the Saturn IB first and second stages, the instrument unit and the spacecraft are integrated into a space vehicle designed for Apollo earth orbital missions necessary for spacecraft development and astronaut training.

The Manned Spacecraft Center's Flight Crew Operations Branch reports that its KSC flight crew training effort for the Apollo/Saturn 205 mission is progressing satisfactorily along with spacecraft operations and schedules.

The prime crew, Wally Schirra, Donn Eisele and Walt Cunningham, and two backup crews, Tom Stafford, Gene Cernan and John Young, and Bill Pogue, Ron Evans and Jack Swigert, are training at various periods in the flight crew training facility and are presently concentrating on systems work as related to mission profile.

Continued systems operations familiarization is performed with mission emphasis on related trajectory runs associated with launch, rendezvous and entry portions of the flight.

The Marshall Space Flight Center, directed by Dr. Wernher von Braun, is responsible for the manufacture of the Saturn IB vehicle, while the Manned Spacecraft Center, directed by Dr. Robert R. Gilruth, is in charge of building the spacecraft.

- more -

Once at KSC, Launch Vehicle Operations and Spacecraft Operations, under the Launch Operations Directorate headed by Rocco Petrone, are responsible for a thorough testing and checkout program before launch.

The Saturn IB first stage, built at the Marshall Center's Michoud Assembly Facility by the Chrysler Corporation, was erected April 16 in Launch Complex 34, followed by mating with the second stage and instrument unit.

The first stage, measuring 80.3 feet in length and 21.4 feet in diameter, generates 1.6 million pounds of thrust through its eight H-1 engines.

Built by McDonnell-Douglas, the second stage is 58.4 feet high and 21.7 feet wide. It develops 200,000 pounds of thrust through one J-2 engine.

The instrument unit (IU), which is three feet high and 21.7 feet in diameter, is built by International Business Machines. Commands for engine gimballing, inflight sequencing of engine propulsion system, staging operations and all primary timing signals originate in the IU.

The command and service modules of the spacecraft are built by North American Rockwell.

When fully assembled, the Saturn IB will stand 224 feet tall and weigh 1.3 million pounds fueled.

####

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

RELEASE NO: KSC-209-68
FOR RELEASE: Immediate

April 26, 1968

KSC AIDE TO SERVE ON WORKSHOP COMMITTEE

KENNEDY SPACE CENTER, Fla. -- J. M. Fisher, Interagency Data Exchange Program (IDEP) representative for the Spaceport, will serve on the committee that will conduct the Sixth Annual IDEP Workshop Conference May 1-3 in Los Angeles.

IDEP is sponsored by the National Aeronautics and Space Administration, the Army, Navy, and Air Force to save money on materials and parts purchased by them.

In the program, 200 military-space contractors and government agencies pool their test reports on materials and parts, specifications, manufacturing techniques and scientific technical information for the benefit of all.

In addition to the IDEP workshop sessions, achievement awards will be presented in recognition of timely exchange of data, effective use of data, and valuable participation in IDEP functions.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #55

RELEASE NO: KSC-208-68
FOR RELEASE: Immediate

April 25, 1968

KING OLAV V OF NORWAY TO VISIT KSC SATURDAY

KENNEDY SPACE CENTER, Fla. -- His Majesty Olav V, King of Norway, will visit KSC Saturday for a tour as part of his official visit to the United States April 24 through May 1.

Dr. Kurt H. Debus, Director of KSC, will greet the King on his arrival by plane at the Skid Strip and will accompany him on the tour.

The tour will include the NASA and Air Force launch complexes on Cape Kennedy and Complex 39 at KSC. The group will be briefed in the Launch Control Center before walking through the Vehicle Assembly Building and viewing Apollo/Saturn V vehicle stages.

They also will inspect the simulators in which Apollo astronauts complete training before flight.

The King and his party will be briefed on the United States lunar missions by Rocco A. Petrone, KSC's Director of Launch Operations, and Riley D. McCafferty, Chief, Flight Crew Operations Branch.

Accompanying the King on the state visit will be Kaare Willoch, Minister of Commerce of Norway; Vincent Bommen, Private Secretary to the King; Arne Gunneng, Ambassador of Norway; Ingvald Smith-Kielland, Deputy Master of the Royal Household; Erling Bakke, Principal Aid-de-Camp and Chief of Staff to the King; Ditlef Knudsen, Chief of Protocol of Norway; Georg Krane, Counselor for the Embassy of Norway and Ole Iversen, Aide-de-Camp to His Majesty.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

news release

RELEASE NO: KSC-210-68
FOR RELEASE: Immediate

April 26, 1968

KNIGHTS OF COLUMBUS DIRECTORS TOUR THE KENNEDY SPACE CENTER

KENNEDY SPACE CENTER, Fla. -- The International Board of Directors of the Knights of Columbus, headed by the Supreme Knight Dr. John W. McDevitt of New Haven, Connecticut, toured the Spaceport and Cape Kennedy today.

The organization's board members, from all over the United States and Canada and Mexico, spent the week meeting at the Cape Kennedy Hilton Hotel in Cape Canaveral.

The board conducts the business of the 1,300,000 -member organization, including its fraternal, charitable and social-civic activities.

Its members, some of them accompanied by their wives, took time out from their business sessions long enough to take a look at the nation's space facilities.

They visited the Air Force Museum on Cape Kennedy and then crossed the Banana River to Launch Complex 39 of the Kennedy Space Center.

They visited the Vehicle Assembly Building (VAB) where the Apollo/Saturn V space vehicle, which ultimately will help land U.S. astronauts on the moon, is assembled and checked out before launching.

They were briefed on America's lunar landing program, toured the Launch Control Center, and viewed the giant transporter that carries the Apollo/Saturn V and its Mobile Launcher from the VAB to the launch site 3.5 miles away.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

RELEASE NO: KSC-211-68
FOR RELEASE: Immediate

April 26, 1968

KSC FIRE DEPARTMENT SUPPORTS LOCAL FIRE-FIGHTING EFFORTS

KENNEDY SPACE CENTER, Fla. -- Kennedy Space Center's fire department sent men and equipment to Cape Kennedy, Titusville, and Mims this week, as it joined local communities in an attempt to extinguish the many fires burning in the area due to the extreme dryness.

Wednesday was the department's busiest day. After assisting the Pan American fire department on Cape Kennedy with a brush fire burning on the north side of the skid strip, two trucks and two crews were sent to Titusville where a brush fire was threatening housing in the Fox Lake area. One of the trucks and crews was later dispatched from the Titusville fire to assist with another fire burning in nearby Mims. That crew did not return to KSC until about 10:30 Wednesday evening.

The KSC area has not been immune to the brush fires either. On Thursday morning an 11-man crew was sent to a bush fire burning about one mile north of Route 406 on Kennedy Parkway. The crew began fighting the fire at 3:30 and had it extinguished before it could cause a problem with the morning traffic buildup.

The KSC fire department is operated by Trans World Airlines as part of the overall base support contract.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

A2.3 #55

news release

RELEASE NO: KSC-212-68
FOR RELEASE: Immediate

April 27, 1968

KSC EXECUTIVE IS HONORED FOR ROLE IN OBTAINING MENTAL HEALTH CENTER

KENNEDY SPACE CENTER, Fla. - - A KSC official, who years earlier drafted the national law leading to establishment of mental health centers across the country, was honored last night for his role in obtaining one of those centers for Brevard County.

He is George A. Van Staden, Director of Administration at KSC.

Before joining the Spaceport staff in 1965, Van Staden was Executive Officer of the National Institute of Mental Health, an agency of the U.S. Department of Health, Education and Welfare.

In that post, he helped plan and develop the national mental health program that led to the passage of the Community Mental Health Centers Act of 1963.

The Act aims at the establishment of about 2,000 mental health centers throughout the nation.

Two years later, when Van Staden joined KSC, he plunged into the task of obtaining one of those centers for Brevard County.

Today that goal is a virtual certainty.

Van Staden's activities in its behalf began when he assumed the chairmanship of a board that was created to weld together six separate community health agencies into a single effective group called the Brevard County Community Mental Health Center, Inc.

Its first goal was to raise enough funds to enable it to qualify for a grant from the National Institute of Mental Health.

- more -

It is in the midst of a campaign to raise $202,500. NIMH will provide $247,500.

The $450,000 center will be built on donated land on Cedar Street in Rockledge.

It will help the mentally ill and mentally retarded and assist families with other problems, such as alcoholism, regardless of their ability to pay.

Last night Van Staden was one of four persons who received awards from the Mental Health Association of Florida. He was recognized for his role in making the Brevard center a reality.

Thirty-one chapters of the state association are convening at the Quality Court Motel, Cocoa Beach, in a three-day session that ends today.

Van Staden also serves on three other community boards of directors. They are the Brevard County United Fund, Brevard County Community Services Council, and the North Brevard Youth Activities, Inc.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

RELEASE NO: KSC-213-68
FOR RELEASE: Immediate

May 1, 1968

PRIME MINISTER OF THAILAND VISITS KENNEDY SPACE CENTER

KENNEDY SPACE CENTER, Fla. -- The Prime Minister of Thailand, His Excellency Field Marshal Thanom Kittikachorn, and his wife will tour NASA's Kennedy Space Center and adjacent Cape Kennedy on Saturday as part of the Prime Minister's official visit to the United States.

Prime Minister Thanom and his party will be greeted by Miles Ross, Kennedy Space Center Deputy Director, Center Operations, and a representative of the Air Force Eastern Test Range.

The tour will include a drive-through of the launch complexes on Cape Kennedy where military rockets undergo development testing and where NASA has launched many of its manned and unmanned satellites and probes. At Complex 39 on the NASA Spaceport, the prime minister and his party will walk through the Vehicle Assembly Building where the Saturn V moon rocket is assembled and checked, and will receive a briefing on launch operations by KSC Director of Launch Operations Rocco A. Petrone.

The official party from Thailand, numbering over 25 persons, will be joined by United States Government officials from Washington for the tour. The Prime Minister and his party will be in the United States for about 10 days. Kennedy Space Center is the first official stop on their U. S. visit.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

RELEASE NO: KSC-215-68
FOR RELEASE: Immediate

May 8, 1968

CAPTURED VIET CONG WEAPONS AIDING BOND CAMPAIGN AT KSC

KENNEDY SPACE CENTER, Fla. -- The Freedom Shares and Savings Bond Program now underway at KSC is receiving a boost from Viet Nam -- a U. S. Army exhibit of weapons captured from the enemy on the battlefields.

The equipment, taken from Viet Cong insurgents and North Vietnam regulars, is on display May 8-10 in the Headquarters building at KSC.

Accompanying the exhibit is a Treasury Department display which shows how the purchase of Savings Bonds strengthens the economy at home and supports the American fighting man overseas.

The weapons range from rifles to heavy machine guns. Other features of the exhibit include medical supplies, a typical North Vietnamese Army uniform, Viet Cong "pajamas" and an improvised gas mask.

Captured documents are another part of the display. Viewers can see the identification card of a North Vietnamese soldier and read his diary, for which a translation is provided.

A map highlights the areas of action in which the equipment was captured.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

news release

RELEASE NO: KSC-216-68
FOR RELEASE: Immediate

May 8, 1968

KSC DIRECTOR OF ADMINISTRATION LIKES CHALLENGES AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- George A. Van Staden likes to tackle a challenge, whether it's in his official capacity as Director of Administration at the Kennedy Space Center or in working on a community project.

As Director of Administration, he supervises KSC's resources and financial management, personnel, procurement and contracting, manpower, management systems analysis, labor relations and new technology and patent administration.

He is also responsible on behalf of the Center Director for the management of KSC institutional resources and for maintaining an overall surveillance of non-personal service contracts to assure compliance with NASA policies and conformance to sound business practices.

In community affairs, he is currently a member of the United Fund Board of Directors, the Community Services Council of Brevard County, the North Brevard Youth Activities Board and the Community Mental Health Center Board of Trustees, of which he is past chairman.

Van Staden said he has worked in three successive challenging programs in some 20 years of Government service, all research and development efforts.

In the post-World War II era, he served with the National Institutes of Health while there was a major upsurge in medical research. The Institutes were the prime source for medical research funding in this country during that time frame.

He was Executive Officer of the National Institute of Mental Health in Bethesda, Maryland, an agency of the U.S. Department of Health, Education and Welfare, prior to coming to KSC in 1965.

- more -

In that post, he helped plan and develop the national mental health program that led to the passage of the Community Mental Health Centers Act of 1963. After coming to KSC, he was honored by Brevard County officials for his role in obtaining one of those centers for the area.

"With the impetus given by President John F. Kennedy," Van Staden said, "mental health research had its greatest expansion, providing the new concept of care for the mentally ill in their own communities."

In turning to his work at KSC, he said, "The space program has a challenge all its own. The greatest demands are due to the complexity of the program.

"As anchor man in the program, KSC has a very big responsibility in bringing everything together. In my particular area I have had an opportunity to develop an administrative management organization that is properly oriented to its role in support of KSC's mission."

Van Staden said his motivation, expressed in the question, "What is KSC's mission?", has evolved into the philosophy of "how can we support the launch team?"

He spoke highly of the office Chiefs who work under him, W. M. Lohse, procurement Office; J. M. Scrivener, Resources and Financial Management Office; B. W. Hursey, Personnel Office; J. O. Harrel, Patent Counsel and Technology Utilization Officer; R. L. Fairman, Management Systems Office; and O. E. Kearns, Labor Relations Office.

"I urge all of them to work directly with the KSC Policy Staff and I put a premium on delegation of work," he said. "Of course they have a responsibility of bringing me aboard on policy matters. In my opinion, this method of operation develops a strong, capable staff."

In the resources and financial management area, he said, his office concentrates on giving the line manager the tools he needs to do his job. These include a competent, co-located staff together with an effective reporting system to keep track of such things as "fund allocations and costs--where we've been, where we are and including information as to the future."

He said the Personnel Office in some respects is the same as in other Government centers, "but at KSC it has the added problems of handling a Civil Service system in a fashion that is consistent with the contractor system. There are some 2,800 Civil Service employees here, compared to 23,000 contractor employees."

Procurement and contracting is one of the most important areas at KSC, Van Staden said, because "we administer the greatest part of our work through contracts."

The management systems office provides an in-house management consultant capability. In addition to the conduct of management systems studies, its responsibilities also include manpower and space utilization and feasibility and analysis studies relating to commercial automatic data processing requirements.

Industrial relations is a small but highly important function, he said.

"In the last 18 months," Van Staden said, "our labor manpower loss rate has been at a minimum. This has been accomplished by preventive labor relations."

He has combined new technology and patent administration under one office to cut down on duplication of effort.

"We have been able to do both under one leader very well," he said.

Van Staden, born in Equinunk, Pennsylvania, in 1918, earned a Bachelor of Arts Degree in Government in 1950 and a Master of Arts degree in Public Administration in 1952 from George Washington University in Washington, D. C.

He lives in Titusville with his wife, Evelyn, his daughter Ellyn and two sons, Richard and Robert.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #55

news release

RELEASE NO: KSC-219-68
FOR RELEASE: Immediate

May 8, 1968

KSC BUYING NEW LIGHTS FOR LAUNCH COMPLEX 39

KENNEDY SPACE CENTER, Fla. - - The Kennedy Space Center is purchasing a high-intensity lighting system to illuminate the Apollo/Saturn V space vehicle while it is on the pad.

Walt Parsons, Electrical and Electronic Manager in Design Engineering, said plans call for 40 Xenon light sources designed to satisfy requirements for night tanking and photography, and, if ever required, for night launches.

Until the new lights are deliverd, the present aggregate lighting system on loan from the Eastern Test Range will be used.

"We have looked extensively throughout the country to find what we consider to be the most reliable, efficient and operationally feasible light sources," Parsons said, "And have decided to utilize the existing technology developed by the Army for night time combat missions.

"We have tested light sources identical with those in use in Vietnam and found them to completely satisfy our requirements for high intensity lighting."

Parsons said each of the 40 units would produce 20 kilowatts.

-end-

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-220-68
FOR RELEASE: Immediate

May 8, 1968

COST REDUCTION PROGRAM UNDERWAY AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- The Kennedy Space Center's Cost Reduction (CR) Office has launched an ambitious campaign to put its employee participation program over the top before June 30th, the end of Fiscal Year 1968.

Through the third quarter of Fiscal 1968, KSC has logged 70 percent of its CR objective, having received 185 submissions of 260 solicited. Greater participation in the KSC CR program is needed to meet the goal of 260 submissions and $14 million savings.

Spearheaded by the timely slogan, "Help Pave the Road to the Moon with Cost Reduction," KSC's latest campaign is directed to all of the Center's more than 3,000 Civil Service personnel.

Contractor employees are encouraged to participate in their cost reduction programs through their representative companies.

Raymond Smith, KSC Cost Reduction Officer, said: "We consider both dollar savings and participation as the most effective measures of the success of the program."

Smith said that savings reflect an effective performance and, taken with participation, indicate a sense of cost consciousness among employees.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #55

news release

RELEASE NO: KSC-221-68
FOR RELEASE: Immediate

May 9, 1968

DIVIDED COUNTDOWN DEMONSTRATION TEST SCHEDULED FOR FIRST MANNED APOLLO LAUNCH

KENNEDY SPACE CENTER, Fla. -- The Countdown Demonstration Test (CDDT) at the Kennedy Space Center for the first manned Apollo earth-orbital mission will be divided into two segments to provide maximum safety for the flight and close-out crews.

The Apollo 7 mission, carrying astronauts Wally Schirra, Donn Eisele and Walt Cunningham, is scheduled for launch this fall. The backup crew is Tom Stafford, John Young and Gene Cernan.

Don Phillips, Test Supervisor for Launch Operations who oversees all on-site activities, gave the following description of the CDDT and other test and checkout procedures:

Loading of the cryogenic (super cold) propellants will begin at approximately T-6 hours and the count will go to T-3 hours while tests are conducted in this configuration.

At the beginning of the "wet" period, the gas "start bottles" and the propellant tanks on this vehicle will be brought up to pressure for the first time at KSC and the tanks' ability to withstand the extremely cold temperatures and the volume weight of the propellants will be fully tested.

Should any faulty link be present in the propellant systems, this would be the time when a malfunction would occur.

At about T-3 hours, the count will be stopped while the propellant tanks are emptied and preparations are made for the astronauts to come aboard. Once the count is resumed, the crewmen will stay in the spacecraft until T-0 conducting simulated assignments.

- more -

At the beginning of the CDDT, the spacecraft will be powered up and checks will be performed on the environmental control system (ECS), the stabilization control system (SCS) and guidance and naviagation (G&N).

A guidance navigation and control interface test will be performed and then the launch vehicle power will be applied.

Following radio frequency, telemetry and digital range safety command systems checks on the space vehicle, a launch vehicle power transfer test will be conducted.

An emergency detection system test will then be performed.

After a radio frequency compatibility test, the flight crew will leave the spacecraft and the space vehicle will be recycled to a pre-cryogenic loading configuration.

For the wet count, the Saturn IB first and second stage liquid oxygen systems will be prepared for loading and then loaded. All launch vehicle control spheres will be pressurized to flight pressure. The preparation and loading of the second stage's liquid hydrogen systems will then be accomplished.

Guidance and control system tests will be performed and remotely controlled operations will be conducted until all systems are configured for "launch sequence start."

The automatic launch sequence will be initiated and will continue to countdown to "time for ignition," at which time a sequence failure cutoff will occur.

A post-CDDT critique will be held with all participating agencies to determine the adequacy of the test to meet the specified objectives.

Prior to mating, the launch vehicle's two stages and the spacecraft will be checked out separately.

The prime and backup astronaut crews will go through altitude chamber runs in the MSO Building with the spacecraft before it is taken to the launch pad.

After the space vehicle is mated, a series of tests leading to launch will be conducted.

An integrated systems test will be conducted to verify the compatibility between the spacecraft, launch complex and the range systems. Also, it will verify the subsystem performance level and the mate connections between the launch system, command module, service module and the service module adapter.

While astronaut participation is optional, the flight crew may particpate in abort and mission simulation. Crew time in the spacecraft, which could vary from one to eight hours, would provide familiarization with actual flight hardware during mission simulation conditions.

The interface test between KSC and the Mission Control Center, Manned Spacecraft Center, will follow to verify the compatibility of the command and telemetry data processing capability for the flight.

The test phases include verifying software (programming) with KSC's unique ground configuration and with the unmanned remote ground configuration.

Astronaut participation of about seven hours is required for familiarization of flight control procedures with the flight hardware.

The first major test will be "plugs-in", which is designed to verify launch vehicle and spacecraft compatibility during an emergency detection system-initiated abort and normal mission flight through launch vehicle and spacecraft separation.

Astronaut participation in this test is optional. The prime and backup crews may perform terminal count switching activity, in which case three hours for each crew would be required.

Following this, the plugs-out test will be conducted. The primary difference between plugs-in and plugs-out is that the umbilical connection with the ground are left intact on the first one and are disconnected on the second.

The test objectives of plugs-out will be to verify the space vehicle systems performance with a minimum of ground support equipment connected and to assure that no problems occur at the time of umbilical disconnect. Astronaut participation is also optional for this test.

In an emergency egress test, prime and backup crew time in the spacecraft will be approximately six hours. It will provide thorough knowledge of exit procedures and routes.

The test phases will include unaided egress of both crews in inflight coveralls from closed cabin and unaided and aided egress of prime and backup crews in pressurized suits from closed and pressurized cabin.

The CDDT, which follows, will be conducted before the Flight Readiness Test (FRT) for this mission to give more time to iron out any problems that might be detected.

The test objectives of the FRT will be to provide final verification of compatibilty and proper operation of all space vehicle and ground support systems prior to launch. The test phases will include sub-system tests, abort simulation tests and terminal count and normal mission simulation.

The flight crew will perform terminal count switching activity and abort and mission runs. Crew time in spacecraft will be nine hours for the mission run and three and one half hours for abort runs.

The FRT will familiarize the astronauts with final configuration flight hardware during mission simulation conditions.

The test objectives for the countdown will be to prepare for launch and to launch the space vehicle.

The test phases include:

--Spacecraft sub-systems checks and environmental control system water servicing.

--Launch vehicle mechanical and electronic preparations.

--Spacecraft and launch vehicle mechanical buildup and pyrotechnic hookup.

--Spacecraft propulsion helium servicing.

--Launch vehicle battery installation.

--Spacecraft fuel cell activation.

--Spacecraft cryogenic loading.

--Launch vehicle system checks and final mechanical closeout.

--Spacecraft pre-ingress switch setting.

--Move service structure.

--Launch vehicle liquid oxygen and liquid hydrogen servicing.

--Entrance by astronauts at about T-3 hours.

--Spacecraft and launch vehicle systems checks.

--Spacecraft pyrotechnic and logic bus arming.

--Terminal sequence.

The astronaut participation will be the same as in the CDDT, except that they will remain in the spacecraft after cryogenic loading.

During the countdown, all spacecraft and launch vehicle systems are in flight configuration.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #55

news release

RELEASE NO: KSC-222-68
FOR RELEASE: Immediate

May 9, 1968

NEW ASTRONAUT TRAINING FACILITIES INSTALLED AT KSC

KENNEDY SPACE CENTER, Fla. -- An Apollo command module, white room and access arm have been installed in the astronaut training facility at the Kennedy Space Center for training astronauts, spacecraft closeout crews and pad rescue teams.

The command module was built by North American Rockwell in Downey, California and contains all switches which would be involved in making the spacecraft safe in emergency situations, plus the quick opening hatch now installed on all Apollo spacecraft.

The white room built at KSC simulates the newly designed white room which will be used for manned Apollo launches at Complexes 34 and 39. It is designed to accommodate the new spacecraft hatch and contains improved safety devices such as an exhaust fan, more extensive lighting and new fire-fighting equipment.

The access arm, which gives access to the white room and spacecraft from the launch tower, is also the same as the ones on the Apollo/Saturn complexes, incorporating the new safety features which were recommended by the AS-204 Review Board.

The KSC Hazardous Egress and Evacuation Working Group headed by Bob Harrington, Launch Operations Test Planning office and astronaut Stuart Roosa are now working out procedures utilizing the rescue teams who will be working at LC-34 on the first manned Apollo launch.

After procedures are worked out, training will begin for the pad crews and the astronauts. At the completion of training in the simulator, an egress test will be conducted with the prime and backup astronaut crews and the pad crews using the flight spacecraft of LC-34.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-223-68
FOR RELEASE: Immediate

May 9, 1968

KSC ENGINEER DON PECK, 67, ACCEPTS CHALLENGING NEW JOB

KENNEDY SPACE CENTER, Fla. -- At an age when many men dream of sitting back in the retirement chair, Kennedy Space Center Engineer Don Peck is taking on a challenging new job.

Peck, 67, is transferring as Chief of the Unmanned Facilities Branch in Support Operations to Systems Manager for Transporter, the gigantic machine that moves the Saturn V vehicle, mobile launcher and mobile service structure to the pad.

"As NASA's engineering man for the transporter," said Bailey Stimson, head of the Launch Facilities Division who is Peck's supervisor, "he will work closely with Bendix, the support contractor, and evaluate the firm's performance.

"Don is one of the most experienced launch support engineers at KSC, having worked on more than 150 Atlas launch operations. He has consistently done above average work, both as a technical man and as a supervisor."

As for his new job, Peck said, "I accept it as a tremendous challenge. I don't want to retire.

"I've been in the space field 12 exciting years and want to stay as long as possible. I still get a kick out of seeing a rocket launched."

Peck said his only future plans were to go to work every day.

"I've only been to the doctor twice in the last 20 years and have never stayed in the hospital except after I was struck by a hit-and-run driver in 1937."

Three slogans he uses as guides in everyday living are as follows:

1. Always listen to the little guys.
2. Fly high but keep your feet on the ground.
3. Things aren't always as they appear to be.

- more -

Peck said he got famous on a malfunction on Complex 14 during the Mercury program.

"At the time," he said, "there wasn't anything humorous about it.

"I was working for the range contractor, Pan American, in support of NASA operations and, with Astronaut Gordon Cooper sitting in the spacecraft, a diesel engine I was responsible for developed a fuel pump problem.

"The diesel was to drive a generator that provided electrical power to move the service structure into a parking area.

"I couldn't get the engine started and 60 million people were watching on TV."

After about an hour, he said, they took a fuel pump off of another diesel and replaced the faulty one and the count resumed.

Peck was born and reared in Massachusetts and received a Bachelor of Science degree in Electrical Engineering from Northeastern University in Boston in 1923.

He has worked on both the east and west coasts, mostly in shipbuilding operations.

He came to the KSC area in 1957 from Jacksonville, Florida, where he was employed as a marine engineer.

He and his wife, Gertrude, reside in Edgewater. They have three children and five grandchildren.

In his leisure, Peck said, I try to take care of my house and grounds and fish when everything is right.

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A 3 #56

news release

RELEASE NO: KSC-217-68
FOR RELEASE: Immediate

May 8, 1968

KSC DIRECTOR PLANS VISIT, 2 SPEECHES DURING MAY

KENNEDY SPACE CENTER, Fla. -- Dr. Kurt H. Debus, Director of the Kennedy Space Center, has two speaking engagements and a trip to Massachusetts scheduled in May.

Named co-winner of the American Astronautical Society's Space Flight Award for 1967, Dr. Debus will be in Dedham, Massachusetts May 14 for the formal presentation of the award.

The award is given annually as an acknowledgement of outstanding efforts and achievements to those who have contributed the most to the advancement of space flight and space science.

Dr. Debus will speak at a luncheon meeting Friday, May 17, in Cocoa Beach of the Society of American Military Engineers, which is holding its 48th annual national meeting.

The subject of his speech will be "NASA's Space Program."

On the following Wednesday, May 22, Debus will address a luncheon meeting of the Aviation Space Writer's Association at Cocoa Beach. More than 300 science and space writers from across the nation are expected for the convention.

-end-

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-218-68
FOR RELEASE: Immediate

May 8, 1968

2 HISTORIANS WRITING ACCOUNT OF APOLLO FACILITIES DEVELOPMENT

KENNEDY SPACE CENTER, Fla. - - Two historians have taken residence at the Kennedy Space Center to research and write a full narrative history of Apollo launch and support facilities development.

The two, Dr. James W. Covington and James J. Frangie, are working under a NASA contract administered through the Florida Institute of Technology.

Covington, a Professor of history on leave from the University of Tampa, said, "At first I was reluctant to leave the university after being there 17 years, but the administration was happy that I had been selected and gave me a leave of absence.

"We like the area and are enjoying the work."

Covington, author of five books and 40 articles, mostly on the American frontier and the American Indian, is residing on Merritt Island with his wife Sofia and daughter Virginia.

Frangie joined the faculty of FIT after working as an historian in the Office of the Joint Chiefs of Staff in the Pentagon. He was then assigned to work on the Apollo project.

While serving in the Army, Frangie prepared some 15 monographs, varying in length from 100 to 500 pages, on a variety of military subjects. These were distributed to Army installations throughout the country and were used in the preparation of some of the Official Army histories of World War II.

- more -

Frangie resides in Indian Harbor Beach with his wife, Leila and the three R's, Roxane, Ramsey and Rhanda.

Ironically, Covington received his Doctorate and Frangie his Master's degree from the University of Oklahoma.

"We weren't there at the same time, however." Covington said.

In a joint statement, Frangie and Covington said:

"As historians we will have to know as much about all Apollo facilities as possible in order to write a definitive history that will be published by NASA.

"We are interested in talking with Government and contractor personnel who worked on facilities during the early days. We are particularly anxious to be granted access to diaries or other personal papers that might throw some light on the early development of facilities.

"Also, we would appreciate these people being prepared to relate their recollections to assure historical accuracy."

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-248-68
FOR RELEASE: Immediate

June 4, 1968

HONEYWELL AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. --The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $28,000 contract to Honeywell, Incorporated, Computer Control Division of 1000 Woodcock Road, Orlando.

The contract calls for an electronic circuit system which will be used by the Spaceport's Data Translation Section to store electronic data during Apollo/Saturn launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-249-68
FOR RELEASE: Immediate

June 4, 1968

VAN PELT SERVICE STEEL DIVISION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. --The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $40,269 contract to the Service Steel Division, Van Pelt Corporation of Cincinnati.

The contract calls for corrosion resisting steel tubing which is used in spacecraft support piping at the Space Center.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #56

news release

RELEASE NO: KSC-250-68
FOR RELEASE: Immediate

June 4, 1968

LIGHTNING & TRANSIENTS RESEARCH INSTITUTE AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. --The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $72,160 contract to the Lightning & Transients Research Institute of 3011 Foshay Tower, Minneapolis.

The firm will provide service and materials necessary to conduct a study and analysis of various systems used by the Spaceport's electronic design branch.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

9A.3 #56

news release

RELEASE NO: KSC-251-68
FOR RELEASE: Immediate

June 4, 1968

MELLEY MOTOR SUPPLY AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. --The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $174,415 contract to Melley Motor Supply, Inc., of 7912 Batavia St., Pittsburgh.

The contract calls for five 300 KW modular generator sets used by the Space Center's plant engineering and maintenance division to support Apollo/Saturn launches.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #56

news release

RELEASE NO: KSC-255-68
FOR RELEASE: June 6, AM

June 5, 1968

QUALITY SURVEILLANCE TEAM PROVIDES TECHNICAL DIRECTION AT SPACEPORT

KENNEDY SPACE CENTER, Fla. -- Design Engineering Directorate has a closely knit six-man Quality Surveillance team whose functions spread out to all areas of the Spaceport.

Headed by rocket veteran William E. Wheeler, the group's main function is to provide technical direction and guidance to 26 Air Force inspectors in evaluating the effectiveness of the mission support contractors' quality assurance systems as related to ground support equipment.

Wheeler, who has worked on the Redstone, Jupiter, Atlas and Saturn programs during the past 13 years, is mainly concerned with administration and coordinating the activities of his group.

Four of the men working in the group -- space systems quality control representatives -- have duties related to the activities of different contractors.

The KSC men and the respective contractors are: John Claxton, Catalytic-Dow; Dave Felix, Boeing; Hub Badous, Chrysler; and William Claus, General Electric.

A fifth quality control representative, Arnold Watson, works on special processes such as non-destruct testing for the other four groups.

The contractors' work as related to the quality group is as follows: Catalytic-Dow, design responsibility for facilities; Boeing, design responsibility for mechanical systems in Launch Complex 39; Chrysler, design responsibility of mechanical systems in Launch Complexes 34 and 37; and General Electric, electrical and electronic design of Launch Complexes 34, 37, and 39.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #56

news release

RELEASE NO: KSC-257-68
FOR RELEASE: June 6, AM

June 5, 1968

SPACEPORT DIRECTOR OF INSTALLATION SUPPORT FINDS WORK CHALLENGING

KENNEDY SPACE CENTER, Fla. -- Frederic H. Miller has a keen knowledge of what it takes to support flying operations -- from jet airplanes to Saturn rockets.

As Director of Installation Support for the Kennedy Space Center, Miller is responsible for the general operation and maintenance of the installation.

Before retiring in 1966 as a Major General in the Air Force, Miller served as Commander of the Middletown Air Materiel Command, Olmstead Air Force Base, Pennsylvania.

Asked what motivated him to enter the space field, Miller said:

"When I began to consider what I would like to do after retiring from the Air Force, I decided I would look for work that was as interesting and challenging.

"I had been flying since 1932 when we flew fabric-covered biplanes with Liberty engines, and working in the space program seemed a natural evolution from flying."

Miller said the work and atmosphere at KSC "has more than met my expectations. I'm delighted that I came and was able to fit into the program.

"All the challenges, interest and enthusiasm of getting on with the job of getting to the moon provides a stimulating environment."

He said Installation Support's functional responsibilities, in one way or another, support KSC missions, either in test, checkout or launch operations.

- more -

"In terms of specifics," he said, "we play a significant role in the fields of security, fire protection, medical support, electrical power, food, disaster control planning, photography, reproduction, and publication services, logistics, and maintenance of buildings and permanent structures except for test and launch complex facilities."

He also maintains quality control surveillance over incoming KSC-procured material and equipment and provides administrative services for library, mail and distribution services, and issuance of KSC directives.

"During tests and the countdown to launch," Miller said, "people in certain areas -- KSC Civil Service employees as well as TWA and LTV personnel -- are on the alert and manning consoles related to their responsibilities in the Launch Control Center firing rooms."

Miller's right-hand man in Installation Support is Deputy Director C. C. Parker. "We're fortunate to have a man of his experience at the Center," Miller said.

Office Division chiefs in the Directorate include:

P. A. Fagnant, Center Administrative Services Office; S. E. Carlson, Management Support Office; J. F. Russo, Documentation Division; G. E. Harrington, Logistics Division; R. C. Daley, Plant Engineering and Maintenance Division; R. A. Gramer, Quality Surveillance Division; W. E. Andruss, Requirements and Resources Office; C. L. Buckley, Jr., Security Office; and D. W. Hardin, Test Support Management Office (acting).

"We've got highly qualified people in Installation Support who contribute immeasurably in support of KSC missions," Miller said.

"These executives have excellent managerial ability and know how to stretch the dollar."

Miller said there has been a substantial evolution in the role of Installation Support in relation to Launch Operations and "the flights of AS-501 and 502 revealed that we made positive contributions in our various fields.

"Our biggest challenge is to develop operational methods and procedures to assure that Installation Support's role is satisfactorily executed. Then, we must provide the level of support to launch and non-launch operations at proper standards in the face of reduced availability of funds."

In attaining the high military rank and his present position at KSC, Miller's educational background played a significant role.

He was graduated from Purdue University in 1932 with a degree in Electrical Engineering and received a Masters Degree in Business Administration in 1949 from the University of Pennsylvania.

In 1953, he was graduated from the Industrial College of the Armed Forces, and in 1954, he completed the 26th Advanced Management Program at the Harvard Business School.

Miller, who enjoys golf and fishing as hobbies, lives in Cocoa Beach with his wife, Alice. They enjoy traveling, and Mexico is next in their travel plans.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #56

news release

RELEASE NO: KSC-258-68
FOR RELEASE: June 6, A.M.

June 5, 1968

MODIFICATIONS IMPORTANT TO APOLLO 7 CHECKOUT

KENNEDY SPACE CENTER, Fla. -- Modifications are a way of life in the space business, but their importance becomes increasingly apparent as a target date for a manned launch starts eating away the time left to effect the changes.

Such is the situation at the Kennedy Space Center with the upcoming launch of Apollo 7 this fall.

Prior to the actual countdown and launch, a series of tests and checkout procedures have to be performed. However, before these can be carried out, certain modifications to the launch vehicle, spacecraft or ground support facilities may have to be carried out.

For example, a modification to decrease the moisture content in the spacecraft is scheduled for completion before mating the spacecraft to the launch vehicle. Should it be held up, a slip could occur that would affect subsequent tests and possibly the launch date.

In this context, NASA and contractor personnel are holding daily joint planning room sessions to post new modifications and to keep track of them.

Modification requirements originate from three sources: KSC Directorates, Marshall Space Flight Center or Manned Spacecraft Center.

The requirements are submitted through the Apollo Program Office and then are relayed to the Configuration Control Board where they are categorized either mandatory, highly desirable or desirable.

- more -

All mandatory mods "must be completed to support the operating schedule," said Hardie Ford, Design Engineering's representative to the Apollo 7 planning sessions. "We take care of the highly desirables that we can, and are extremely happy if we can get to any of the desirables."

Between the time a requirement is approved and it is turned over to the operating organization, Design Engineering is responsible for its design and for procuring long-lead-time items needed to effect it.

The modification kit is then turned over to Launch Vehicle Operations, Spacecraft Operations or Technical Support for field implementation.

The planning room sessions are generally direct and to the point, following a list of the posted modifications to check progress.

About 70 people generally attend such a session, and with this many involved, the decibel level sometimes rises.

"Hold down the noise," directed chairman Dave Flowers, Launch Operations Test Supervisor. "There are three or four conversations in progress and I can't hear what's going on."

The list of modification kits is spotted with flags, diamonds and circles, and the participants talk in acronyms and initials. A bystander would think this was a class in goobledegok, but the reason for this soon becomes evident.

It is easier to place a small flag in the margin rather than to say "Conflict in the Operational Readiness Date and the Estimated Completion Date" and it is easier to say "T-C-P" than Test Checkout Procedure or "M-I" rather than Modification Instruction.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #56

news release

RELEASE NO: KSC-259-68
FOR RELEASE: June 6, AM

June 5, 1968

APOLLO SPACECRAFT BEING PREPARED FOR FALL MISSION AT KSC

KENNEDY SPACE CENTER, Fla. - - The Apollo Spacecraft 101, scheduled for a 10-day earth orbital mission with a three-man crew this fall, is being prepared for extensive tests and checkout at the Kennedy Space Center.

Astronaut Wally Schirra will command the spacecraft and Astronauts Donn Eisele and Walt Cunningham will serve as pilots.

The spacecraft has had numerous modifications since the Apollo 204 accident and will undergo about 90-100 days of preparations after arrival here.

The main features of the modification work include a complete job of fireproofing the interior of the cabin and a quick release hatch. A crewman can open the new hatch in three seconds in the event of an emergency.

Several milestone events will face the spacecraft both inside the Manned Spacecraft Operations Building and at the pad itself.

About three weeks after arrival, both the prime and backup crews will go through egress training while the spacecraft is at simulated altitude in the KSC altitude chamber.

The first unmanned altitude test will come a few days later, followed by manned altitude runs for both crews.

After about six weeks in checkout and preparation in the MSO Building, the spacecraft will go to Pad 34. The electrical mate with the launch vehicle will take place later.

The "plugs in" and "plugs out" tests will be conducted with crew participation.

- more -

While the spacecraft is on simulated internal power during the plugs out test, the hatch will be open and the crew will make the test in street clothing rather than in flight suits.

Two major pad milestones will come after about a month on the pad. Both crews will participate in the emergency egress test, followed by perhaps the major event prior to the actual count, the Countdown Demonstration Test (CDDT).

The CDDT will be conducted somewhat differently than in the past. The test will run down to the final three seconds of the simulated count then stop. The count will then be recycled to minus three hours. Cryogenics aboard the spacecraft will be dumped and the crew will be brought aboard.

About 80 days after arrival a Flight Readiness Test will be held, followed in about a week and a half by the pickup of the four-day countdown.

The altitude chamber runs for the Apollo 7 spacecraft will be about half those of the Apollo 4 spacecraft. This is due to the availability now of the Apollo Mission Simulators, a training aid that was not available to the Apollo 4 crew.

In general checkout, time for the spacecraft can be placed in four categories.

The first two week period will be build-up time when technicians prepare the spacecraft after its journey from the contractor facility for the checkout and test period.

The second phase, also about two weeks, is devoted to combined systems testing.

The next two-week period includes altitude runs and preparations for the move to the pad, and the final period is devoted to pad work.

All chamber testing and manned runs on the pad will be conducted at a 60-40 percent oxygen/nitrogen combination in the cabin environment.

The crew, however, will make all test runs on the space suit circuit when the cabin is pressurized. The suit circuit is 100 percent oxygen and is a completely self-contained system.

The 60-40 ratio will also be used during the countdown for launch. Once in orbit, the spacecraft will be purged and re-pressurized at 100 percent oxygen. The crew will then switch to the cabin environment.

All egress tests will be conducted with the cabin at 16.2 psia.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #56

news release

RELEASE NO: KSC-260-68
FOR RELEASE: June 6, AM

June 5, 1968

FLIGHT CREWS AND SUPPORT TEAMS FOR APOLLO 7 SCHEDULED TO ARRIVE AT KSC

KENNEDY SPACE CENTER, Fla. -- The flight crews and support teams for the Apollo 7 earth orbital mission are scheduled to begin arriving at the Kennedy Space Center June 17 for the final phase of training, according to the Manned Spacecraft Mission Support Office, Flight Crew Operations Branch located here.

This move follows the arrival of Spacecraft 101 at KSC. While the crews have been in training at MSC's Flight Crew Training Building at KSC for several months, they did not remain here continually.

The astronauts will utilize their quarters at KSC during the final tests, checkout and countdown to launch. The quarters are comparable to the average motel rooms, with additional facilities for exercising, meal preparation and dining.

They are on a training schedule which can involve around the clock work. The program is designed to enable the astronauts to fly their spacecraft successfully and accomplish all mission objectives.

The living-working arrangement at KSC allows them to become an integral part of the operations leading to the flight.

The prime crew for the first manned Apollo mission will be Wally Schirra, Donn Eisele and Walt Cunningham, while Tom Stafford, John Young and Gene Cernan will compose the backup crew.

Later this summer, the second contingent of prime and backup crews are scheduled to begin their final phase of training for the second manned flight.

- more -

The prime pilots are Jim McDivitt, David Scott and Russell Schweickart. The backup pilots for this mission are Charles Conrad, Richard F. Gordon and Alan Bean.

In addition to the prime and backup crews, there are non-flight astronaut crews for both missions.

The first non-flight crew is composed of Ron Evans, Jack Swigert and William Pogue, while members of the second crew are Edgar D. Mitchell, Fred Haise and Alford Worden.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-261-68
FOR RELEASE: June 6, A.M.

June 5, 1968

HONEST EMPLOYEE RETURNS $100 OVERPAYMENT TO KSC CREDIT UNION

KENNEDY SPACE CENTER, Fla. --Dale Pope is an honest man . . . just ask the Kennedy Space Center Credit Union.

After a recent payday, Dale cashed his check at the Credit Union and on Friday went to deposit it in the bank.

"I stood at the bank window about 20 minutes trying to figure out how I got an extra $100," he said.

"On Monday I went back to the Credit Union and asked if they were short on money and they said, 'Yes, we're $100 short'. I wrote them out a check for it."

Freida Ezell, Credit Union Manager, said there was no way of knowing what happened to the money and, "We wrote a letter to Mr. Pope's supervisor in the Reliability and Quality Assurance Office, Apollo Programs, commending his honesty."

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-271-68
FOR RELEASE: Immediate

June 14, 1968

PLANNING RESEARCH CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $49,406 contract to the Planning Research Corporation of 1100 Glendon Avenue, Los Angeles.

The contract calls for necessary services and materials to study methods of performing component reliability assessments based on Field Failure Rates.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-272-68
FOR RELEASE: Immediate

June 14, 1968

JERVIS B. WEBB, COMPANY AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $116,872 contract to the Jervis B. Webb Company of 9000 Alpine, Detroit.

The contract calls for delivery, installation and testing of an automated material handling system used in the receipt and distribution of supplies at the Spaceport.

The Kennedy Space Center conducts manned and unmanned launches from the Nation's Spaceport at Merritt Island and from adjacent Cape Kennedy.

- end -

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #57

RELEASE NO: 311-KSC-68
FOR RELEASE: July 1, 1968
Immediate

MILLIONTH TICKET SOLD FOR KSC BUS TOURS

KENNEDY SPACE CENTER, Fla.--The millionth patron took the public bus tour of the Spaceport today.

He was Glenn Eady of 618 Shadow Lane, Jonesboro, Ark.

With his wife Shirley, his daughter Torya, 11, and son Glenn Jr., 12, he stepped up to the TWA ticket sale window shortly before 2 p.m.

The ticket he bought for himself was the historic millionth stub sold since the public bus tours were inaugurated on July 22, 1966.

The Eadys were en route to Miami, planning to arrive there tonight.

Instead, they will remain in Titusville until Wednesday as guests of the City of Titusville. A program including dining, dancing, sightseeing, fishing and other activities is planned for them.

The Spaceport will make a presentation to its millionth bus visitor and his family at 9:30 tomorrow morning in the Visitors Information Center, where the bus tours begin their daily runs.

Rocco A. Petrone, KSC Director of Launch Operations, will present an Apollo/Saturn V launch photograph autographed by Center Director Dr. Kurt H. Debus.

Trans World Airlines, which operates the Spaceport tours for KSC, will also make a presentation.

The Mayor of Titusville, Wendell Sease, will present the family with a key to the city.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

news release

RELEASE NO: 312-KSC-68
FOR RELEASE: July 2, 1968

KSC AWARDS COMPUTER CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration has awarded a rental contract to IBM Corporation, Cape Canaveral, Fla., for the conversion of Automatic Data Processing computer systems at the John F. Kennedy Space Center.

The fixed-fee-plus contract calls for replacement of existing IBM 70/10 computers with 360/40 and 360/50 machines and for conversion of programs for the new machines. The 70/10s are being replaced because of increasing work loads which necessitate newer machines.

Estimated total of the contract, which runs from October 1, 1968, through June 30, 1969, is $514,989.

The Kennedy Space Center launches manned and unmanned spacecraft in the nation's program of lunar exploration and other space missions.

# # # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

news release

RELEASE NO: KSC-316-68
FOR RELEASE: Immediate

July 3, 1968

KSC UNDERTAKES AMBITIOUS SUMMER EDUCATION PROGRAM

KENNEDY SPACE CENTER, Fla. -- The Kennedy Space Center is undertaking by far its most ambitious NASA Space Education summer program, reports Hal Mehrens, Chief of the Educational Branch of the Public Affairs Office.

Mehrens said KSC's region includes Georgia, Florida, Puerto Rico and the Virgin Islands.

Weeklong workshops will be held at some 30 colleges and universities of the region. Educators from 42 campuses will come to the Center for two and three-day training sessions before the program ends in late September.

"This in-depth program," Mehrens said, "is designed to update the curricula of the nation's schools with the latest developments and discoveries from the space program, both in technology and in the sciences."

NASA expects about a million educators to participate in the nationwide program this summer.

Professional educators of the KSC Space Education unit launched their first workshop sessions at the University of Puerto Rico June 1.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

news release

RELEASE NO: KSC-317-68
FOR RELEASE: Immediate

July 3, 1968

LETTER FROM SAIGON SURPRISES SPACEPORT'S JANIE CALLAHAN

KENNEDY SPACE CENTER, Fla. -- Janie Callahan was surprised when she received a letter recently from rocket-torn Saigon, Vietnam.

"I didn't know anyone there," she recalled.

Inside the envelope was an article about Janie and her job as an aerospace technologist on the Flight Safety Staff at KSC that appeared in the Saigon Sunday News and a letter from Bill Shettle, formerly with TWA at Cape Kennedy.

The headline on the article reads, "Janie Keeps Watch over Roaring Rockets," and Shettle's letter said:

"If you want to really keep watch over roaring rockets, you have a noble calling but a location of low traffic density."

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

news release

RELEASE NO: KSC-318-68
FOR RELEASE: Immediate

July 3, 1968

HERB CRIBB RECEIVES TWO MORE AWARDS

KENNEDY SPACE CENTER, Fla. -- Herb Cribb has done it again...twice, in fact.

He has received awards of $525 for a C-Band Validation Complex suggestion and $300 for an invention of an improved C-Ban parasitic probe antenna at the Kennedy Space Center.

Cribb is employed in the Communications and Radio Frequency (RF) Section, Telecommunication and Experiment Branch, Spacecraft Operations.

The inventive genius of this technician has earned him $1,625 in the past two years, $900 for inventions and contributions and $725 for suggestions.

Bill Martin, head of the Incentive Awards Program in the Personnel Office, said: "These kinds of suggestions and inventions are the real cost savers at KSC. I understand Mr. Cribb has four or five more in the making."

The suggestion for the C-Band Complex brought KSC a validated savings of $11,000 by providing a better method of simulating the spacecraft or booster C-Band beacons. It replaces eight pieces of test equipment required to perform prelaunch antenna and transmission line validation.

The features of the improved C-Band parasitic probe antenna provide an antenna having low insertion losses and requiring less power to be used by the interrogating radar.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #57

news release

RELEASE NO: KSC-319-68
FOR RELEASE: Immediate

July 3, 1968

RICHARD H. MUNDY APPOINTED TO KSC CHIEF COUNSEL OFFICE

KENNEDY SPACE CENTER, Fla. -- Richard H. Mundy has been appointed to the Kennedy Space Center's Chief Counsel Office as an attorney advisor on contracts for the Procurement Office.

Mundy was on the staff of the Chief Counsel in a similar position at the Marshall Space Flight Center, Huntsville, Alabama, for nearly three years before joining KSC.

He retired from the U.S. Air Force as a Lieutenant Colonel in 1966. At that time, he was stationed at the Sheppard Air Force Base in Wichita Falls, Texas, in the Judge Advocate General's Office.

Mundy graduated from the Drexel Institute of Technology in 1951 with a B.S. degree in Business Administration and earned a law degree from the University of Houston in Texas in 1957.

Mundy lives in Cocoa Beach with his wife, Molly, and their children, David and Jane Anne.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #57

news release

RELEASE NO: KSC-321-68
FOR RELEASE: Immediate

July 3, 1968

KSC TOUR TO HIGHLIGHT ANTIQUE CAR "SPACE MEET"

KENNEDY SPACE CENTER, Fla. -- A drive-through tour of the Kennedy Space Center and Cape Kennedy in vintage automobiles will highlight the "First Space Meet" sponsored by the Antique Automobile Club of Cape Canaveral.

Art Griffin, Chairman of the club's Tour Committee, said antique car owners from Florida and Georgia have been invited to the meet.

"I don't know for sure how many are coming," he said, "but there are usually between 50 and 150 antique cars at such a meet."

The cars will be on display Saturday at the Sears Town Mall in Titusville. Other activities include a swap and sell session, judging of cars, model car contest, fashion show and awards breakfast.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: 320-KSC-68
FOR RELEASE: July 3, 1968

ATKINS RANKS HIGH IN SAFETY RANKS

KENNEDY SPACE CENTER, Fla.--John Atkins ranks high in the safety ranks.

As Safety Director of the Kennedy Space Center, he has helped make the Center one of the safest industrial complexes in the United States.

"This hasn't come easily," Atkins said. "NASA personnel are diligent in assuring safety awareness and contractor safety groups work hard at it.

"More than two-thirds of our people are in medium to high risk work. Keep in mind that most people think only in terms of safety on the complex, but safety encompasses all phases of activity at KSC.

"Within the boundaries of available time, effectiveness and cost,"he said,"KSC and contractor personnel have been trained to act correctly in emergency situations, as indicated in the safety record.

"We've made people conscious of safety procedures," he added, "by asking for demonstrations before major tests. That's how we make sure that they maintain their level of competence."

Basically, Atkins is responsible for making sure that all operations at KSC are performed in an acceptable, safe manner. His office develops safety standards, criteria and policies pertaining to spacecraft, launch vehicles and related safety activities.

He described safety as a risk management program dealing with inherent hazards.

"We have to determine what the hazards are, how to keep them in control, the probability of them getting out of control and, then, what to do about the situation.

- more -

"We have to take what people have to do and evaluate it against established procedures. It's an evolutionary process we're going through each day at KSC.

"And it's not just a matter of personnel safety. For example, should a propellant spill occur, we first assure the safety of employees, but we've also got to determine the best way of cleaning up the spill to protect the vehicle."

A native of Detroit and an electrical engineering graduate of Notre Dame, Atkins is an old hand in rocketry.

After serving two tours with the Navy -- one during World War II and the second in the Korean Conflict -- he headed the electrical procedures branch of the Navy's Bureau of Ordnance for the Talos missile program at Misawaka, Indiana. There, he organized, staffed and trained personnel for a new quality assurance division.

In 1957 he joined the Air Force Missile Test Center's (now the Eastern Test Range) operations analysis office. He was soon named Chief of the Missile Handling Branch and began setting policies covering the entire Air Force safety program at Cape Kennedy and on the range.

Atkins joined Aerospace Corporation in 1960, and as chairman of the pilot safety active review team, he was responsible for reviewing checkout and acceptance of the Atlas booster that orbited John Glenn in 1962.

He transferred to Space Technology Laboratories in 1962 where he was in charge of reliability on the Minuteman program. He also conducted a number of studies, including one that established precedents on setting up launch windows and built-in holds during countdowns.

In june 1964, Atkins entered the Gemini program in NASA's Spacecraft Test Conductor's Office at KSC.

Atkins became Chief of the KSC Safety Office, Installation Support, in January, 1966, and was elevated to the position of Safety Director in January, 1968.

Atkins lives in Satellite Beach with his wife, Betty, and their two children, Becky and Doug.

# # #

KSC news release
ENNEDY SPACE CENTER, FLORIDA
TIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #57

RELEASE NO: 322-KSC-68
FOR RELEASE: July 3, 1968

EXCELLENT EMPLOYEE PARTICIPATION

PUSHES KSC COST REDUCTIONS OVER GOAL

KENNEDY SPACE CENTER, Fla.--Excellent Federal employee participation swept the KSC cost reduction program over its submission and dollar savings goals, reports Raymond Smith, KSC Cost Reduction Officer.

Through June 21, 304 submissions, representing approximately $25 million were received. This amounted to 44 submissions above the goal, exceeding the Center's $14 million goal by 79 per cent.

Smith noted, however, that while the outlook for Fiscal 68's participation appears optimistic, "we must wait until August to find out the number of submissions validated locally and accepted by NASA Headquarters."

He said that even though the dollar value realized is obviously of major concern, individual participation is a most important factor. The "heart" of the program is motivating employees to be cost conscious and find ways to reduce costs through improvements.

Lewis E. Melton, KSC's cost Reduction Manager, described a resurgence of a new and positive cost reduction attitude throughout all areas of the Center.

"Fortunately, this attitude is becoming a way of life here, especially in light of known and possible future budgetary restraints." Melton said.

In a recent memo to his staff, George A. Van Staden, Director of Administration, said: "Only through conscious, consistent economy can we hope to keep KSC intact and in a position to respond to whatever assignments the agency may be given."

Even before final results for this year were in, the Cost Reduction Committee and NASA Headquarters CR Office began formulating plans for Fiscal 69's campaign.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #59

news release

RELEASE NO: 323-KSC-68
FOR RELEASE: July 3, 1968

FLORIDA SMALL BUSINESS FIRMS GET $5 MILLION IN SPACE CONTRACTS

KENNEDY SPACE CENTER, Fla.--Prime contractors at NASA's Kennedy Space Center awarded about $5 million to small business concerns in Florida during the nine month period that ended last March 31.

Two of the contractors, LTV and Catalytic-Dow, each awarded subcontracts totaling more than $1 million, followed by Bendix Launch Support Division, which awarded approximately $700,000.

The ten top Florida-based small business firms receiving subcontracts include:

McGregor & Werner, KSC, $834,776; Continental Test Lab, Fern Park, $369,579; Kononoff & Smith, Inc., Coral Gables, $153,000; Precision Fabricating & Cleaning, Sharpes, $137,492; Avionics Research, KSC, $137,412; Franklin Company, KSC, $113,806; James E. Turnquist, KSC, $84,325; Indian River Uniform Rental, Fort Pierce, $76,878; Computing Technology, KSC, $60,300; Milgo Electronics, Miami, $49,450.

# # # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #51

news release

RELEASE NO: 332-KSC-68
FOR RELEASE: July 15, 1968

HONEYWELL GETS SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $59,892 contract to Honeywell Inc., Computer Control Division of Framingham, Mass.

An integrated circuit core memory unit will be built at the Framingham plant for delivery to KSC on September 2. This unit will be used to fabricate systems for transmitting telemetry data from Launch Complex 39 to the Spaceport's Central Instrumentation Facility during checkout and launch of Apollo/Saturn V missions.

Launch Complex 39 is the launch site for the nation's lunar missions.

The Central Instrumentation Facility houses massive computers and electronic equipment which receive and record vital data from launch vehicles throughout the pre-launch preparations and the launch phase.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #57

RELEASE NO: 333-KSC-68
FOR RELEASE: July 15, 1968

CALIFORNIA FIRM AWARDED KSC CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $99,930 contract to Scientific Data Systems, Inc. of El Segundo, California.

The contract is for maintenance and service from April 1, 1968, through March 31, 1969, on Kennedy Space Center's Data Measurement/Aquisition system. The equipment was manufactured by Scientific Data Systems, Inc. under separate contract and is located at launch complex 39 on the Space Center.

Launch Complex 39 is the launch site for the nation's lunar missions.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #5

news release

RELEASE NO: 334-KSC-68
FOR RELEASE: July 15, 1968

CINCINNATI FIRM AWARDED KSC CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $67,943 contract to Development Consultants, Inc., 5657 Vine Street, Cincinnati, Ohio.

The one year contract provides for study to develop designs for gaseous nitrogen processing equipment and environmental control system equipment which will be superior to that now being used.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

RELEASE NO: 335-KSC-68
FOR RELEASE: July 15, 1968

AMPEX CORPORATION AWARDED SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $222,169 contract to Ampex Corporation, 401 Broadway, Redwood City, California.

The contract provides for all maintenance and repair work for one year on all NASA owned Ampex recording equipment at KSC and adjacent Cape Kennedy.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #51

RELEASE NO: 336-KSC-68
FOR RELEASE: July 15, 1968

ROCKLEDGE FIRM GETS KSC CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $122,388 contract to Scientifics Systems, Inc., 210 Hardee Lane, Rockledge, Florida.

Under the contract, Scientifics Systems Inc. will build a shielded, mobile laboratory equipped to measure electromagnetic fields in support of Apollo/ Saturn launches and pre-launch tests.

The Kennedy Space Center conducts unmanned and manned launches from the Spaceport at Merritt Island and from adjacent Cape Kennedy.

# # #

KSC

KENNEDY SPACE CENTER, FLORIDA

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

A23 #57

news release

RELEASE NO: 337-KSC-68

FOR RELEASE: July 17, 1968

NORTH HOLLYWOOD FIRM GETS SPACE CONTRACT

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a $37,917 contract to Allan Aircraft Supply Company, 11643 Vanowen Street, North Hollywood, Calif.

The contract calls for special fittings to be used on Launch Complex 39, the site where Apollo/Saturn V space vehicles are launched. The Apollo Program is designed to land U.S. astronauts on the moon and return them safely to earth.

The Kennedy Space Center conducts prelaunch testing and launches the 363-foot high Apollo/Saturn V space vehicles.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

news release

RELEASE NO: 338-KSC-68
FOR RELEASE: July 17, 1968

CHICAGO FIRM GETS SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla.-- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded an $80,644 contract to Vacudyne Corporation, 375 East Joe Orr Road, Chicago, Ill.

The contract calls for construction of a mobile chamber to be used for astronauts and others who may experience decompression sickness from the Apollo Altitude Chamber at the Spaceport.

The Altitude Chamber is used to simulate space flight conditions for training purposes in the Apollo manned lunar landing program.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #58

news release

RELEASE NO: KSC-339-68
FOR RELEASE: Immediate

July 16, 1968

McCOY RETURNS TO KSC FROM SLOAN PROGRAM

KENNEDY SPACE CENTER, Fla. -- Gene McCoy has just returned to the Kennedy Space Center from a nine-month study in the Sloan Program at Stanford University to head the Space Vehicle Office in the Apollo Applications Program.

Speaking of the Sloan Program, McCoy said, "It was the greatest opportunity I've ever had. It's certainly a tremendous personal advantage and it remains to be seen how it will affect me professionally."

He said he came back to the AAP Office because "there will be more influence here than anywhere in future space programs.

"Most people don't realize how well defined these missions are becoming.

"We had harder jobs at KSC than adapting ground facilities for AAP, but testing and checkout will be a different story. We will be dealing with very sophisticated equipment."

McCoy first came to KSC in 1960, arriving by plane the same day as the first Mercury-Redstone.

He served as Spacecraft Pad Coordinator in the Mercury Program, Deputy Division Chief, Support Systems Division during Gemini activation, Test Conductor for Gemini and in the Apollo Program Office for three years prior to receiving the Sloan fellowship.

Born in Norfolk, Virginia, McCoy was a 1954 graduate of Clemson University in Civil Engineering.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #5"

news release

RELEASE NO: 340-KSC-68
FOR RELEASE: July 16, 1968

PUBLIC FLOCKING TO SPACEPORT CAMPGROUND, PLAYALINDA BEACH

KENNEDY SPACE CENTER, Fla.--The public is flocking to recreational and camping areas located on the Kennedy Space Center's 88,000 acres.

Playalinda Beach, situated just north of Launch Complex 39, has had some 203,000 bathers and surfers since it opened in April under the supervision of the North Brevard Parks and Recreation Commission.

Fred Bynum, General Manager of the commission, said the figure was compiled from daily reports turned in by lifeguards.

A monthly chart showed 33,000 in April, 53,000 in May, 93,295 in June and 23,820 the first seven days of July.

"Our biggest day was July 4 with 12,000," Bynum said, "But the most amazing thing is that there haven't been any accidents."

Curtis Wilson, Manager of the Merritt Island National Wildlife Refuge, said 501 campers have used the Dummitt Cove Campground in the northern portion of KSC since May.

Wilson said 200 Boy Scouts, 41 Girl Scouts, 150 Campfire Girls and 110 from church groups had camped out there.

'Most of the youngsters play on the rope-drawn raft which leads to a three and one-half mile nature trail," he said, "while others are fishing for Sailor's Choice or small trout."

He said 12 picnic tables, 12 charcoal grills, chemical toilets, water and a power source are available at Dummitt Cove.

Wilson said that fresh-water fishing on the refuge has slowed down due to the heavy rains which brought in an abundance of natural food for the fish.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #58

news release

RELEASE NO: KSC-341-68
FOR RELEASE: July 18, 1968

LACY LIKES LEGAL FIELD WITH SCIENTIFIC ACCENT

KENNEDY SPACE CENTER, Fla. -- John P. Lacy liked the idea of being in a legal field with a scientific accent, so he's now Chief Counsel at the Kennedy Space Center.

This didn't happen overnight, however.

Lacy began his government service with the Navy General Counsel's Office, Washington, D.C. He was primarily concerned with the procurement of aircraft.

In 1962 he transferred to NASA's legal office in Washington, where he remained until 1965 when he came to KSC as Acting Chief Counsel. A year later he was named to the position permanently.

What is the function of office of Chief Counsel?

First, Lacy has a staff of eight other lawyers to assist in tackling the many and varied matters that come to his office -- Deputy Chief Counsel John E. O'Brien, Warren W. C. Burk, Richard H. Mundy, Ross L. Jones, William A. Block, Douglas G. Hendriksen, Sadie A. Weissenegger and Edward D. Earl.

"Probably 60 per cent of our time is spent on contracts and claims that relate to our contractors," Lacy said. "This includes time spent in trial before the NASA Board of Contract Appeals."

During the past year, the office handled some 1,800 contracts, 360 invitations for bids, 240 requests for proposals and 780 other procurement items.

- more -

The other 40 per cent is taken up mostly in personnel, labor relations, accidents, and claims by and against the government.

The personnel area includes misconduct, misuse of government property, and disciplinary actions.

On the lighter side, an inquiry was made recently to his office about whether KARS could give a 12-foot alligator found at the Complex 99 recreational area to an animal farm or whether it should be declared surplus to determine if any government agency wanted it.

"We cut through the red tape," Lacy grinned, "and told them to let the man have it if he would come and get it."

The Chief Counsel is also involved in settling the remaining land claims and in labor relations cases.

In cases where the United States is being sued and KSC is involved, Lacy's office works with the U.S. Attorney and the Department of Justice in defending or settling the matter.

If a NASA employee is called to testify in a case which KSC is interested, a lawyer in the office will be available to assist him.

Although it is mostly an advisory office, Lacy does have authority to determine certain smaller claims and to authorize payment.

Lacy has a day-by-day contact with KSC Director Dr. Kurt H. Debus' office in reviewing the legal aspects of correspondence and advising on any matter that the Director brings up.

The Chief Counsel lives in Cocoa Beach with his wife, Alice, and son, John. They have three daughters, Ann in Europe, Jill in New Haven, Connecticut, and Nina in Miami.

# # #

KSC

KENNEDY SPACE CENTER, FLORIDA

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

24.3 #58

news release

RELEASE NO: KSC-346-68

FOR RELEASE: Immediate

July 18, 1968

HIGHWAY SAFETY EXPERTS TO TOUR SPACEPORT

KENNEDY SPACE CENTER, Fla. -- A group of state Highway Safety experts will go on a tour themselves tomorrow (Friday) on a visit to Cape Kennedy and the Spaceport.

Thirty-five members of the Florida Counties Safety Planning Council, meeting at the Cape Kennedy Hilton Motel at Cape Canaveral, will begin the tour after concluding their session tomorrow afternoon.

They will view the gantries on Cape Kennedy, including Complex 34 where a Saturn IB vehicle is being prepared to launch NASA's first manned Apollo spacecraft later this year.

They also will tour KSC's Launch Complex 39, including the Vehicle Assembly Building where two Apollo/Saturn V space vehicles are being prepared for launch.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #58

news release

RELEASE NO: KSC-345-68
FOR RELEASE: Immediate

July 18, 1968

FINAL PREPARATIONS UNDERWAY FOR ATS-D LAUNCH ON JULY 24

KENNEDY SPACE CENTER, Fla. -- Applications Technology Satellite-D was scheduled to be hoisted atop its Centaur launch vehicle at Launch Complex 36 today, marking the start of final preparations for launch July 24.

The launch team is headed by Robert H. Gray, Director of Unmanned Launch Operations at the Kennedy Space Center.

A synchronous orbit 19,325 miles above the Pacific Ocean is planned for the cylindrical spacecraft, which measures 56 inches in diameter and 72 inches long.

Major assembly and checkout operations for the Centaur vehicle were completed last week with the joint flight acceptance test.

Fuels were unloaded after the tanking test and the RP-1 fuel for the first stage Atlas booster will be loaded for flight a few days before launch. The liquid hydrogen fuel for the second stage and the liquid oxygen oxidizer for both stages will be loaded as part of the final countdown on the 24th.

The spacecraft was scheduled to be moved to the launch pad early this morning from the Explosive Safe area on Cape Kennedy where certain ordnance items were installed. Initial checkout of the ATS-D spacecraft took place in Hangar AM.

The spacecraft, which will be designated ATS-4 when it achieves orbit, will be one of a series of satellites designed to evaluate satellite development and explore advanced satellite technology in the fields of meteorology, communications, navigation and sensor development.

# # #

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #58

news release

RELEASE NO: KSC-343-68
FOR RELEASE: July 18, 1968

KSC CREWS BUSY PREPARING FOR FIRST MANNED SATURN V

KENNEDY SPACE CENTER, Fla.--Crews in the VAB and the MSO Building at the Kennedy Space Center are busy preparing major components of the Apollo/Saturn 503 space vehicle for a planned manned flight, while the two astronaut crews are training on simulators in the Flight Crew Training Building.

The Saturn V first stage is in a high bay of the VAB awaiting completion of mechanical and electrical systems checkout on the second stage before they can be remated. The S-II stage recently returned from the Mississippi Test Facility where it successfully underwent cryogenic proof-pressure testing.

Following remating next week, work crews will need another week to complete final preparations for "power-up" on each stage, an electrical test to assure that the systems function properly.

Meanwhile, the third stage will remain in a low bay to allow completion of an instrumentation modification. This stage is scheduled to be remated during the first part of August.

In the MSO Building, the lunar module is undergoing a systems checkout prior to mating with the spacecraft lunar module adapter (SLA).

The command and service modules for this mission have not yet arrived at KSC.

The prime crew for AS-503 is James McDivitt, David Scott and Russell Schweikart, while the backup crew is composed of Pete Conrad, Dick Gordon and Alan Bean.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-344-68
FOR RELEASE: July 18, 1968

PETITE ENGINEER LIKES MATH, MUSIC

KENNEDY SPACE CENTER, Fla. -- Cherie Lee is a petite lady who thinks big.

A 1967 math graduate of Florida Institute of Technology, she is now employed in the Automation and Programming Office, Launch Vehicle Operations, Kennedy Space Center.

Her office is concerned with checking out different programs associated with post-launch activities, as well as some pre-launch programs.

In her off-duty hours, Cherie sings professionally with a small group on Saturday nights. She is taking piano and voice lessons and learning to play the guitar and drums on the side.

She lives in Satellite Beach with her parents, Col. and Mrs. James L. Lee, and Great Dane Reiny, a Pekinese and a cat.

Cherie said she finds the space program very interesting "because it is our biggest frontier . . . something unknown to explore."

Asked if she thought it was a man's world in the mammoth VAB with all its mechanical wonders, Cherie answered: "No, no, no, never! Why, there are two women engineers right in this office."

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #58

news release

RELEASE NO: KSC-347-68
FOR RELEASE: July 18, 1968

JAPAN'S MINISTER FOR SCIENCE VISITS SPACEPORT FACILITIES

KENNEDY SPACE CENTER, Fla. -- Naotsugu Nabeshima, Japanese Minister of State for Science and Technology, will arrive at Kennedy Space Center today (Thursday) for briefings on America's unmanned space programs and the Apollo lunar landing project.

Mr. Nabeshima is also chairman of Japan's Atomic Energy Commission and head of his country's Space Activities Committee. Among those accompanying him will be Tsuneo Fujinami, Director of Japan's Atomic Energy Bureau.

The Japanese group will be welcomed to KSC this morning by Robert H. Gray, Director of Unmanned Launch Operations, and his staff in their offices at Cape Kennedy.

The Japanese will spend the morning being briefed at KSC's spacecraft laboratories on the Cape, the Thor-Delta facilities at Launch Complex 17, and the Atlas-Centaur facilities at Complex 36.

KSC launches weather communications, and other scientific satellites from Complex 17. The Surveyor moon-landing spacecraft were launched from Complex 36. An Applications Technology Satellite is scheduled to be launched there on July 24.

The visitors will be luncheon guests of Dr. Kurt H. Debus, Center Director, and Albert F. Siepert, Deputy Director, Center Management. They will tour Launch Complex 39 following lunch.

They will be briefed on the U.S. manned lunar mission by Siepert who will show them through the Launch Control Center and its firing rooms.

- more -

The party will also visit the Vehicle Assembly Building where two Apollo/Saturn V vehicles are being prepared for launch. They also will inspect the transporter, which carries the Apollo/Saturn V vehicles to the launch pads.

They will conclude the tour at Pad A, where the first two Apollo/Saturn V space vehicles have been launched.

Saturn V is the vehicle that will launch the three-man Apollo spacecraft on its journey to the moon.

# # #

KSC

KENNEDY SPACE CENTER, FLORIDA

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #57

news release

RELEASE NO: KSC-348-68

FOR RELEASE: July 18, 1968
3:00 p.m.

NASA AWARDS $71 MILLION CONTRACT TO NAR

KENNEDY SPACE CENTER, Fla.--The National Aeronautics and Space Administration has awarded a $71,195,250 amendment to the North American Rockwell Corporation Apollo spacecraft contract to cover mission support at NASA's Kennedy Space Center.

Under the amendment, NAR will provide Apollo spacecraft pre-launch, launch, and post-launch support at Launch Complex 39 of the Spaceport and Launch Complexes 34-37 at Cape Kennedy from July 1, 1968, through November 30, 1970.

NAR builds the command and service modules of the Apollo spacecraft and the spacecraft lunar module adapter in which the moon exploration vehicle is housed in initial launch phase.

KSC conducts manned and unmanned launches in the nation's program to land Apollo astronauts on the moon.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #58

RELEASE NO: KSC-349-68
FOR RELEASE: July 18, 1968
11:00 A.M.

The National Aeronautics and Space Administration has completed tests associated with the "longitudinal oscillations" problem of the Saturn V launch vehicle and has mapped out a means of preventing excessive oscillations. The solution will be verified in a test firing of a flight stage early next month.

The solution will be the use of "accumulators" or small gas reservoirs in the liquid oxygen prevalves of the first stage to change the frequency of oscillation in the propulsion system.

The oscillations resonating with the vehicle structure natural frequency caused considerable concern among rocket engineers during a portion of the flight of the second Saturn V. It was launched from the NASA-Kennedy Space Center last April 4.

The Saturn V -- a three-stage rocket 363 feet tall with the Apollo spacecraft in place -- was developed by the NASA-Marshall Space Flight Center as the launch vehicle for the manned lunar landing mission.

Engineers working on the problem encountered during the flight of the second Saturn V have completed analyses, studied flight data and conducted hundreds of tests in identifying the cause of the up-down motion of the vehicle.

The natural frequency of the vehicle structure is about four cycles per second. The frequency of the propulsion system was between four and five cycles per second.

Changes in mass, such as when propellants are being drained from the tanks, increase the frequency level of the structure. The frequency level of the propulsion system also increases as the flight progresses but at a slower rate.

Since the propulsion system frequency was only slightly above that of the structure, and since the structure frequency increased faster, the frequencies grew closer together and finally coincided.

When two frequencies are the same or very near, the amplitude, or severity, of the oscillations are multiplied. This is what happened during the flight of the second Saturn V.

- more -

The task facing the engineers was finding the best method of keeping the frequencies apart. Several possible methods were considered but these were narrowed to two "candidate fixes" which received maximum attention.

One possible solution was to inject helium into the liquid oxygen feed lines to change the frequency of the propulsion system.

The decision was made, however, to use "shock absorbers" in the LOX prevalves to dampen out any oscillations that might occur in the feed ducts. This would reduce the natural frequency of the propulsion system to about two cycles per second, lower than that of the structure.

Prevalves are located in the five LOX ducts just above the engines. They serve to detain the LOX in the feed ducts until late in the countdown, when the fluid is admitted to the main LOX valves on the engines in preparation for ignition.

Each prevalve has a cavity in which a gas pocket will be maintained. Filling the cavities with helium will begin ten minutes before liftoff and will continue after start-up of the first stage engines.

A relatively small amount of gas is required -- about 2.1 cubic feet in all five of the first stage engine feed systems. The only modification required to the stage is provisions of a means of injecting helium into the prevalve.

The helium is fed into the accumulator initially from a ground source; after launch the small amount needed for replenishing comes from the on-board helium vessels which are used to supply gas for the operation of certain valves, for pressurizing the fuel tank and other purposes.

Kits for modifying the vehicle to accept either of the two candidate fixes were prepared and tested early in the study to save time.

Modifications are being made now in the first stage of the third Saturn V launch vehicle, now at Kennedy Space Center, and to the first stage of the sixth Saturn V. The latter stage is in a test stand at the Mississippi Test Facility being prepared for test firing early in August.

Lee B. James, Saturn V Program manager at the Marshall Center, said about 1000 engineers working on the problem included those from MSFC, the Boeing Company, the Martin Company, TRW, Inc., Aerospace Corp. and Rocketdyne Div. of North American Rockwell. Martin and TRW personnel worked on the problem from independent positions, and Aerospace Corp. engineers served as consultants.

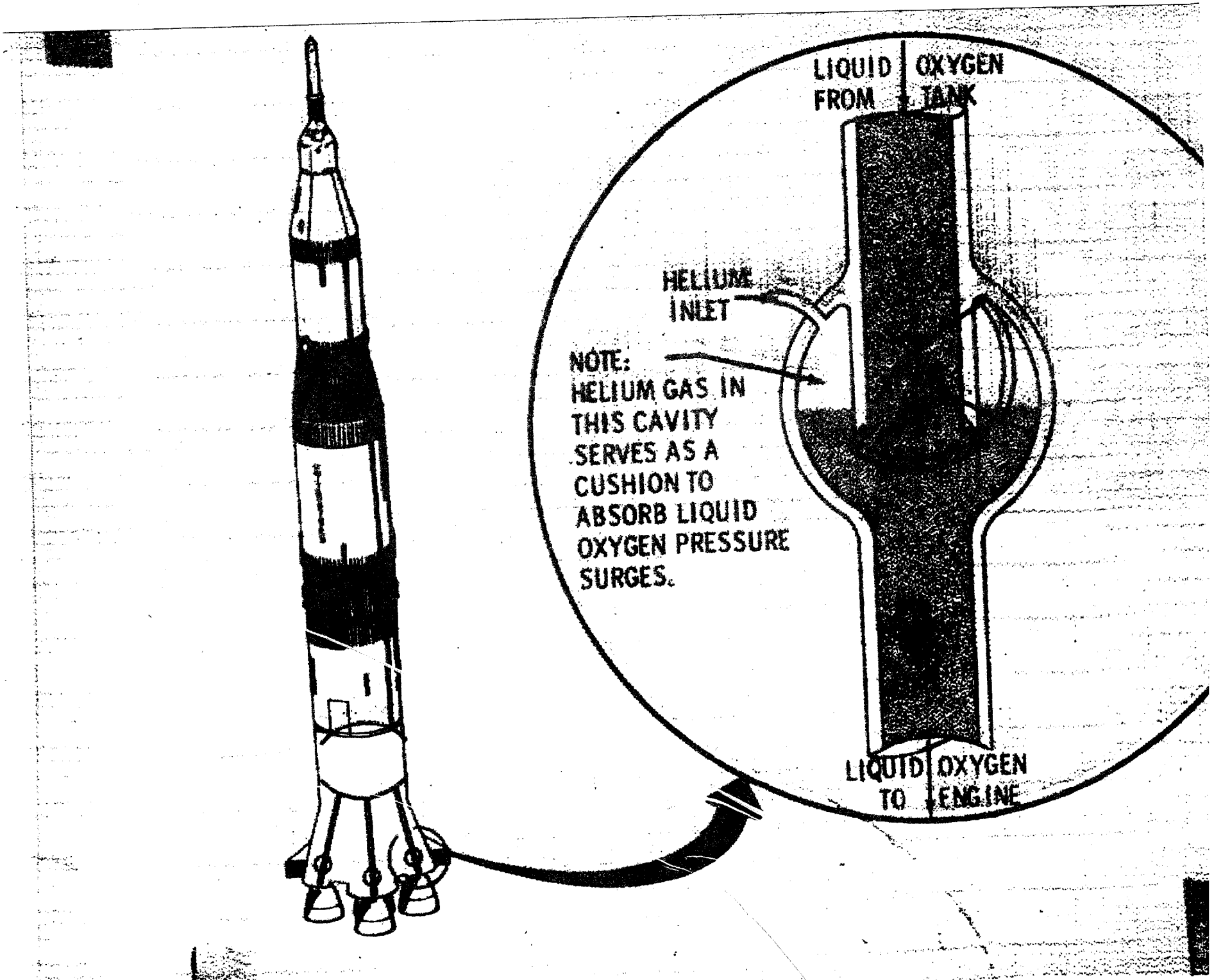
James said the unanimous decision of all involved to use the accumulator method indicates how thoroughly the test, propulsion and analysis work was done.

Results of the work and the recommendations were presented to Lt. Gen. Samuel C. Phillips, Apollo Program Director and Dr. George Mueller, NASA associate administrator for Manned Space Flight during a conference Monday. Both accepted the recommendations.

The conference included representatives of the industry team involved, the Marshall Center, Kennedy Space Center, the NASA-Manned Spacecraft Center and NASA Headquarters.

James said tests indicate that the oscillation levels for the upcoming flight of the third Saturn V will not exceed those of the first Saturn V, which made a "textbook" flight on November 9, 1967.

# # #


LIQUID OXYGEN FROM TANK
HELIUM INLET
NOTE: HELIUM GAS IN THIS CAVITY SERVES AS A CUSHION TO ABSORB LIQUID OXYGEN PRESSURE SURGES.
LIQUID OXYGEN TO ENGINE

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #58

news release

RELEASE NO: KSC-354-68
FOR RELEASE: Immediate

July 23, 1968

YANKEE WALTER CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for $99,000 to the Yankee Walter Corporation of Los Angeles, Calif.

The contract calls for aircraft-type rescue, crash and fire fighting apparatus for use during space vehicle launch operations.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -

KSC

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #54

news release

RELEASE NO: KSC-355-68
FOR RELEASE: Immediate

July 23, 1968

HONEYWELL, INC.
AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for $37,080 to the Computer Control Division, Honeywell, Inc., of Framingham, Mass.

The contract calls for a computer memory module for use with the lunar and command module simulators utilized to train Apollo astronauts.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration. A major goal of the Apollo Program is to land American astronauts on the moon and return them safely to earth.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #56

news release

RELEASE NO: KSC-356-68
FOR RELEASE: Immediate

July 23, 1968

HATHAWAY INSTRUMENTS, INC.
AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for $60,000 to Hathaway Instruments, Inc., of Denver, Colorado.

The contract calls for a transient recorder to detect, measure, and record electrical disturbances in the power line system in support of space vehicle launches.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #58

news release

RELEASE NO: KSC-356-68
FOR RELEASE: Immediate

July 23, 1968

QUINDAR ELECTRONICS, INC. AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for $47,542 to Quindar Electronics, Inc., of Springfield, New Jersey.

The contract calls for a 40-channel remote control sub-system in the hazards monitoring system for the launch pads at Launch Complex 39.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #58

news release

RELEASE NO: KSC-358-68
FOR RELEASE: Immediate

July 23, 1968

FAIRCHILD ELECTRO-METRICS CORPORATION AWARDED NASA CONTRACT

KENNEDY SPACE CENTER, Fla. - - The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for $91,986 to the Fairchild Electro-Metrics Corporation of Amsterdam, N.Y.

The contract calls for a remote control system for the interference analyzer used to measure radio frequency interference in hazardous areas at the Center.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #58

news release

RELEASE NO: KSC-361-68
FOR RELEASE: Immediate

July 30, 1968

TRAFFIC INCREASES AT KSC

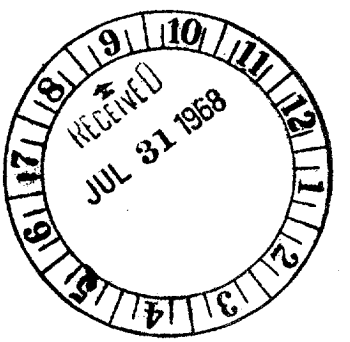
KENNEDY SPACE CENTER, Fla. -- During a normal 24-hour working day this month, 50,417 vehicles drove into and out of the Space Center and Cape Kennedy Air Force Station.

Traffic through some access gates reflected a substantial increase over the last counting period. Gate 3 near the mainland south of Titusville tallied 13,940 vehicles compared to 12,766 May 1; Gate 4, on the Titusville Causeway, counted 7,059 compared to 4,957 in April while Gate 1, the main entrance to Cape Kennedy, counted 19,800 compared to 18,271 April 15.

Traffic volume remained practically constant through Gate 2, on SR-3, Merritt Island where 8,564 vehicles were tallied compared to 8,575 April 19 and Gate 5, south of Haulover Canal and used by traffic originating in Oak Hill and points north, reported 1,054 vehicles compared to 1,461 in April.

Some of the Gate 3 increase via NASA Causeway into the Center reflected tourist traffic to and from the Visitor Information Center.

# # #



PUBLIC INFORMATION OFFICE, COCOA BEACH - 783-7781, KSC - 867-2467

KSC

KENNEDY SPACE CENTER , FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #59

news release

RELEASE NO: KSC-365-68
FOR RELEASE: Immediate

July 30, 1968

ATS-D LAUNCH DATE SET

CAPE KENNEDY, Fla. -- The launch of an Applications Technology Satellite (ATS-D) by a Centaur launch vehicle has been scheduled for no earlier than August 7.

The new launch date was established to permit additional testing time to qualify the modified flight gyro package for the second stage at the contractor plant, General Dynamics/Convair, San Diego, California.

The launch window for August 7 is 6:31 to 7:40 p.m. EDT.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #59

RELEASE NO: KSC-366-68
FOR RELEASE: July 31, 1968

ZWEIGBAUM NAMED CHIEF OF ULO TECHNICAL SUPPORT

KENNEDY SPACE CENTER, Fla.--Robert H. Gray, Director of Unmanned Launch Operations at the Kennedy Space Center, has announced the appointment of Harold Zweigbaum as Chief of Technical Support Operations.

Zweigbaum, former Chief of the Atlas-Agena Program, will replace James W. Johnson who has been granted a fellowship to study under the Stanford-Sloan Program, Stanford University.

Gray also named F. R. Searle as Deputy Chief of the Technical Support Operations.

# # #

PUBLIC INFORMATION OFFICE,

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-367-68
FOR RELEASE: July 31, 1968

ELECTRICITY USED AT KSC WOULD SERVE 14,000 HOMES

KENNEDY SPACE CENTER, Fla.--The amount of electricity used at the Kennedy Space Center in one month -- approximately 21 million kilowatt hours -- would furnish power to about 14,000 homes in the same period.

To supply this tremendous requirement, a 115,000 volt loop was established by Florida Power and Light Company to feed into KSC and Cape Kennedy, said Bill Cannon, Chief of the Electrical Branch, Electrical/Electronic Systems Division, Design Engineering.

The loop is tied back into the FP&L grid, the Orlando Utilities Commission, other utilities in Florida and the national power grid.

There are five major Government substations on the loop which transform the power into lower voltage levels for distribution to the various buildings and facilities.

The Orsino substation, situated at the south end of the KSC Industrial Area, serves the electrical needs of the Headquarters, Central Instrumentation, Manned Spacecraft Operations, News Center and Flight Crew Training Buildings and other facilities in that area.

The C-5 substation, located on the west side of the Kennedy Parkway, serves the Vehicle Assembly Building, Launch Control Center, and other Launch Complex 39 facilities.

Launch Complexes 34 and 37, along with other NASA and Air Force facilities, get power from the North Cape Substation.

The South Cape substation normally serves only Air Force facilities at Cape Kennedy.

The C-5 substation receives the 115,000 main-line voltage and transforms it to 13,800 volts for distribution to Launch Complex 39 where the load requirements are heavier than at the other substations. The four remaining units distribute 13,200 volts.

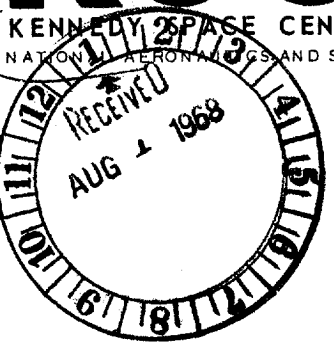
# # #

PUBLIC INFORMATION OFFICE, 867-2468

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #59



RELEASE NO: KSC-368-68
FOR RELEASE: August 1, 1968

9

PROCUREMENT CHIEF'S JOB SPREADS TO ALL CORNERS OF SPACEPORT

KENNEDY SPACE CENTER, Fla. -- "I thought the space program would be a real challenge and it has turned out to be greater than I anticipated."

This is the "before and after" of his work with NASA at the Kennedy Space Center as seen by Procurement Officer William M. Lohse.

What motivates a man who, through 147 personnel in four branches, is responsible for filling the vast purchasing and non-personal service needs of the Spaceport.

It's simply trying to do as good a job as possible.

As Lohse put it: "We are a service and support organization set up to try to help the Center carry out its mission through the best suited contract and pricing methods."

A specialty with Lohse is the procurement of ground support equipment.

"This hardware is extremely varied," he said, "ranging from common off-the-shelf items to the one and two of a kind . . . not built until KSC needed them. The crawler is a good example of this."

Lohse said handling of non-personal service contracts is one of the biggest challenges.

- more -

"These contracts take a very comprehensive contract management policy. The Bendix launch support contract is a good example. They have eight major areas covered by 3,000 people."

He said KSC was using an award-fee system when he came in 1965 and that it has worked very well.

Under this system, Lohse said, "the contractors earn their fees based on the level of performance they achieve."

Reporting to Lohse are four Branch Chiefs:

George Lott, Chief of the Management Operations Branch, develops and writes administrative policies and procedures, provides support to the Contract Review Office and takes care of bidding, industrial relations and cost and price analysis.

Charles Clift, Chief of the Material Branch, buys commercial service, hardware, and study contracts.

Jim Rice, Chief of the Support Contracts Branch, handles the launch (including stages and spacecraft) and base support contracts and is responsible for increasing the office's responsiveness by supervision of co-located personnel in most line directorates.

Charles Green, Chief of the Small Purchase Branch, takes care of the spot cash fund and small emergency purchases up to $2,500, as well as the blanket purchase agreements which are billed monthly.

Another top man in the Procurement Office is Clyde Jones, an incentive-contract specialist.

Lohse served as Deputy Procurement Office for about two years before being appointed to his current position in 1967.

His career with the Government began in 1942 when he enlisted in the Navy and soon was commissioned as Ensign in the Supply Corps.

He has had a broad career in purchasing, serving as Assistant Director, Purchasing Division NPO, Washington, D.C.; Procurement Branch Officer, General Supply Depot NSC, Oakland, California; and Purchasing Division Officer, Naval Aviation Supply Office, Philadelphia, Pennsylvania.

Also, he was Acting Purchasing Director, Military Petroleum Supply Agency, Washington, D.C. before concluding his Navy career as Captain, SC USN, Officer in Charge, Navy Purchasing Office, Washington, D.C.

Lohse received a Bachelor of Arts degree from Colorado State College of Education in 1938 and Masters of Business Administration degree from the Harvard Business School, Boston, Massachusetts, in 1947. He also attended the Naval War College in 1961 and 1962.

He and his wife, "Gus", live north of Cocoa with their two sons, Chris and Chuck. He enjoys golf and bridge as hobbies and is active in Cub Scouts.

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #5?

RELEASE NO: KSC-369-68
FOR RELEASE: August 1, 1968

OPPORTUNITIES FOR WOMEN ENGINEERS ARE GROWING

KENNEDY SPACE CENTER, Fla.--Opportunities for women in the professional engineering field are growing.

That's the word from Mary Driver, personnel staffing specialist who has helped sign up six girl engineers for work at the Kennedy Space Center since the beginning of the year.

"It's been a good year for finding girls," Mary commented. In fact it's been our best. Hiring six lady engineers in a single year is a record here."

The six are Judy Anderson, Helen Bullard, Ann Lavender, Karen Stevens, Ruth Ann Strunk and Mary Golden.

The achievement particularly gratifies Mary because she is also KSC's coordinator for the Federal Women's Program which promotes equal opportunity for women in all areas of government employment.

How does the Spaceport find the women they need to fill their vacant job slots?

There are three main ways, says Mary who has been engaged in the task since 1961 -- in the project Mercury days -- back when the Spaceport was just a gleam in the space planners eyes.

One way is through applications sent direct to the KSC Personnel Office by girls at college who have qualified themselves for work done at the Spaceport and in the aerospace industry.

-more-

Another fount of talent, says Mary, is the "friends-of-friends system -- one friend telling another about her job at KSC."

Third and best source is recruiting done by the federal government and private industry on the college campus. Talking directly to the current year's crop of seniors is the system that yields the best returns.

In all the recruiting methods, Mary and her colleagues keep sharp eyes peeled for likely feminine prospects.

"We don't exactly hunt for them, or give them special preference, but we do scan each application carefully for eligible girls or women in order to comply with the equal opportunity policy of the government," Mary explained.

The six lady engineers recently joining KSC are new members of a profession that usually is dominated by men.

A total of 75 women now occupy professional, administrative or technical positions, and all of them -- including a total of 15 engineers -- work at tasks usually handled by the male sex.

The women are holding down jobs in such fields as contract negotiations, resources management (budget), production control, and some are computer systems analysts.

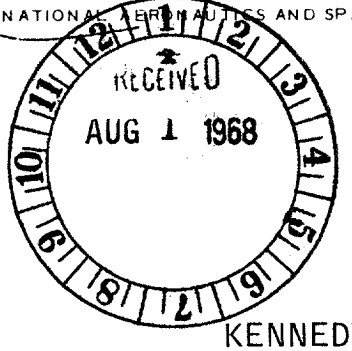
"Fifteen years ago you'd probably find men in all these positions," Mary Driver said. "Today careers in Federal service are definitely open if a girl goes and gets the education and background required for specific professions.

"Here at KSC we're finding that in our job positions sex makes no difference -- women are just as employable as men."

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



RELEASE NO: KSC-370-68
FOR RELEASE: August 1, 1968

KSC'S FUTURE STUDIES OFFICE RESEARCHES TECHNICAL NEEDS

KENNEDY SPACE CENTER, Fla.--While many of the Kennedy Space Center's personnel are directly concerned with an upcoming launch, J. P. Claybourne's Future Studies Office is researching the needs of new space vehicles and new technology for future missions.

Specifically, his office in the Design Engineering Directorate is charged with developing concepts and conducting studies "which pertain to launch vehicles, manned and unmanned spacecraft, space vehicles and launch facilities preflight preparations, and integration, test, checkout and launch operations at KSC."

Also, he is to determine major item requirements and research needs for the evolution of new technology to support space vehicle launches, including vehicle ground launch systems and foreseeable extra terrestrial launch operations.

In studying new vehicle systems, the Advanced Studies unit examines design data on such items as nuclear stages or solid rocket strap-ons and works out facility requirements and operational plans for KSC.

On a matter such as orbital refueling, this unit would determine the requirements for checkout of the system that would operate in a weightless environment.

The Supporting Development unit is responsible for technological improvements through advanced engineering on existing hardware.

"We are in the manager's role here," Claybourne said. "The actual improvement tasks are performed by the people closest to the particular hardware."

-more-

The Supporting Research office looks at "way out" technological requirements for lunar and planetary exploration such as longer-life power supplies from radioisotopes or nuclear reactors.

"We keep track of mission requirements from near-term to five to 10 years away," he said. "One interesting new development is slush hydrogen -- how to make it, how to store it and how to use it."

Claybourne's office also participates in advanced studies of other centers. For example, if another center came up with new technology involving an upper stage with an ion engine, his office would study it and determine what support would be required to handle the new stage.

Claybourne, a graduate of New York University, served as a Saturn Coordinator with the Missile Firing Laboratory in 1959 and in 1960 as Deputy to Rocco Petrone, then Chief of Apollo Program Management. In 1965 he became Chief of the Future Studies Office.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #59

RELEASE NO: KSC-371-68
FOR RELEASE: Immediate

August 1, 1968

NASA TOURS SHOW 23.9 PERCENT INCREASE

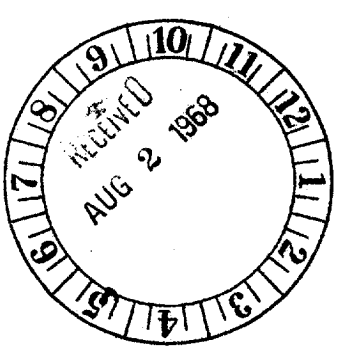
KENNEDY SPACE CENTER, Fla. -- A 23.9 percent increase in attendance last month, compared to July, 1967, was reported today for the NASA Tours program conducted by Trans World Airlines for this Center.

The July 1968 attendance was 96,744.

Since January 1, 1968, 403,368 persons have participated in the daily escorted bus tours of the Center and Cape Kennedy Air Force Station. The total since the program began July 22, 1966, reached 1,094,254.

The concessioner operated a fleet of 28 buses per day on the average last month. In addition, 77 charter buses were accommodated carrying 3,751 persons. Sixteen of these bus trips were under sponsorship of NASA's education program.

# # #



PUBLIC INFORMATION OFFICE,

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #59

RELEASE NO: KSC-381-68
FOR RELEASE: August 19, 1968

ESTES ACCIDENT

A workman was killed last May 16 at the National Aeronautics and Space Administration's Kennedy Space Center, Fla., when he failed to release pressure from a water line on a launch pad, an investigation board has reported.

William B. Estes, a mechanical technician employed by the Launch Support Division of Bendix Corp., died of his injuries some minutes after the cap on an eight-inch water main blew off and struck him in the chest.

The Board, appointed by the Director of the Center, handed down the opinion that Estes' failure to determine the condition of the water main system and to bleed off the pressure it contained before he released a clamp that held the cap was directly responsible for the accident. Cause of death was traumatic laceration of the liver.

Testimony by witnesses indicates that Estes did not check for nor release pressure in the water line although a bleed valve was located within a few inches of the clamp. The pressure in the line, containing air and water, was so great that when the cap was released, it struck Estes in the chest and propelled him more than six feet into the air. He fell on his back.

Immediate first-aid measures failed to save him and he was dead on arrival at a nearby hospital.

The operation underway at the time of the accident was concerned with preparation for moving the Saturn V Mobile Service Structure to the pad for a major test. The water system had been drained, inspected, and cleaned, and was being refilled to bring the water level up to the pad location so as to connect it to the fire main of the service structure.

The method fo filling the system probably resulted in the pressure being higher than on previous occasions. Although there was an overall procedure covering movement of the service structure, it did not detail the method of filling and did not require the workmen to verify the absence of pressure before opening the clamp.

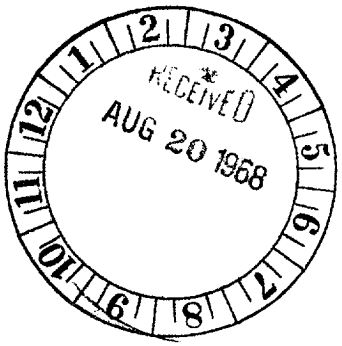
-more-

PUBLIC INFORMATION OFFICE, 867-2468

The Board recommended that the water connection at the pad should be vented to preclude any pressure build-up at that point; that such equipment should be color-coded as hazardous; that a detailed procedure for filling the system tanks and lines should be written; and that the procedure for the hookup of the line should be modified to require verification of the absence of pressure prior to releasing the clamp. It also recommended that liquid systems in general be reviewed and any precautionary measure taken which would minimize the possibility of similar accidents.

Bendix Corporation, which maintains and operates the water system, conducted an independent investigation of the accident with similar findings.

# # #


RECEIVED
AUG 20 1968

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

A23 #59

RELEASE NO: KSC-382-68
FOR RELEASE: August 19, 1968

APOLLO PROGRAM CHANGES

NASA Acting Administrator Thomas O. Paine announced today that Lunar Module operations will be dropped from the first manned Apollo-Saturn V flight, Apollo 8.

Dr. Paine also stated that the National Aeronautics and Space Administration's Office of Manned Space Flight will begin planning for an alternate manned Command and Service Module mission for launch in December.

Dr. Paine emphasized that no final decision will be made on the precise mission plan for the alternate flight until after the first manned Apollo flight (Apollo 7) this Fall. Apollo 7 is a mission of up to 10 days' duration to complete flight qualification of the Command and Service Modules.

To assure greatest value from the mission, planning and training for Apollo 8 must begin in the period before the Apollo 7 mission is flown but the final content of the mission plan will be selected only after Apollo 7 mission results are evaluated.

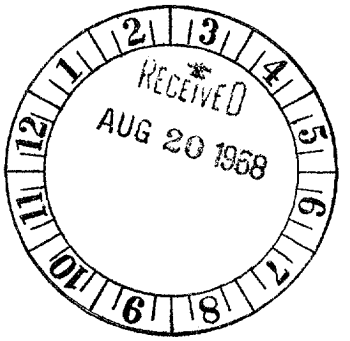
Lunar Module 3, which has been delayed in checkout, will be flown next year on the fourth Saturn V (AS 504) with Command and Service Modules No. 104. This decision is based on preliminary studies which indicate that many Apollo program objectives scheduled for later flights can be attained by utilizing the Apollo 8 Command Service Module mission.

Lt. Gen. Samuel Phillips, Apollo Program Director, said one very important advantage of flying Apollo 8 this year is the opportunity for earlier experience in the operation of the Saturn V and Command and Service Modules than can otherwise be obtained.

Two problems previously experienced in the Saturn Apollo systems -- vertical oscillation or "POGO effect" in the first stage of the Saturn V and the rupture of small propellant lines in the upper stages -- have been corrected and the solutions verified in extensive ground tests.

# # #

PUBLIC INFORMATION OFFICE, 867-2468


RECEIVED
AUG 20 1958

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #59

RELEASE NO: KSC-383-68
FOR RELEASE: August 20, 1968
Immediate

BOEING IS TOP EMPLOYER AT KSC WITH 3,711 ON ITS ROSTER

KENNEDY SPACE CENTER, Fla.,--The Boeing Atlantic Test Center is the largest contractor of the industrial firms engaged in NASA's space exploration program at this installation.

As of June 30, 1968, Boeing employed 3,711. Next largest of the KSC contractors was Trans World Airlines with 3,096 while Bendix ranked third with 2,832.

Other contractors employing more than 500:

North American Rockwell	1,947
Federal Electric Company	1,702
General Electric Company	1,387
McDonnell Douglas	1,253
Grumman Aircraft	1,121
Catalytic Dow	1,090
International Business Machines	1,048
Chrysler Corporation	1,047
Ling Temco Vought	689

Contractor employment totaled about 22,000 persons.

# # # #

PUBLIC INFORMATION OFFICE, 867-2468

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #59

RELEASE NO: KSC-373-68
FOR RELEASE: Immediate

August 6, 1968

BJC FACULTY MEMBERS ARE BRIEFED ON SPACEPORT

KENNEDY SPACE CENTER, Fla. -- About 50 new faculty members, librarians and counselors of Brevard Junior College received a briefing on NASA facilities at the Spaceport and Cape Kennedy today (Tuesday).

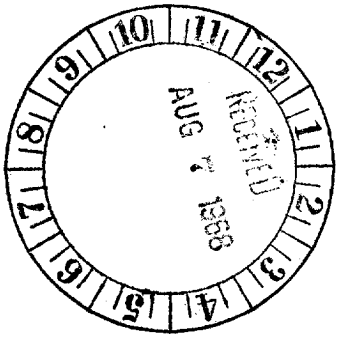
Purpose of the tour of both areas was to familiarize the educators with the surroundings in which they will work in the school on Clearlake Road, Cocoa, not far from KSC.

They were shown the launch pads of the Cape, including Complex 34 where KSC teams are scheduled to launch the first manned Apollo mission aboard a Saturn IB vehicle this fall.

At the Spaceport, they toured Launch Complex 39 where the Apollo/Saturn V space vehicles are assembled, checked out, and launched in the nation's program to land men on the moon and return them safely to earth.

They visited the Launch Control Center and toured the Vehicle Assembly Building.

# # #

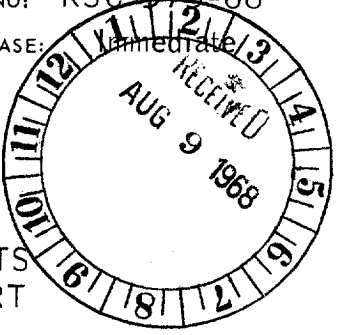


2A3 #59

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-375-68
FOR RELEASE: Immediate



August 8, 1968

SUMMER INSTITUTE STUDENTS GET BRIEFINGS AT SPACEPORT

KENNEDY SPACE CENTER, Fla.--Twenty-five college students interested in governmental research and development programs, toured the Spaceport and Cape Kennedy today and were briefed on Project Apollo and other U.S. programs in space research.

The students, from all sections of the country, visited the space facilities here as part of a Summer Institute in Public Administration they are attending at the University of Maryland.

The Institute is sponsored by the National Aeronautics and Space Administration's Goddard Space Flight Center in Maryland. They were accompanied on their one-day field trip to the Spaceport by Dr. Michael J. Vaccaro, Assistant Director of Administrative Management at Goddard.

The educational program is aimed at broadening information about government research and development management for the academic community. It also seeks to stimulate interest for such governmental programs in undergraduate students.

In a firing room of the Launch Control Center at Complex 39 the visitors were briefed on the Apollo/Saturn vehicles and spacecraft which will be used to land U.S. astronauts on the moon.

The lunar mission was described for them by Albert F. Siepert, KSC Deputy Director, Center Management.

Later Siepert led the group in a 90-minute discussion of management and administrative techniques.

The group visited NASA's facilities on Cape Kennedy and were briefed on communications, weather, and other scientific spacecraft by James W. Johnson, Chief of the Unmanned Launch Operations' Technical Support Operations Branch.

# # #

PUBLIC INFORMATION OFFICE, 867-2468

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-376-68

FOR RELEASE: 4 p.m.

August 8, 1968

NASA INTERIM OPERATING PLAN

The National Aeronautics and Space Administration has arrived at a number of decisions and program adjustments to establish a basis for an interim operating plan for Fiscal Year 1969 and to guide the studies and analyses directed at decisions on its FY 1970 Budget.

The agency will operate under the interim plan pending completion of Congressional action on the FY 1969 appropriations and the apportionment of FY 1969 funds by the Bureau of the Budget.

NASA will present its final plans to the appropriate Congressional Committees before placing them in effect.

The interim plan reflects Congressional reductions of $362 million in NASA's appropriation requests for FY 1969. It also takes into account the possibility that NASA may be required to make further reductions under the Revenue and Expenditure Control Act of 1968. If the interim plan were maintained throughout the year, about $3.85 billion of new obligational authority would be used.

Under the interim plan, work on the Apollo program, on aeronautics, and on space applications will proceed at the levels authorized by Congress. Activities in many other areas have had to be curtailed, certain projects reduced in scope and other work deferred to future years. The principal adjustments embodied in the interim plan:

NASA civil service personnel will be reduced by more than 1,600 and contractor support effort at NASA installations by more than 2,000. The

- more -

interim plan contemplates adjustments between appropriation accounts to prevent substantially larger personnel reductions which would place in jeopardy the conduct of the Apollo and other current programs.

The Apollo Applications Program (AAP) will be funded at about $140 million, a reduction of about $300 million from the 1969 Budget request. As previously announced, production of Saturn IB launch vehicles will be terminated after Vehicle No. 214.

Saturn V production will not be continued after the first 15 launch vehicles. The AAP flight program will be delayed and limited in scope to one Saturn I Workshop, one revisit, and one Apollo Telescope Mount with a back up for each. Work toward post-Apollo lunar exploration and toward the Earth-orbiting Saturn V Workshop will be limited to studies.

The plan for a Mars 1973 mission is being revised to conform to sharply reduced funding in FY 1969. The instrumentation to be landed on Mars and the scientific return will be substantially less than in the program presented in the FY 1969 budget.

In the nuclear propulsion program, development of the flight weight NERVA engine will not begin in FY 1969 but a cadre of design and development personnel will be retained, thus preserving an option to initiate development of the flight weight engine in FY 1970. Advanced technology work will be continued and testing of one experimental engine will be completed.

NASA emphasized that the interim plan is being established to permit the agency to go forward with its program until such time as decisions on a final plan are possible.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-374-68
FOR RELEASE: Immediate

August 8, 1968

LOVELL REPLACES COLLINS ON THIRD MANNED APOLLO MISSION

Astronaut James A. Lovell, Jr., a Navy Captain, has replaced Astronaut Michael Collins as prime command module pilot for the third manned Apollo mission, the National Aeronautics and Space Administration announced today. Lovell, 40, held the same position on the mission's backup crew.

Collins, 37, Lt. Col., USAF, underwent successful spinal surgery on July 23. The recuperative period is estimated to be three to six months.

Astronaut Edwin E. Aldrin, Jr., 38, a Lt. Col., USAF, backup lunar module pilot, has been moved to the command module pilot position on the backup crew.

Astronaut Fred W. Haise, Jr., 34, has been assigned to the backup crew as lunar module pilot. A civilian, he is the first member of the astronaut group selected in April, 1966 to be assigned to a flight crew. Haise has been a member of the astronaut support team for the second manned Apollo mission and has specialized in the lunar module. He is married, has three children, and is a native of Biloxi, Mississippi.

Lovell joins Astronauts Frank Borman, 40, Col., USAF, commander, and William A. Anders, 34, Maj., USAF, lunar module pilot, on the prime crew for the mission scheduled in the first quarter of next year. Commander of the backup crew is Astronaut Neil Armstrong, 38, a civilian.

Astronaut Jack R. Lousma, 32, has replaced Haise on the support team for the second mission. He is a Marine Corps Major.

Astronaut Vance D. Brand, 37, a civilian, has joined the support team for the third mission. He succeeds Navy LCdr John S. Bull, 33, who was forced to withdraw from the astronaut program recently because of a pulmonary problem.

# # #

PUBLIC INFORMATION OFFICE, 867-2468

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #59

RELEASE NO: KSC-378-68
FOR RELEASE: Immediate

August 15, 1968

TEXAS FIRM BUILDING NITROGEN FACILITY TO SUPPLY SPACEPORT

KENNEDY SPACE CENTER, Fla.--A Texas gas firm will provide facilities and a continuous supply of gaseous nitrogen to the Kennedy Space Center's Launch Complex 39 at an estimated savings of $2.2 million over a three-year period.

Guy Thomas, Chief of the Propellants and Ordnance Branch, Support Operations at KSC, said gaseous nitrogen is used primarily to purge tanks, to place interstages in an inert condition by forcing out the oxygen, and to activate the many pneumatic-controlled valves on the Saturn V launch vehicle.

Presently, this extremely cold nitrogen is brought in by truck in a liquid form to a 500,000-gallon storage tank, he said, from where it is piped into the Converter Compressor Facility (CCF) east of the Vehicle Assembly Building for conversion to a gaseous form.

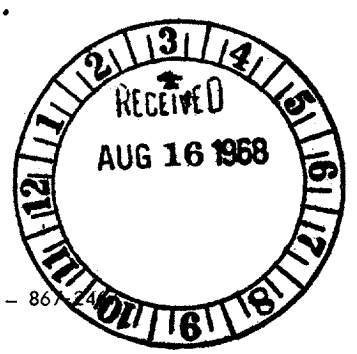
The Big Three Industrial Gas and Equipment Company, Houston, will provide high and low pressure gaseous nitrogen at a cost of 69.9 cents per 1,000 standard cubic feet.

To deliver the gas, the firm will soon lay a pipeline from the plant and storage facility immediately outside of Gate 2 on Merritt Island, along the west side of Kennedy Parkway, around the north of the VAB to the junction at the CCF.

The plant, which is being constructed on private property will be operated on one or both of two different modes, one a routine day-to-day operation and the other a high-use operation during tests or countdown to launch.

The CCF will be retained in operating condition as a backup system.

The new gaseous nitrogen facilities will be needed to fulfill requirements stipulated by KSC and the Office of Manned Space Flight, NASA Headquarters.



The Big Three Company is operating under a contract issued by the AF Logistics Command at San Antonio, Texas. The contract calls for an activation date of December 1, 1968.

The contract provides for 1.77 billion standard cubic feet yearly production for the first two years and 1.585 billion annually for the following three years.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-379-68
FOR RELEASE: Immediate

August 15, 1968

DR. HANS F. GRUENE DEDICATED TO JFK'S GOAL FOR LUNAR MISSION

KENNEDY SPACE CENTER, Fla. -- Dr. Hans F. Gruene is committed to fulfill one goal -- the same goal President Kennedy set out in his historic address to Congress on May 25, 1961:

"I belive that this Nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to earth."

And, as Director of Launch Vehicle Operations at the Kennedy Space Center under Launch Operations Director Rocco Petrone, Dr. Gruene is playing a major role in preparing for this great scientific and technological achievement.

He is responsible for preflight testing, preparation, and launching of the Saturn IB and Saturn V vehicles in the Apollo manned lunar landing program and operation and maintenance of associated ground support systems.

"We're giving our very best to make that goal," Dr. Gruene said seriously when asked what he was mainly concerned with in his work.

He said that while working on V-2 rockets at the Army's White Sands, New Mexico firing range in the late 1940's, he could not have predicted what has come to pass in the space program.

- more -

"One lesson we have learned," he added, "and that is that you need a goal if you want to accomplish anything. Otherwise, you will just limp along.

"There is an imminent danger now in slowing down the space program. A crash effort, certain to come later, will cost much more."

Dr. Gruene said he expects the Soviet Union to orbit manned space stations or another space spectacular soon and "it will be difficult to explain to our citizens and the world why we, as the wealthiest nation in the world, cannot match or better the Russians."

He expects nuclear upper stages for the Saturn V to be the next major vehicle development, minimizing the expense of building all new ground support facilities.

"Ion engines will possibly be utilized later for planetary travel," he predicted. He said these vehicles probably would be assembled on large orbiting space stations.

He added that man will have to prove he can work in space for the country to be ready for all contingencies.

Dr. Gruene said he first realized the potential of using rockets for space travel in 1944 when working on V-2's at the Peenemunde Guided Missile Center, Germany.

"Dr. Wernher von Braun started urging the use of rockets for space exploration," he said, "but the government at that time didn't like it."

After the war in 1945, Dr. Gruene served as guided missile design engineer at the Army's Ordnance Research and Development facility at Fort Bliss, Texas. Much of the work was done at White Sands.

In 1951, he became Chief of the Guidance, Control and Networks Section of the Missile Firing Laboratory at Redstone Arsenal, then under the direction of Dr. Kurt H. Debus, KSC Director. He was transferred to the Army Ballistic Missile Agency in 1956 in the same capacity.

Dr. Gruene joined the George C. Marshall Space Flight Center staff when that organization was established in 1960. There he served as Deputy Director of the Launch Operations Directorate, dividing his time between Huntsville and the Spaceport.

He was appointed to his present position in August, 1964.

The rockets that Dr. Gruene has worked on include the V-2, Redstone, Pershing, Jupiter, Atlas-Centaur, Saturn I, Saturn IB and Saturn V.

He was born in Braunschweig, Germany, in 1910. He earned his degree in electrical engineering at the Technical University in his hometown. Following graduation in 1935, he became a research engineer. He received his PH.D. in 1941.

Dr. Gruene lives at Cocoa Beach with his wife, Edith. Their son, Peter, will attend the University of Florida this fall and their daughter, Mrs. John Evans, lives in Huntsville, Alabama.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #60

news release

RELEASE NO: KSC-384-68
FOR RELEASE: Immediate

August 22, 1968

STRAZA INDUSTRIES RECEIVES NASA CONTRACT

KENNEDY SPACE CENTER, Fla. -- The National Aeronautics and Space Administration's John F. Kennedy Space Center has awarded a contract for $226,469.00 to Straza Industries at El Cajon, California.

The contract calls for a study to increase the performance characteristics and reliability of vacuum jacketed umbilical lines by developing improved components and maintenance procedures.

The Kennedy Space Center conducts manned and unmanned launches in the nation's program of space exploration.

-end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #160

RELEASE NO: KSC-391-68
FOR RELEASE: August 29, 1968

AEROSPACE FIRMS TO BE AWARDED BOND DRIVE FLAGS AT SPACEPORT

KENNEDY SPACE CENTER, Fla.,--Fourteen KSC aerospace support contractors will receive Minuteman flags, emblems of success in the United States Savings Bond drives, in a ceremony at the Spaceport on September 4.

The presentations will be made personally by Glen Johnson, National director of the U.S. Savings Bond Division of the Treasury Department.

The ceremony, in front of the main entrance of the Headquarters Building, will start at 11:30 a.m.

Four individuals will receive Flying Eagle Awards, special achievement acknowledgements given to campaign chairmen who exceeded their assigned quotas.

Dr. Kurt H. Debus, KSC director and chairman of the Brevard County Bond drive, will receive a Flying Eagle Award. The three others are: General T.J. Conway, Commander-in-Chief of the U.S. Strike Command and chairman of the Hillsborough County campaign; W.V. Roy, District Manager for Southern Bell Telephone, and A.P. Perez, president of Florida Power and Light Company.

Companies receiving the blue and white Minuteman flags are:

Bendix, Boeing, Catalytic-Dow, Federal Electric, General Dynamics, General Electric, Grumman, IBM, Lockheed, LTV Aerospace, McDonnell-Douglas, Pan-Am, RCA and TWA.

Three firms will be awarded white stars for the flags already in their possession. They are Chrysler, North American Rockwell and Martin Marietta.

# # #

PUBLIC INFORMATION OFFICE 867-2468

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-392-68
FOR RELEASE: Immediate

August 28, 1968

SCRIVENER FILLS KSC RESOURCES, FINANCIAL MANAGEMENT OFFICE

KENNEDY SPACE CENTER, Fla. -- George A. Van Staden, Director of Administration at the Kennedy Space Center, has named James M. Scrivener as Chief of the Resources and Financial Management Office.

In this capacity, Scrivener is responsible for planning, formulating, managing and coordinating the Center's resources and financial management program.

Scrivener came to NASA from the Department of the Army where he served as Director, Management Office, Office of Secretary of the Army, and as Executive Secretary to a number of Army Boards. He also served as Chief, Budget and Manpower Branch in the Secretary's Office.

He joined NASA Headquarters in 1962 as a Resources Program Specialist in the Manned Space Flight Program Control Directorate. In June 1966 he transferred to the Kennedy Space Center as Deputy Chief of the Resources Management Office.

He is married to the former Joy M. Wilson of Chattanooga, Tennessee. They have two children.

Van Staden said James A. St. Croix replaces Scrivener as Deputy Chief of the Resources and Financial Management Office.

# # #

PUBLIC INFORMATION OFFICE, 867-2468

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #160

RELEASE NO: KSC-393-68
FOR RELEASE: Immediate

August 28, 1968

ARLIN SMITH, WILLIAM ROCK RECEIVE NEW KSC APPOINTMENTS

KENNEDY SPACE CENTER, Fla. -- Admiral R. O. Middleton, Manager of the Kennedy Space Center's Apollo Program Office, has announced the appointment of two new office chiefs.

Arlin G. Smith, former head of reliability and quality assurance (R&QA) at Michoud Assembly Facility in New Orleans, was named chief of the Apollo Program's Launch Vehicle Office.

Before joining NASA, Smith served with the Army Ballistic Missile Agency at Redstone Arsenal, Alabama. He worked on the initial design of the instrumentation, tracking and safety devices for the Redstone, Jupiter, Juno, and Saturn vehicles.

Smith is a member of the American Society of Quality Control and the National Geographic Society. He is married and has one child.

William Rock comes from the NASA Headquarters, Washington, D. C., where he has been chief of quality assurance of the Apollo Program. He was appointed chief of the R&QA Office of the Apollo Program, which is also responsible for Apollo Applications R&QA.

Rock joined NASA in 1964 serving as chief, Quality Engineering Section at Goddard Space Flight Center, Greenbelt, Maryland, until 1967. Prior to 1964 Rock was with Eastman Kodak, the Army, and Martin Marietta in Baltimore.

Rock is a member of the American Society of Quality Control and the Baltimore Society of Engineers. He is married and has three children.

# # #

PUBLIC INFORMATION OFFICE, 867-2468

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #60

RELEASE NO: KSC-394-68
FOR RELEASE: Immediate

August 29, 1968

2,000 MEASUREMENTS COMPUTED FROM APOLLO 7 SPACE VEHICLE

KENNEDY SPACE CENTER, Fla. -- More than two thousand measurements are being taken of the performance of the Apollo 7 space vehicle systems during testing and checkout at Complex 34.

These measurements of pressures, temperatures, vibration, acceleration, voltages, current flow, fuel levels, switch and valve positions, guidance commands, and biomedical data are sent by telemetry transmitters to the Central Instrumentation Facility (CIF) in the KSC Industrial Area.

There the information is processed by computers that relay various portions of it to the Mission Control Center in Houston, the Marshall Space Flight Center in Huntsville, Alabama, and KSC's Complex 34 Launch Control Center, ACE display rooms in the Manned Spacecraft Operations Building, and to the Data Display Room in the CIF.

There are four separate telemetry systems carried on Apollo 7. The first and second stages, the Instrument Unit, and the Apollo spacecraft telemetry transmit signals that tell the story of what's going on aboard the vehicle.

Some of the measurements are relayed continuously, providing complete records from certain sensors. Other measurements are sampled at various rates, such as two or three times each second.

Because Apollo 7 will be a manned flight, the number of spacecraft telemetry measurements will be significantly greater than in previous unmanned missions. Telemetry from the launch vehicle stages remains substantially the same as on previous Saturn IB launches.

PUBLIC INFORMATION OFFICE, 867-2468

The telemetry signals received at the CIF are processed for display and analysis as the event is occurring, or are recorded for post-test study.

Ted Hershey, acting chief of the Telemetric Systems Division, Information Systems Directorate, says there are two types of displays for the quick look data.

"We prepare information from the telemetry input sources for entry into a computer. The computer does certain processing and presents the data on cathode ray tube devices, much like a television screen.

"Other data is displayed on strip charts or event recorders. The computer converts the raw data into signals that are routed to the proper recorders."

The Data Display Room in the CIF is manned by more than 150 people during tests and launch. These include S-IB, S-IVB and Instrument Unit engineers from Chrysler, McDonnell Douglas and IBM, respectively; NASA flight controllers watching the fueling operations, power distribution and control, propulsion system operation and vehicle guidance and control; and Launch Vehicle Operations technical personnel who monitor performance and are available with information and advice in the event non-standard conditions are noted in the data.

All telemetry data is recorded at the CIF so that the information is available for close study whenever required.

"You can reconstruct in detail," Hershey says, "exactly how all your systems performed and from this you can make a determination if you were able to achieve all of the goals that you had set out.

"You can learn more as far as the technology is concerned, by seeing if the systems did perform the way you expected them to in the difficult-to-simulate environments of launch and space."

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 Fleo

RELEASE NO: KSC-395-68
FOR RELEASE: August 29, 1968

MILA UNIFIED S-BAND STATION IS COMPLEX ARRAY OF EQUIPMENT

KENNEDY SPACE CENTER, Fla.,--The MILA Unified S-Band (USB) Station at the Kennedy Space Center -- a complex array of antennas, transmitters, receivers, computers, and recorders--is active now supporting the Apollo 7 pre-launch operations and will soon join its sister stations around the world to support the orbital phase of the mission.

The MILA station, under the direction of the Goddard Space Flight Center (GSFC), is a key segment of the Manned Space Flight Network (MSFN).

Jack Dowling is the GSFC Station Director here and Ted Helm heads the Bendix Field Engineering Corporation's team.

There is a staff of three GSFC engineers and some 200 Bendix engineers and technicians required to operate the station on a continuous basis.

Situated about one and one half miles south of the NASA causeway and east of the Visitors Information Center, the station is comprised of the following:

A sophisticated Unified S-Band Communications System, computers capable of the real time processing of telemetry data from and commands to the spacecraft, air-to-ground communications, a TV receiving system, a trajectory measurement system, associated recorders and ground communications, and its own electric power supply for reliability during operations.

MILA is integrated with other tracking stations through the MSFN Control Center at GSFC to provide mission support to the Flight Director at the Manned Spacecraft Center's Mission Control Center. It is linked with the KSC Launch Control Center, the Central Instrumentation Facility and Manned Spacecraft Operations Building to provide support to the Launch Directors.

To understand the new Unified S-Band System as required for Apollo, it is necessary to turn back to Mercury and Gemini to see how communications and tracking were handled.

-more-

The trajectory was tracked using C-Band radars. Voice communications, telemetry flight data and commands to the spacecraft from the Mission Control Center all used VHF transmitting/receiving equipment.

Each function required its own systems and antennas on board the spacecraft and at each of the stations around the world.

For Apollo, NASA decided to "unify" all of the flight support systems of the MSFN using only one set of radio frequencies so that only one antenna, transmitter and receiver system on board the spacecraft and on the ground could handle all ground to air communications.

The frequencies chosen were in the S-Band of the RF spectrum and hence the name Unified S-Band evolved.

This frequency, a power output of 20 kilowatts and large antennas provide a capability for support of the entire lunar mission.

The new USB System was designed to be readily integrated into existing basic MSFN stations without disrupting work that was in progress on Gemini.

The MILA USB Station is unique in that it is not only an operational station during the actual space mission, but also provides support to KSC and MSC during the long pre-launch test and checkout and launch periods.

For Apollo 7, Wiley White and George Jenkins, GSFC, are supporting Apollo 7 Test Supervisor Don Phillips from the MILA USB Launch Support Console. Helm and Lynch Berry, Bendix Corporation, will provide the support to the MSC Flight Director, Glen Lunney, from the MILA mission support console.

During this period the station also supports the MCC in the test, checkout and acceptance of operational computer "software" programs produced by GSFC for the MSFN and those produced by MSC for the MCC flight control facilities.

Since the USB System will be the only means of tracking and maintaining communications with the spacecraft, it is necessary prior to launch to assure that the MCC systems at MSC, MSFN systems at GSFC and the network stations and the flight systems in the spacecraft are compatible and sufficient to support the mission.

-more-

To accomplish this, certain KSC pre-launch integrated tests "marry" all of the mission support elements with those at KSC and the space vehicle on the pad.

In the final count, the MILA USB Station enters the worldwide network in support of MSC simultaneous with KSC.

During the mission, USB will handle continuous and simultaneous coverage of both the command and lunar modules.

The USB tracking and communications with the lunar module while it is on the moon will be provided by deep space facilities at Madrid, Spain; Canberra, Australia; and Goldstone, California, each employing 85-foot antennas.

The MILA USB Station and several other stations will use their 30-foot antennas for in-flight checkout of the spacecraft, to fill gaps in the coverage of the three lunar stations and to provide instrumentation coverage for checking the spacecraft in earth orbit.

Four land stations, MILA, Grand Bahama, Antigua, and Bermuda, and one instrumentation ship are required to provide continuous USB coverage from launch through insertion.

An additional seven land stations, Canary Islands; Texas; Guaymas, Mexico; Ascension Island; Carnarvon, Australia; Guam; and Hawaii, and two additional instrumentation ships are required to complete the USB system worldwide coverage requirements.

Also, the Apollo networks will include four ships and eight instrumented aircraft.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #60

RELEASE NO: KSC-390-68
FOR RELEASE: Immediate

August 26, 1968

APOLLO PROGRAM MAJOR ACTIVITY AT KSC

KENNEDY SPACE CENTER, Fla. -- The Apollo program, NASA's commitment to land astronauts on the Moon and return them to Earth before 1970, accounts for 67 percent of the 25,000 personnel engaged in launch operations and supporting activities here.

As of June 30, 1968, aerospace contractors involved in Apollo at KSC employed 15,709 while Government personnel committed to this program totaled 1,878.

There were 5,363 contractor employees in Saturn vehicle operations, and 2,856 engaged in Apollo spacecraft operations with the lunar module or landing craft, and command and service modules for the journey to the Moon and back.

In support of launch preparations, other contractors employed 4,170 while design tasks required 2,767. Five hundred and fifty-three contractor personnel support the manager, Apollo Program and the Launch Operations directorate staff.

Unmanned launch operations involving scientific spacecraft and the Delta and Centaur vehicles employed 1,184 contractors and 140 Government personnel.

The Apollo Applications Program, planning further use of Apollo vehicles and spacecraft after the initial lunar landing, is in an early phase and accounts for 29 Government employees and 13 contractors. Advanced missions employs 10 Civil Service personnel.

# # #

PUBLIC INFORMATION OFFICE 867-2468

KSC news release

KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-464-68
FOR RELEASE: Immediate

October 18, 1968

SATURN IB FLIGHT NEAR FLAWLESS

An early engineering evaluation of a Saturn IB launch vehicle which flew three astronauts into earth orbit Oct. 11 verified that the huge rocket performed almost flawlessly.

It marked the fifteenth flight of the Saturn I's and all were successful. The Saturn vehicles are developed under the technical direction of the NASA-Marshall Space Flight Center, Huntsville, Ala.

The rocket was launched from the NASA-Kennedy Space Center in Florida at 11:02 a.m. EDT during steady surface winds of about 20 knots -- almost twice as high as winds recorded during previous Saturn launches.

Flight events occurred very close to predicted times. Significant happenings during the flight are listed below with the numbers indicating elapsed seconds after liftoff. Predicted times are in parentheses.

Start pitch and roll 10.31 (10.36); end roll 38.48 (38.36); stop pitch 133.92 (134.66); inboard engines cutoff 140.65 (140.28); outboard engines cutoff 144.32 (143.28); stage separation 145.59 (144.58); guidance initiation 169.76 (168.28); S-IVB stage cutoff 616.76 (614.80).

Trajectories of both stages were extremely close to nominal and orbital insertion conditions were satisfactorily met.

First stage outboard engine cutoff came at 37.6 statute miles altitude, 37.3 miles range, and at a velocity of 5,197 miles per hour.

Orbital insertion came at 141.7 statute miles altitude, 1,175.6 miles downrange and at a velocity of 17,419 miles per hour.

The launch vehicle reached Mach 1 (speed of sound) at 62.3 seconds -- .7 seconds later than expected -- at an altitude of 4.7 statute miles.

- more -

PUBLIC INFORMATION OFFICE, 867-2468

Maximum dynamic pressure occurred at 78 seconds at an altitude of 7.1 nautical miles, which was .3 statute miles higher than nominal.

The Saturn IB booster's propulsion and mechanical systems operated satisfactorily. This includes the fuel pressurization, liquid oxygen pressurization, control pressure, retrorockets, and engine systems. The stage develops 1.6 million pounds thrust.

Performance of the second (S-IVB) stage and associated systems was normal. The stage is powered by a single J-2 engine which produces 225,000 pounds thrust at operating altitude.

J-2 engine mainstage operation was within one percent of expected performance. The S-IVB burn time was about 470 seconds and within one second of the predicted time. The engine stage pneumatic system and hydraulic system operated satisfactorily.

Propellant residuals at J-2 cutoff were more than expected. About 1,590 pounds of liquid oxygen (1,586 pounds were predicted) and 2,620 pounds of liquid hydrogen (2,049 pounds predicted) remained in the stage.

The auxiliary propulsion system performed satisfactorily.

The S-IVB stage emergency destruct system was rendered safe as planned.

The first and only liquid oxygen tank vent, initiated just after J-2 engine cutoff, dropped the liquid oxygen tank ullage pressure from about 38 pounds per square inch to about 20 pounds per square inch at vent termination.

Quick-look data indicates that the instrument unit's guidance system performed satisfactorily. All orbital guidance and sequencing functions performed correctly.

The instrument unit environmental control system was normal through the flight. Vehicle electrical systems also performed as expected. Batteries in the second stage and instrument unit exceeded their design lifetime. One was still operating after more than 60 hours.

The Saturn IB stage base region pressure and thermal data indicates that the environments were close to those expected.

Engineers and designers will take a look at a few minor deviations noted during the flight even though they had no adverse affect on the mission.

These include:

*Failure of the J-2 engine thrust chamber temperature to drop at the expected

rate just before liftoff. This caused a two minute and 45 second hold until the temperature dropped to an acceptable level.

*A small performance shift of less than one percent at about 394 seconds into the burn of the second stage J-2 engine. Similar shifts have been observed during static testing and, at this time, the shifts are not considered abnormal. But the cause is unknown.

*Of the 700 vehicle measurements taken during the flight, only four were possible failures and in addition, three are in question. One of the three was an external temperature measurement on the augmented spark igniter fuel line which indicated an erratic behavior at about 415 seconds into the second stage burn, but returned to normal prior to J-2 engine cutoff. An analysis is being made of this measurement.

*During the first stage boost phase, slightly higher gas temperature was recorded in the heat shield region than that recorded on previous flights. This was for a 20 second period only.

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA 32899

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-466-68

FOR RELEASE: Immediate

October 22, 1968

SPACEPORT SCHEDULES OPEN HOUSE FOR EMPLOYEE FAMILIES SATURDAY, OCTOBER 26, 1968

KENNEDY SPACE CENTER, Fla. - - Family members of thousands of Center badged personnel will visit KSC launch complexes and installations at the Spaceport and Cape Kennedy Air Force Station, Saturday, as KSC holds an open house for employee family members.

The open house, postponed from October 19 as Hurricane Gladys threatened the area, marks the 10th anniversary of the establishment of NASA.

KSC launch complexes and installations at Cape Kennedy and the Spaceport, including the Vehicle Assembly Building, the KSC Visitor Information Center, and the Air Force museum will be open for the occasion.

With the prospect of families of thousands of KSC's 25,000 government and contractor employees attending, the open house is not available to the public. However, NASA Tours will be in operation to accommodate the public during the open house.

Access for family members of KSC government and contractor employees will be limited to those accompanied by a badged employee. The Cape Kennedy south gate and KSC gates 2, 3, and 4 will be open for family access. Gates will be open from 9 a.m. to 4 p.m.

KSC
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 #60

news release

RELEASE NO: KSC-469-68
FOR RELEASE: Immediate

October 24, 1968

KENNEDY SPACE CENTER OPEN HOUSE TO COMMEMORATE NASA'S 10TH ANNIVERSARY

KENNEDY SPACE CENTER, Fla.,--The Kennedy Space Center Open House, commemorating the National Aeronautics and Space Administration's 10th Anniversary, will be held from 9 a.m. until 4 p.m. Saturday.

This special event will observe NASA's space achievements during the historic decade.

Families of NASA and contractor personnel will have an opportunity to tour the Spaceport and visit offices. Designated NASA/Contractor facilities at Cape Kennedy also will be open for the occasion.

Those areas of the Spaceport considered hazardous, or where visitors might interfere with operations, will be closed.

Gates 1, 2, 3 and 4 will be open to KSC families. To gain entry, each automobile must have at least one badged occupant. Visitors may bring cameras.

Regular guided bus tours will be in operation throughout the day from the Visitor Information Center (VIC). NASA/contractor families may also visit the VIC to view space-age exhibits and to hear science lectures.

The major points of interest will include the VIC, KSC Industrial Area, Cape Kennedy Industrial Area, Cape Kennedy launch complexes, and KSC's Launch Complex 39.

Launch Complex 39, which includes the Vehicle Assembly Building, (VAB), Launch Control Center (LCC) and Pads A and B, is on Merritt Island five miles north via Kennedy Parkway from the Industrial Area.

The north Cape Road will be closed, requiring the use of the NASA Causeway for travel between Cape Kennedy and Launch Complex 39.

# # #

2A-3
#60

JOHN F. KENNEDY SPACE CENTER, NASA
Kennedy Space Center, Florida 32899

Public Information Office
867-2468

August 29, 1968

Release No: KSC-397-68
For Release: September 1, 1968

Activity at NASA's Spaceport is at an all-time high with two manned Apollo spacecraft launches and five unmanned launches scheduled before the end of this year.

In addition, assembly and checkout is in progress in the Vehicle Assembly Building of Apollo/Saturn 504, to be launched early in 1969.

The quickening pace of Apollo launch operations was emphasized by Dr. Kurt H. Debus, Director of the Kennedy Space Center, last week:

"This Center is entering a critically important period of major launch operations," Dr. Debus said.

"We accepted the commitment to achieve two significant milestones in the next 120 days: Launch of the first manned Apollo Saturn IB vehicle; and launch of the first manned Apollo/Saturn V vehicle.

"Either operation would place heavy demands upon our launch and support teams. Together they constitute a challenge that ought to inspire every member of the Government-industry team to his best effort.

"These complementary missions will bring the Apollo program closer to its original objective and reinforce our determination to achieve the manned lunar landing in 1969."

Launch preparations for Apollo 7, scheduled for mid-October, are well underway. The Saturn IB rocket that will place this first manned Apollo capsule into earth orbit is assembled at Launch Complex 34.

There, Chrysler Corporation and McDonnell Douglas crews are checking out the rocket, putting it through extensive prelaunch tests. Chrysler builds the first stage and McDonnell Douglas the second, or upper stage. The instrument unit which guides the two rocket stages, is built by International Business Machines.

All rocket systems are tested, including propellant lines and tanks, engines, electrical and mechanical systems and ground support equipment, under the technical direction of KSC launch vehicle test conductors.

The systems are checked out stage-by-stage and then on a combined systems basis to assure each works properly with the others. Final prelaunch testing is in progress now that the spacecraft is mated atop the rocket.

The Apollo 7 command and service modules arrived from North American Rockwell's plant in May. Teams of North American personnel test the spacecraft in the Manned Spacecraft Operations building, located in the Spaceport industrial area.

Working around the clock, the crews prepared the capsule for unmanned altitude chamber tests, followed by two manned altitude chamber runs. Preparations for the chamber tests included combined systems tests which involved some new spacecraft features and modifications.

The main features were a complete fireproofing of the cabin and a quick release hatch. A crewman can now open the hatch in three seconds in the event of an emergency.

About a month was necessary to test and check out the spacecraft before it was ready for the first manned test at altitude.

Powerful pumps removed most of the air from the three-story tall steel tank to create the vacuum conditions of space in which the Apollo spacecraft must function.

The first manned test took place on May 26 and lasted more than nine hours. The prime crew for the Apollo 7 mission, astronauts Walter Schirra, Don Eisele and Walter Cunningham, "flew" the spacecraft at simulated altitudes of 226,000 feet.

On July 29, the backup crew of Tom Stafford, John Young and Gene Cernan spent some eight hours at above 200,000 feet altitude. Both tests were successful.

"The major purpose of the tests is to prove out all spacecraft systems under altitude conditions", said Schirra, commander for Apollo 7. "The spacecraft, the test team and we, the crew, had a good run."

Following this, the spacecraft was mated with the spacecraft lunar module adapter. The adapter encloses the bug-like lunar module, built by Grumman Aircraft, during its flight into space and is an integral part of the spacecraft. However, no lunar module will be flown on the Apollo 7 mission.

Following installation of final components in the Manned Spacecraft Operations building, the spacecraft was transferred to Complex 34 on August 9.

Crews at the launch pad mated the spacecraft with the launch vehicle for final prelaunch tests, now underway.

During one phase of testing, the countdown demonstration test, fuels and oxidizers for both rocket stages will be loaded aboard.

A second phase of the countdown test will see fueling simulated and the astronauts participating in the tests as they would on launch day. The Flight Readiness test follows the countdown test, and then comes the actual four-day countdown and launch.

In general, spacecraft checkout can be broken down into four categories. During the first phase, technicians prepare the spacecraft for checkout and test after the modules are delivered to KSC. It then undergoes combined systems testing, followed by altitude runs and preparations for the move to the launch pad.

The final checkout period for both the rocket and spacecraft is at the pad where the combined space vehicle is checked out.

In addition to more than 8,200 contractor personnel directly involved with Apollo spacecraft and launch vehicle "hardware", support organizations are being kept busy with various support functions. For example, close to 4,200 contractor personnel support launch preparations at the Space Center, while almost 2,800 are involved in design tasks.

Among the support contractors, Technicolor Corp. is responsible for photographic documentation of assembly and checkout milestones, while Ling-Temco-Vought provides technical publications documentation. Launch support at Complexes 34 and 37 is supplied by the Chrysler Corp., while this service is provided by the Bendix Corp. at Complex 39. The General Electric Co. provides services and materials necessary for Saturn checkout and technical communications are the responsibility of the Federal Electric Corp.

Dow-Catalytic personnel provide engineering services and Trans World Airlines, the Space Center's housekeeper, is responsible for operating and maintaining production engineering shops and other support facilities.

As preparations continue for the flight of Apollo 7, Apollo 8, the first manned Saturn V, scheduled for December, is being readied for launch.

Tests are underway, including some modifications to the first stage to eliminate the vibration problem encountered on the Apollo 6 flight. During the second week of August, the three stages and instrument unit were mated with a mock spacecraft for test purposes.

The Boeing Co. builds the first stage of the Saturn V. The second stage is built by North American Rockwell and McDonnell Douglas supplies the third stage. International Business Machines supplies the instrument unit for both Saturn IB vehicles and the Saturn V. The instrument unit guides and controls the flight of all Saturn launch vehicle stages.

The command and service modules for Apollo 8 arrived at the Center early in August and underwent receiving inspection prior to being mated in the altitude chamber. Combined systems tests will follow after the umbilical connections between the modules have been completed.

Apollo/Saturn 504, scheduled to fly during the first quarter of next year, is being prepared in the Vehicle Assembly Building. The second stage is in a low bay where modification and checkout work is in progress. The lunar module has been delivered to the Manned Spacecraft Operations building where a mission simulation related to the spacecraft integrated systems test was completed in mid-August.

During these periods of testing, two support organizations play essential parts. One is involved with spacecraft checkout and the other with launch vehicle testing.

The checkout of the complex Apollo spacecraft systems is processed by a computerized system called ACE (Acceptance Checkout Equipment). With five ACE stations at KSC, test conductors can monitor spacecraft continuously and may view any test data as desired.

The prelaunch tests of Apollo command, service and lunar modules may involve as many as 3,500 different measurements, many of which occur so rapidly and in such numbers that it would be infeasible to perform them manually. By contrast, only 88 measurements were taken on the one-man Mercury spacecraft.

The ACE system is located at areas where Apollo spacecraft undergo checkouts, both at Cape Kennedy and the Spaceport.

At the Central Instrumentation Facility, located in the industrial area, UNIVAC, IBM and General Electric computers and electronic equipment receive and record prelaunch and launch data from Saturn launch vehicles. The building houses processing stations for telemetry, in-flight television, facilities for data reduction and storage and presentation and distribution in real time to other NASA Centers.

Approximately 1,350 Saturn IB rocket measurements and 3,200 Saturn V measurements are received at the Central Instrumentation Facility.

While rockets and spacecraft are being readied for launch, astronaut crews continue training for their missions.

The command module simulator, located at KSC, is one of their prime training tools. Crews go through "dress rehearsals" in the simulators, duplicating all conditions of the mission from liftoff to return to Earth.

For example, astronauts rehearse rendezvous and docking the Apollo with the lunar module as they will in an actual lunar module mission. Then two astronauts transfer to a lunar module simulator, practicing descent to the moon's surface.

They can "see" the moon approaching until they are only a few feet away. After "landing" they can return to the Apollo command module as it orbits the moon and practice rendezvous, dock and transfer for flight back to the Earth.

During this training, the crews' performances are monitored by flight controllers in the Mission Control Center, Houston, who also confront the astronauts with sudden problems. In this way, the crew is conditioned to react to unexpected contingencies that might occur in flight.

In summing up KSC's total commitment to the Apollo program, Dr. Debus said,

"We know clearly what is expected of us. We know how much will be required. We must, therefore, proceed to fulfill the commitment with a sure sense of direction, ever mindful that attention to detail will repay us many times over in the added assurance of success. I am confident that the men and women of the KSC organization will measure up to that requirement."

He concluded by pointing out that of the 25,000 personnel engaged in launch and support operations at the Center, 67 percent were involved in the Apollo program.

Unmanned launch operations involving scientific spacecraft, the Delta and Centaur vehicles, and the Apollo Applications Program, accounted for the balance of the work force.

-end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-470-68
FOR RELEASE: Immediate

October 24, 1968

INTERNATIONAL AERONAUTICAL FEDERATION MEMBERS BRIEFED ON U.S. SPACE EFFORT

KENNEDY SPACE CENTER, Fla.,--Thirty-eight engineers and scientists, many of them from foreign countries, toured the facilities of the Spaceport and Cape Kennedy today and were briefed on the U.S. program of space exploration.

The group, representing 14 overseas nations and the United States, consists of members of the International Aeronautical Federation (IAF). They were welcomed to the Kennedy Space Center by its Director, Dr. Kurt H. Debus.

They were briefed on the National Aeronautics and Space Administration's scientific satellite program by John J. Neilon, KSC's Deputy Director of Unmanned Launch Operations.

E. R. Mathews, Deputy Manager of the Apollo Program at the Spaceport, outlined the manned lunar landing project.

The group received an additional briefing on the lunar mission in a firing room of the Launch Control Center at Launch Complex 39.

They toured NASA's scientific satellite launch complexes on Cape Kennedy and Launch Complex 39 at the Spaceport where Apollo/Saturn V space vehicles are assembled, checked out and launched in the manned lunar landing program.

They viewed the AS/504 vehicle being prepared in the Vehicle Assembly Building, and AS/503 - Apollo 8 - on its launch pad being readied for launch in December.

#. # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #61

RELEASE NO: KSC-473-68
FOR RELEASE: Immediate

October 29, 1968

COMMUTING TRAFFIC PATTERNS CHANGE AT KSC

KENNEDY SPACE CENTER, Fla.,--Some changes in commuting traffic patterns became evident today in the most recent electronic counts of vehicles entering and leaving the NASA installation and Cape Kennedy Air Force Station in a 24-hour period.

The flow in and out of Gate 1, South gate of Cape Kennedy, amounted to 21,644 vehicles on October 10 compared to 19,800 in July and 20,334 in January, 1968.

A sharp increase was noted at Gate 3, located on the NASA Causeway connecting KSC with the Florida mainland. Here the tally was 16,699 compared to 13,940 in July and 10,695 in January.

While the movement via Gate 2, on SR 3, Merritt Island, increased over July, the percentage hike was not as high as at Gate 3. At Gate 2, 10,064 cars entered and left the Center compared to 8,546 in July and 9,052 in January.

Gate 4, located on the approach via the Titusville Causeway over the Indian River, clocked 6,920 in one October day compared with 7,059 in July and 5,054 in January.

Gate 4TB on Kennedy Parkway north of the Vehicle Assembly Building registered 4,725 cars compared with 5,062 in July and 5,378 in January.

The daily volume at all access gates has reached 60,000 vehicles.

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-475-68
FOR RELEASE: Immediate

October 30, 1968

CITRUS COMMISSION REPRESENTATIVES TOUR KENNEDY SPACE CENTER

KENNEDY SPACE CENTER, Fla.,--Sales representatives of the Florida Citrus Commission who are attending a sales meeting at Cape Canaveral this week toured the Spaceport and Cape Kennedy today.

Nearly 100 representatives, accompanied by Commission Chairman O. D. Huff and Key Scales, advertising committee chairman, viewed the National Aeronautics and Space Administration's facilities at the Spaceport and on the Cape.

The group is holding its meeting at the Cape Kennedy Hilton hotel.

On Cape Kennedy they visited Launch Complex 17 where two NASA spacecraft -- Pioneer D and an Intelsat -- are being prepared for launch aboard Delta vehicles.

They also viewed Launch Complex 36 where an Orbiting Astronomical Observatory and a Mariner Mars spacecraft are to be launched aboard Atlas/Centaur rockets.

At Launch Complex 39 of the Kennedy Space Center, they saw the giant Apollo 8 space vehicle on its launch pad, being prepared for a manned mission in December.

They also toured the rest of Complex 39, including the Vehicle Assembly Building and Launch Control Center.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 Hel

RELEASE NO: KSC-475-68
FOR RELEASE: Immediate

October 31, 1968

APOLLO 7 LAUNCH INCREASES MAIL VOLUME

KENNEDY SPACE CENTER, Fla. - - The successful flight of Apollo 7 has caught the imagination of young people throughout the free world, increasing the volume of letters to the KSC Education Office.

More than 2,000 letters have been received since October 15, an average of 220 a day, and five times the volume prior to launch.

Many are from young children, expressing their admiration for the astronauts. "I'd like to go to the moon," one girl wrote, "but I'd probably chicken out before I got there. So you must be awfully brave. I wish I could see you in person."

A letter from a boy asked, "Now that moon travel is inevitable and we will soon be exploiting its resources, is it possible for individuals to claim or purchase land on the moon? "

Some letters provide suggestions. "We were talking about the three Apollo 7 space men needing a shave. My father and aunt said the whiskers would float around in the spaceship. My suggestion is, why don't they get a rope and go outside and shave? "

A class of third graders sent crayon drawings of their concepts of the Apollo 7 mission from liftoff to recovery. Another class sent a package of letters asking such questions as "Is it scarey in space? " and "What does earth look like from space? "

Many teachers have written requests for teaching aids for use in science class. Each receives a kit providing information on a broad spectrum of space science subjects.

The 2,000 letters received since October 15 included 76 from Canada and 86 from other countries. Most domestic mail came from Florida, Tennessee and New York.

-end-

KSC news release
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-480-68
FOR RELEASE: Immediate

November 4, 1968

WEBB, U.S. AND BRITISH SCIENTISTS TOUR SPACEPORT'S LAUNCH FACILITIES

KENNEDY SPACE CENTER, Fla. -- James E. Webb, who retired as Administrator of the National Aeronautics and Space Administration last month, visited Kennedy Space Center and the Cape Kennedy yesterday (Sunday).

Accompanying him was a group of British and American scientists who visited the facilities NASA operates here for launching scientific satellites and manned spacecraft.

NASA launches scientific spacecraft designed and built in foreign countries as part of its program of international cooperation in space exploration.

Accompanying Mr. Webb were:

Professor Brian H. Flowers, chairman of Britain's Science Research Council (SRC); Mr. C. Jolliffe, Director of SRC's University Science and Technology Division, and Mr. J. F. Hosie, Director of the SRC Astronomy, Space and Radio Division.

Also in the visiting party were Mr. R. G. Voysey, scientific counselor of the British Embassy; Dr. Philip Handler, chairman, of Duke University's biochemistry department; Dr. Harvey Brooks, dean of Harvard University's engineering and applied science department; Mr. Herman Pollack, director of International Scientific and Technological Affairs, Department of State, and John S. Coleman, executive officer of the National Academy of Sciences.

They were accompanied on the tour by Dr. Kurt H. Debus, Director of Kennedy Space Center.

They were briefed on unmanned satellites by Robert H. Gray, KSC's Director of Unmanned Launch Operations, and Donald C. Sheppard, ULO's Chief of Spacecraft and Vehicle Support Operations.

- more -

The group received a briefing on NASA's program to land Apollo astronauts on the moon from Rocco A. Petrone, KSC Director of Launch Operations.

The scientists were shown the HEOS (Highly Eccentric Orbiting Satellite) which KSC will launch in December for the European Space Research Organization and the next INTELSAT, to be launched for COMSAT and on behalf of the International Telecommunications Satellite Consortium. This is a group of 62 nations which jointly own INTELSAT spacecraft in the global communications satellite system.

They also viewed the Pioneer D spacecraft and the Orbiting Astronomical Observatory being prepared for launch at Complex 17 and Complex 36.

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA 32899

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #61

RELEASE NO: KSC-481-68

FOR RELEASE: Immediate

November 6, 1968

KSC CONTRACTORS RELOCATE

KENNEDY SPACE CENTER, Fla., -- The reduced Saturn IB launch program resulting from NASA budget reductions, which was recently announced by the Center, will release administrative space in NASA facilities on Cape Kennedy Air Force Station over the next eight months.

The Center plans to relocate the remaining Chrysler Corporation launch personnel to Saturn IB Complexes 34 and 37. Chrysler produces the IB first, or booster stage. Other structures in the Cape's industrial area occupied by Chrysler will be made available to KSC contractors engaged in the Apollo Saturn V program.

The availability of Government-owned buildings will permit contractors to relinquish commercial administrative space leased in Cape Canaveral and Cocoa Beach. Accordingly, by July 1, 1969, some General Electric Company personnel located in Cape Canaveral and Cocoa Beach will be relocated to Cape Kennedy.

Concurrently, the Boeing Atlantic Test Center, as part of the overall cost reduction effort, will consolidate activities in Cape Canaveral and Cocoa Beach and release some commercial, leased office space.

# # #

KSC
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #161

news release

RELEASE NO: KSC-482-68
FOR RELEASE: Immediate

November 7, 1968

FORT LAUDERDALE FIRM GETS SPACEPORT CONTRACT

KENNEDY SPACE CENTER, Fla. -- The John F. Kennedy Space Center has awarded a $151,789 contract to Systems Engineering Laboratories, 6901 W. Sunrise Boulevard, Fort Lauderdale, Fla., for a system to evaluate the quality of telemetry data used in support of checkout and launch of Saturn V space vehicles.

The Kennedy Space Center conducts unmanned and manned launches in the National Aeronautics and Space Administration's program of space exploration. The Saturn V vehicle launches the Apollo spacecraft in missions aimed at landing U.S. astronauts on the moon.

# # #

KSC news release
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JA3 #61

RELEASE NO: KSC-483-68
FOR RELEASE: Immediate

November 7, 1968

KSC DESIGN ENGINEERING GROUP WRAPPING UP WORK FOR APOLLO 8

KENNEDY SPACE CENTER, Fla. -- Launch Complex 39 Engineering Manager Don Buchanan credits an overall Design Engineering effort in successfully preparing for its role at the Kennedy Space Center in the manned Apollo 8 mission.

Buchanan is responsible for the design, including any modifications, of the three mobile launchers, one mobile service structure, two giant tracked transporters and related ground support equipment.

"The biggest jobs," he said, "have been to modify the equipment for this vehicle, assure all adequate safety measures and implement designs through configuration controls to assure that the hardware is compatible with the software.

"There's a lot of difference in preparing for a manned launch. There is so much more to consider when you throw in that human element.

"We'll be in the best position we've ever been in as related to Saturn V launches."

Steve Harris, Chief of the Technical Management Branch of the LC-39 Engineer Manager Division, added: "All known requirements have been met. We're ready to support the Apollo 8 mission."

Orval Sparkman, Deputy Chief of the LC-39 Engineering Manager Division, said DE has replaced the pure oxygen supply to the spacecraft with an oxygen-nitrogen supply source for ground testing.

Also, extensive modifications have been made in Swing Arm 9, through which astronauts ingress and egress the spacecraft.

- more -

Swing Arm 9 was modified so that it will be parked approximately 12 degrees from the spacecraft. This would enable the swing arm to get back to the spacecraft hatch within 10 seconds after an emergency signal instead of within 30 seconds from the full park position.

Harris said another DE modification provides for a 1,800-foot-long slide wire terminating just outside the periphery of the pad. Egress begins at the 320-foot level of the mobile launcher tower as an alternate escape route for astronauts and closeout crew should trouble be encountered.

Extensive changes have been made in the mobile launcher and mobile service structure water systems which include a safety spray for astronauts and closeout crews as well as for fire fighting.

"We've also made quite a few modifications to cut down refurbishment time between launches," Buchanan said. "We have done this by hardening the area -- using removable hand rails, protecting the environmental control system ducts, adding some structural steel in the mobile launcher and generally "beefing-up" previously damaged equipment on the mobile launcher."

Design Engineering has completed the design of the big jobs for Apollo 8, and installation, by the operators, is scheduled to be completed by the Flight Readiness Test milestone.

# # #

KSC news release

KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-484-68
FOR RELEASE: Immediate

November 7, 1968

KSC MANNED FLIGHT PREPARATIONS FOCUSED ON LAUNCH COMPLEX 39

KENNEDY SPACE CENTER, Fla., -- The manned launch effort at the Kennedy Space Center is now focused on Launch Complex 39 (LC-39) where work on two Apollo/Saturn V space vehicles is progressing well toward flights in December and the first quarter of 1969.

Apollo 8 will mark the first manned launch from LC-39. A decision is expected shortly on whether it will be an earth orbital or lunar orbital flight.

Electrical mating of the space vehicle has been completed, followed by the plugs-in test, a major overall check.

The next major milestone is the Flight Readiness Test. After this test, engineers will begin preparations leading to the Countdown Demonstration Test, the final test before commiting the space vehicle to launch.

The prime and backup crews for Apollo 8 are at KSC on a permanent basis through launch, working in the simulators in the Flight Crew Training Building and studying mission plans.

The prime crew is composed of Commander Frank Borman, Command Module Pilot James Lovell and Lunar Module Pilot William Anders. The backup crew members are Commander Neil Armstrong, Command Module Pilot Edwin Aldrin and Lunar Module Pilot Fred Haise.

Apollo 9, is scheduled as the first space vehicle to fly all three spacecraft modules.

A ground docking test of the ascent stage of Lunar Module 3 with Command Module 104 has been successfully accomplished in an altitude chamber in the MSO Building.

The prime crew for Apollo 9 is Commander James McDivitt, Command Module Pilot David Scott and Lunar Module Pilot Russell Schweickart and the backup crew is Commander Charles Conrad, Command Module Pilot Richard Gordon and Lunar Module Pilot Alan Bean.

# # #

PUBLIC INFORMATION OFFICE, AREA CODE 305-867-2468

KSC news release
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A.3 #61

RELEASE NO: KSC-488-68
FOR RELEASE: Immediate

November 12, 1968

APOLLO 8 LUNAR FLIGHT

The National Aeronautics and Space Administration today announced that the Apollo 8 mission would be prepared for an orbital flight around the Moon.

This decision was reached following a thorough review of the Apollo Program and NASA's overall readiness to undertake the next step toward the national objective of a manned lunar landing next year.

Apollo 8 will be launched from Cape Kennedy no earlier than December 21. Timing of the "launch window" is solely dependent on technical considerations. Among these are the Moon's monthly swing around the Earth, launch restrictions at Cape Kennedy, daylight conditions in the launch and recovery areas, and preferred photographic lighting for sites of interest on the Moon.

Crewmen for the Apollo 8 mission are Commander Frank Borman, Command Module Pilot James A. Lovell, Jr., and Lunar Module Pilot William A. Anders. There will be no lunar module on this mission, but Anders will fly in the position reserved for the lunar Module pilot on fully configured Apollo missions.

The Apollo 8 mission will be an "open-ended" mission conducted in steps referred to as "plateaus" or "commit points." Conducting the mission in this manner provides both maximum crew safety and maximum benefit through alternate flight mission selection as the flight proceeds.

Each plateau includes a thorough check of crew, system and equipment operations. Only when all conditions are satisfactory will the decision be made to commit to the next plateau. The commit points in the Apollo 8 mission are:

- Prelaunch checkout, terminating in launch.

- Earth parking orbit, which ends with translunar injection.

- Translunar coast, preceding lunar orbit injection.

-more-

Conducting Apollo 8 in this manner provides for various alternate missions, which include a low Earth orbit flight, a high apogee mission up to 60,000 miles, or a circumlunar operation.

Launch will be from Complex 39A at Kennedy Space Center on an easterly azimuth between 72 and 108 degrees. The Saturn V launch vehicle will place the spacecraft and the SIVB third stage into a 115-statute-mile high parking orbit around the Earth during which third stage and spacecraft checkout will be accomplished.

The third stage will then be reignited during the second or third parking orbit to inject the space vehicle into a translunar trajectory. The injection will provide a circumlunar "free return" to Earth if the decision is later made not to insert the spacecraft into lunar orbit.

Within two hours after translunar injection, the command and service module will separate from the rocket's third stage. Midcourse corrections may be made using the spacecraft's reaction control system. The translunar coast will take about 66 hours from Earth orbit to the Moon.

At translunar injection from Earth orbit the spacecraft speed will be increased from approximately 17,500 to about 24,200 miles per hour. During coast to the Moon the speed will decrease to about 2,120 mph when the spacecraft is about 30,000 miles from the Moon. At this point lunar gravity will cause the spacecraft to accelerate as it approaches the Moon.

The spacecraft service propulsion system will be used to slow the spacecraft from about 5,700 mph to 3,720 mph, inserting it into a 196 by 70 statute mile lunar orbit. Approximately two revolutions later the system will be fired again to circularize the orbit at 70 statute miles above the surface of the Moon.

Crew activities during lunar orbit will include navigation and landmark sightings and photography. After ten trips around the Moon (each orbit lasting about two hours) the service propulsion system will be fired again to boost the spacecraft out of lunar orbit onto a trans-Earth trajectory. The return flight from the Moon to Earth will take about 57 hours.

-more-

Prior to reentry into the Earth's atmosphere, the command module will be separated from the service module using the latter's reaction control system. Elapsed time from launch to landing in the Pacific Ocean will be about six days.

The decision to fly the lunar orbit mission followed a full review of the readiness of the hardware, crew and support systems by Dr. Thomas O. Paine, Acting Administrator of NASA.

The intensive review process has been underway since Aug. 19, when NASA announced that lunar module (LM) operations would be rescheduled from Apollo 8 to Apollo 9 because LM #3 had been delayed in checkout. LM #3 will now be flown next year on the fourth Saturn V (AS 504), which will be the first manned flight of the LM and third manned mission for the command and service modules.

In the announcement, Lt. Gen. Samuel C. Phillips, Apollo Program Director, said the purpose of the change in the flight schedule was to permit the program to make the maximum progress with the Apollo/Saturn V space system, while working out all problems encountered in the LM 3 checkout.

He said in the Aug. 19 announcement that the Apollo 8 flight would be prepared as an Earth orbital mission but that training and planning would include the possibility of a high Earth orbit, circumlunar or lunar orbit mission.

In recommending the selection of the lunar orbit mission for Apollo 8, Dr. George E. Mueller, Associate Administrator for Manned Space Flight, told Dr. Paine that it would advance the Apollo Program by:

- Providing valuable experience in validating the Apollo CSM communications and navigation systems at lunar distance.

- Completing the final verification of ground support elements and onboard computer programs.

- Increasing the understanding of environmental conditions in deep space and the proximity of the Moon.

- Confirming the ability of the crew to see, use and photograph landmarks during a lunar mission.

-more-

- Providing new measurements of variations in lunar gravitational potential discovered in NASA's lunar orbiter program.

The decision to undertake a flight around the Moon was reached after a long series of reviews which included:

- Final certification of solutions to the anomalies revealed during the unmanned Apollo 6 flight last Spring.

- Detailed analysis and review of the results of the Apollo 7 mission.

- Complete ground tests of Saturn V components, including insulation, structural and pressure tests, before the Apollo 8 command and service modules were certified ready for lunar flight.

- Complete design certification review of all launch vehicle and spacecraft subsystems.

The final review yesterday by Dr. Paine, with all top NASA officials participating, included an assessment of the total risks involved, readiness of all flight and support systems and the degree to which the recommended lunar orbit flight would advance the Apollo Program toward the nation's long-standing objective of a manned lunar landing and return by the end of next year.

"After a careful and thorough examination of all systems and the risks and benefits involved in each of the mission alternatives," Dr. Paine stated, "we have concluded that we are ready to fly this advanced mission around the Moon. Frank Borman and his crew are eager to proceed, our engineers unanimously recommend this mission, and, without being overconfident, we believe that we understand the hazards involved and are now ready to take this next step forward in the nation's space program."

-end-

KSC news release

KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-496-68
FOR RELEASE: Immediate

November 19, 1968

REMARKS OF THE VICE PRESIDENT

KENNEDY SPACE CENTER, Fla. - - During his tour of the Kennedy Space Center Tuesday, Vice President Hubert Humphrey sat in briefly on a meeting of the Apollo 8 Flight Readiness Review. He was introduced to the group by the Associate Administrator for Manned Space Flight, Dr. George Mueller.

DR. MUELLER: I'd like to interrupt for just a moment if I could to ask the Vice President, who's been kind enough to visit with us to say a few words on this occasion.

MR. HUMPHREY: Thank you very much, Dr. Mueller, and Gen. Phillips, gentlemen and ladies. I haven't made a speech for some time, so ... (LAUGHTER)...and I hope what I have to say right now is more effective than what I did have to say... (LAUGHTER).

Mrs. Humphrey and I have just returned from a few days down in the Virgin Islands and we stopped over a day in Miami and I asked Dr. Debus if it would be all right if we'd come by here at Cape Kennedy at this particular establishment and spend a few hours and take a good look at, or at least should I say a prayerful look at Apollo 8 and to see some of you that have been so involved in this great endeavor. I'm sure you know that in my recent work as Vice President, one of the most satisfying experiences I've had has been at the Space Council. The Space Council is one of the assignments that's given to the Vice President and I will be talking with the next Vice President about the work of this Council.

I don't really think that I've contributed a great deal to it, but I've learned a great deal. And I have had the chance to meet some very wonderful people who have lent a degree of excellence to American technology, American scientific capability, American education, management and all that goes into making possible one of these programs.

I believe that the lesson that I've learned out of the space program is the attention to detail as I've noticed that you're doing here. And there isn't any doubt the difference between success and failure in anything, gentlemen, is attention to detail, and also a few breaks...(LAUGHTER)...and a good deal of hard work. I don't think there's any substitute for that.

- more -

I want to think you for what you have done, not only for yourselves and for your particular project or the area of your own responsibility. I know that means a great deal to you, because you're professional people, and anybody that has for himself, either by his own design or by his education and training, what we call "professionalism" want to do a good job. But I think what you've really done is to give the American people a lift, and we need to continue to do so. Some of the drama of the space program has evaporated, to be sure, because now it's become somewhat accepted that you can do what you say you can do. Nevertheless I think that without this program the nation would feel very much behind in the world picture and would feel a letdown.

We take it for granted, now, but without it, it would be more or less like being without some of the other great things that we have in our society that we take for granted.

I want to compliment you on being able to launch this tremendous Apollo program that had its difficulties. Every new endeavor has many difficulties, as you better know than I. We've had some tragedy and like most things that are sorrowful and tragic, we learn a great deal from it.

But we've had some wonderful successes, and more to come, and all of you here have made possible those successes, and many people, by the thousands, that are associated with you.

I wish we could once again reestablish this sense of achievement that comes with this program because, from the worker in the factory to the management, to the financial people, to the universities and the technicians and the engineers and the scientists, to all of those who are the managers and the management personnel, this sense of achievement means so much now. We ought to try and emphasize it wherever we can.

I hope that I can get down here on the 21st for the launch of Apollo 8. If I can't, I'll surely be thinking about the men that are involved, both on the ground and those that will be taking off in that moon flight and orbiting of the moon. But I think what's most important is that we have developed in this country now, the capacity to do tremendous things. And that's the lesson that we need to learn.

I've gone around the country a great deal, talking to university audiences and I've always been proud of the space program. It's been downgraded, as you know, because of the monies that go into it when we have desperate needs in other parts of our society. But I think each one of us knows that this has contributed greatly to the civilian structure of America, to the social and economic structure of this country.

I've never felt that the program was extravagant; in fact, I have felt that it has been somewhat at times underfunded. I think we'll pay a price for that, but that's one of the decisions that had to be made. What it has really meant will yet to be determined. I, for example, have been pushing hard for what we call "Earth Resource Satellites." As Dr. Mueller knows, and some others, because I think the possibilities of return on that program are immense and I know what it's done in medicine. In many areas it's revolutionized some of the medical treatment that we have today and surely a great deal in terms of the equipment that is used. We know what it has meant in the field of the computer and miniaturization. It's made the so-called technological gap between ourselves and Western Europe, I think, and the rest of the world. This program has made this possible and how we have been able to apply it, not only to spacecraft, but how we've applied it in industry, all the way across the board. It's kept this country competitive.

I've been a salesman for the space program. I think the space program has been one of the great forces for industrial efficiency and industrial competiveness onthe part of the United States with the rest of the world, with our high costs, because of our high standard of living in this country. So you've got a lot to sell.

Now of course we have the spectaculars when we have these flights. Without them, I'm sure, it would be difficult to sustain public support, because the public has to have something that's tangible and at times dramatic. But you men know better than anyone that behind these spectaculars are the hundreds of thousands and millions of manhours of hard work and planning and of cost examination, of inquiry, like you're making here, of detail which all lends itself to perfection and sophistication, and that's what this program has meant to me.

I think it's a great endeavor for the excellence of the American society. I only wish that we could have the same degree of attention to some of the human factors in society that we have to these scientific and technical factors. But I have come to the conclusion that if you insist that people perform very well in their science and technology and engineering and their production, they may very well even perform quite well in their social behavior over the long period of time. At least in my work you've got to have that belief, and I want to tell you, in recent days I've had to have a lot of faith...(LAUGHTER)... but I still have it.

I think that the country will get along very well. I intend to be around quite a little while. If you have any new ways of finding out how you extend life and make it more meaningful and more vital, you let me know if you discover it. Don't keep it a secret. (LAUGHTER)

I would like to come back at a later time and compliment you both as a public official and as a citizen. In the meantime, after January 20th, I'll be around just as a taxpayer watching you very carefully. (LAUGHTER) And as a citizen, but always your friend, and always grateful for the privilege that's been mine to be associated with the space program.

Thank you.

(APPLAUSE)

DR. MUELLER: Mr. Vice President, I know I speak for every one in this room when I say that we appreciate all that you've done to support the space program and look forward to many many years of continuing association with you. Thank you ever so much.

MR. HUMPHREY: I'll be available as a consultant. (LAUGHTER)

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #601

news release

RELEASE NO: KSC-583-68
FOR RELEASE: Immediate

VAL

SUPPLY, TRANSPORTATION SERVICES AT SPACEPORT BUSY IN 1968

KENNEDY SPACE CENTER, Fla. - - Logistics operations at the Spaceport in 1968 were keyed to a fast-paced schedule of activity that will continue in the New Year.

As the Apollo Program gained momentum in 1968, cargo streamed into KSC at an average rate of 15 million pounds a month. At the same time, new systems for speeding up service and cutting down costs were being implemented.

A Logistics Management Information System is now fully operational. George E. Harrington, Chief of the Logistics Division, said the new system enables KSC managers to know at all times the status of their budget for supplies and materials.

Procurement this year was reduced $368,000 by a new Spares Accounting and Replenishment System for redistribution of available assets. SARS pinpoints the location of materials in organizations and offices throughout the Spaceport. Inventory controls restrict duplication in ordering.

"The system is accomplishing the desired results," said Harrington, "and we expect it to achieve even more savings in coming months."

The workload for the Supply Branch during the past year was about 45,000 requisitions per month, representing more than 1.6 million units handled.

David E. Mahoney, Supply Branch Chief, said that 90 percent of all orders were filled without delay. A computerized system automatically initiates orders for supplies that are almost depleted.

- more -

An automated delivery system now under construction will speed the routing of orders during 1969. A "towveyor" pulls cars of stock along a track through the center of Central Receiving. Conveyors route materials requiring packaging, special handling, or which will be delivered to users.

The 25,000 employees using the Space Center's supply system request everything from typing paper to computer parts, from film for a spacecraft's cameras to primers for painting steelwork at launch pads.

Whatever the request, chances are it will be filled. In all, the inventory for common supplies at the Spaceport includes 54,000 different items.

The year was a busy one for the Transportation Branch.

All of the flight hardware for three Apollo/Saturn V space vehicles was received in the past 12 months. In 1969, the schedule is even heavier with stages of four Apollo/Saturn V vehicles scheduled for arrival.

The Transportation Branch also processes the arrival of unmanned spacecraft and satellites each year.

James H. Herring, Transportation Branch Chief, explained that another function of his unit is to act as liaison between KSC and the General Services Administration office here. GSA provides motor vehicle services for the Space Center.

Last year the Spaceport's 1,600 vehicles traveled some one and a half million miles a month. "The heavy launch schedule contributed to this figure," Herring explained. During the same time period, the KSC shuttle services transported about 10,000 passengers a week.

There was a 25 percent increase in the total number of inbound freight shipments. Outbound shipments increased 35 percent. Outbound freight includes space flight data and equipment scheduled for modification or repair.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-584-68
FOR RELEASE: Immediate

SPACEPORT SAFETY SETS NEW RECORD

"Spaceport employees are setting new records for on-the-job safety," reports George Kontra, Chief of the Industrial Safety Branch.

"We're having the lowest accident frequency rates in the history of the Center," he added.

Kontra explained that the rates are based on the number of disabling accidents per 1,000,000 manhours worked. Only job-related accidents are included in the computations.

He also pointed out that there are three categories of rates: a combined Center-wide rate for both NASA and contractors; for Federal employees only, and for contractors only.

The combined rate through November was 1.45, compared to 2.25 last year and 3.19 in 1966. Sixty-six lost time accidents occurred out of 45,450,635 hours worked during the first 11 months of the year.

Federal employees had a rate of 0.32, compared to 1.14 NASA-wide.

In the third category, the contractors at KSC had a 1.63 rate which compares favorably with the 2.17 reported last year for the aerospace industry.

According to national safety standards, over two-thirds of the Spaceport workers have high to medium hazard jobs.

"Many of the hazardous jobs are those related to launch preparations," noted Dave Scofield of Industrial Safety. "With heavy work loads coming up on Apollo 8, for examply, good safety practices become essential."

- more -

Safety's Ken Burdick added, "Thinking about the technical side of a job isn't enough. Good safety means not only thinking about what you're doing, but also HOW you're doing it."

The Safety Office introduced some new projects to its accident prevention program this year. One--"It Really Happeded At KSC"--is a series of bulletins distributed every two weeks. The bulletins depict unusual, but real, accidents reported here.

The Office has published "A Guide for Contractor Safety Plans at KSC" which assists companies to meet NASA safety requirements. Contractors are also being encouraged to have company safety award programs, "which help workers become more aware of safety" says Kontra.

Kontra, Scofield and Burdick agree that awareness is a key to good safety habits. Their job, they believe, is to help all KSC employees to "Think Safety."

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A3 #41

news release

RELEASE NO: KSC-585-68
FOR RELEASE: Immediate

SPACEPORT PERSONNEL OFFICE KEEPING WORK ROSTERS FILLED

KENNEDY SPACE CENTER, Fla. - - The KSC Personnel Office continues to fill jobs vacated by the resignation or transfer of NASA employees as 1968 draws to a close.

B. W. Hursey, Personnel Officer, says some of these Civil Service jobs will be filled with new engineering graduates. KSC recruiters visited 21 colleges during October and November and have scheduled visits to 11 additional schools.

In the past five months KSC added 81 employees. Five professional administrative, 38 engineers and scientists, seven technicians and 31 clerical employees were hired.

During the same period 107 employees, including 61 clerical workers, left KSC. This is considered a normal attrition rate for an installation the size of the Spaceport.

Nearly half the NASA force is composed of engineers and scientists. Professional administrative employees comprise about 19 percent of the work force, with about three percent of those positions held by women; another 19 percent are clerical and 16 percent are technicians.

The 2,985 NASA employees at KSC include two temporary employees, 19 Youth Opportunity Corps and 44 co-op students.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

news release

RELEASE NO: KSC-586-68
FOR RELEASE: Immediate

EIGHT HEADS OF STATE VISIT SPACEPORT IN 68

KENNEDY SPACE CENTER, Fla. -- Heads of State from eight foreign countries, a dozen Ministers, nine Ambassadors, the Vice President and First Lady of the United States head the list of distinguished guests of the Kennedy Space Center during 1968.

More than 21,000 guests were handled by the KSC Protocol Office during the year, with 1,252 escorted tours of the Spaceport and briefings on Center operations provided for the visitors. This compares with 998 tours in 1967, 802 in 1966 and 926 in 1965.

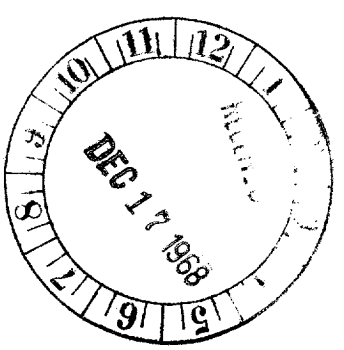
The King of Norway, the President of the Republic of Chad, the Emir of Kuwait, and the Prime Ministers of Thailand, Mauritius, Swaziland, Iran and New Zealand paid visits to the Center.

Vice President Hubert Humphrey and Mrs. Lyndon B. Johnson came here during the same busy week in November. Mr. Humphrey was on his way back to Washington following a post-election vacation. The First Lady and her daughter, Mrs. Charles Robb, were on a coast-to-coast "Discover America" tour.

Protocol Officer Ed Johnson reported the Ambassadors who visited the Center during the year were from Australia, Argentina, Brazil, the Maldine Islands, Thailand, the Vatican and Swaziland.

From behind the Iron Curtain, the Deputy Prime Minister of Romania visited KSC.

- end -



KSC news release

KENNEDY SPACE CENTER, FLORIDA 32899

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RELEASE NO: KSC-595-68

FOR RELEASE: Immediate

December 24, 1968

NEW SPACEPORT FACILITIES CONSTRUCTED IN 1968

With most major construction completed at the Kennedy Space Center, emphasis shifted in 1968 to modifying existing facilities and initiating new changes for assembling, checking out and launching Apollo/Saturn V space vehicles.

Design Engineering has supervised these modifications, which included manrating some support facilities in areas ranging from Launch Complex 39 to the Industrial Area.

At LC-39, extensible platforms have been activated within the Vehicle Assembly Building's High Bay 3 to support checkout of the Lunar Module 3 spacecraft, scheduled to be carried on Apollo 9.

High Bay 2 has been activated and is supporting assembly of the Apollo 10 space vehicle.

Towers A and B, on the western side of the VAB are occupied by administrative and technical support personnel.

Three Radio Frequency and Communications Rooms, nearing completion on the 29th Floor of Tower E, link Bays 1, 2 and 3 with remote facilities at the pad and the Industrial Area.

Instantaneous fire deluge systems were installed on all movable work platforms within the VAB's three bays.

Other improvements at LC-39 include:

Protective overlays added to the VAB and LCC roofs;

Crawlerway surfacing was extended to Bay 2 on the western side of the VAB; and

Security fencing now encloses the VAB, mobile launcher refurbishing area and the transporter parking area.

- more -

Additional LC-39 improvements include:

Protective covering for electrical interfacing between the Mobile Service Structure and Pads A and B for launch environment;

An addition to the Acceptance Checkout Equipment (ACE) room on the service structure's minus 22-foot level;

Modification of the service structure and mobile launcher firex systems, including Spacecraft Lunar Module Adapter and Launch Escape System deluge and cooling;

Clearing of areas around Pads A and B for spacecraft land impact; and installation of enviromental control systems in the Emergency Egress Rooms beneath Pads A and B.

In the Spacecraft Industrial Area, more than 300 modifications were made to the Manned Spacecraft Operations Building's manned spacecraft checkout area.

Included were some 100 changes in the altitude chambers' electrical and mechanical interfaces.

The MSO's high and low bays were transformed into limited access areas.

Two additional ACE stations in the MSO were activated in 1968, bringing the total to six in that building.

The major modification in the Industrial Area during 1968 was addition of east and west wings to the Headquarters Building.

In conjunction with the 120,000-square-foot addition to the Headquarters Building, a new parking lot for 300 cars was completed behind the west wing.

The new and larger Occupational Health Facility was added.

Fire alarm systems were modified throughout the Industrial Area and new smoke-sensitive detectors installed.

A 1,600-foot-addition was made to the Central Telephone Office to house 500 new main lines.

At NASA facilities on Cape Kennedy: The service structure at LC-17A was raised fourteen-and-one-half-feet to accommodate the new long-tank Delta space vehicle. Similar modification will begin next year at 17B.

Saturn launch complexes 34 and 37 have been secured.

A nitrogen gas generating and distribution system was installed on both pads at LC-36.

An annex to Hanger S was completed for a work and primate quarantine area in support of the Biosatellite program.

- end -

KSC
KENNEDY SPACE CENTER, FLORIDA 32899
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

2A-3 △61

news release

RELEASE NO: KSC-596-68
FOR RELEASE: Immediate

December 24, 1968

1968 SUCCESSFUL YEAR FOR LAUNCHES BY KSC

KENNEDY SPACE CENTER, Fla. -- The flight of Apollo 8 capped a year of successful space launches accomplished by the John F. Kennedy Space Center, NASA.

The 36-story high Saturn/Apollo space vehicle lifted off at 7:51 a.m. Dec. 21. It propelled astronauts Frank Borman, James A. Lovell and William A. Anders toward a lunar rendezvous 220,000 miles in space.

"The Apollo 8 mission at this point has been a perfect mission," said Lt. Gen. Samuel Phillips, Apollo Program Director.

The spacecraft carrying the first men to see another body in space at close range will splashdown in the Pacific Ocean south of Hawaii on Dec. 27.

Another manned space flight set the stage for the unprecendented events of late December.

The Apollo 7 mission, Oct. 11 to Oct. 22, marked the first manned flight of the lunar landing program. The spacecraft lifted off atop a Saturn IB rocket from Cape Kennedy. Crewmen were astronauts Walter Schirra, Donn Eisele and Walter Cunningham.

Referring to Apollo 7, Rocco Petrone, Director of Launch Operations at KSC, said that "an excellent launch performance led to what has been described as a 101 percent mission."

There were two other Apollo missions in 1968. The Apollo 6 flight April 4 was the second unmanned test of the Apollo-Saturn V space vehicle. A lunar module was tested during an unmanned orbital flight aboard a Saturn IB rocket Jan. 22. This was Apollo 5.

- more -

The lunar module is the vehicle which astronauts will use to land on and liftoff from the moon. It will be tested in space by astronauts during the flight of Apollo 9, early in 1969.

The year 1968 began for KSC with the successful launch of Surveyor VII by a Centaur Rocket, Jan. 7. The last unmanned spacecraft in the Surveyor series soft-landed on the moon, returned thousands of photos to earth, and performed other experiments. The five successful Surveyor spacecraft returned 89,000 photographs from the lunar surface, helping pave the way for a future landing by American astronauts.

On Dec. 7, Centaur placed an Orbiting Astronomical Observatory in orbit. The scientific satellite carries cameras, telescopes and other equipment to map new stars and define the chemical makeup of stellar objects.

There were three Delta launches from KSC complexes on the Cape in 1968.

The Highly Eccentric Orbit Satellite, HEOS-1, was placed in orbit Dec. 5. HEOS is owned by the European Space Research Organization.

Scientists and engineers representing 10 European nations and the U.S. took part in the HEOS launch. The satellite is studying cosmic rays and other phenomena.

A communications satellite, INTELSAT III, was placed in orbit by a Delta vehicle Dec. 19. Operated by the Communications Satellite Corporation, INTELSAT can transmit 1,200 voice channels or four color television channels simultaneously.

On Nov. 8, a Delta vehicle injected Pioneer 9 into an orbit around the sun. The Pioneer Spacecraft is designed to provide data on the properties of solar wind and interplanetary magnetic fields.

The final Atlas-Agena launch by NASA from Complex 13 took place March 13, when an Orbiting Geophysical Observatory was placed in orbit. The satellite contains a variety of experiments and instruments, including radiation and ionization counters, for geophysical research.

Kennedy Space Center also conducts launches at the Western Test Range in California. There were two successful launches there in 1968, both with the Delta vehicle.

Explorer XXXVIII, placed in orbit July 4, is designed to measure radio noise sources. A TIROS weather satellite, orbited Dec. 15, became part of the U.S. operational, world-wide weather analysis network.

There were 12 successful launches from Kennedy Space Center, and the Western Test Range. There were two failures, one with a Delta vehicle carrying a communications satellite, one with a Centaur carrying an applications technology satellite. A failure at the Western Test Range involved a Nimbus weather satellite atop a Thor-Agena launch vehicle.

- end -