June 2, 2000 Vd. 39, No. 11



Spaceport News

America's gateway to the universe. Leading the world in preparing and launching missions to Earth and beyond.

http://www-pao.ksc.nasa.gov/kscpao/snews/snewstoc.htm

John F. Kennedy Space Center

Mission update STS-106 and STS-92

STS-106 is scheduled to launch no earlier than Aug. 19. The mission will complete the work begun by the crew of STS-101. Mission managers decided earlier in the year to distribute between the two flights the duties originally planned for one mission.

Astronauts on the STS-106 mission will complete service module support tasks on orbit, transfer supplies and outfit ISS for the first long-duration crew.

Following STS-101, the Space Shuttle Atlantis will make a fast turnaround for the flight of STS-106.

The crew consists of Commander Terrence W. Wilcutt, making his fourth flight; Pilot Scott D. Altman (second flight); American Mission Specialists Daniel C. Burbank (first flight), Edward T. Lu (second flight) and Richard A. Mastracchio (first flight); and Russian Mission Specialists Yury Ivanovich Malenchenko (second flight) and Boris V. Morukov (first flight).

The STS-92 mission is scheduled to launch no earlier than Sept. 21.

Spaceport News editorial change

Beginning with the next issue, *Spaceport News* has a new editor. Any submissions or stories or photos should be directed to Kathy Hagood at katharine.hagood-1@ksc.nasa.gov. She can be reached at 867-2468.

KSC's on the move

Weekend activities complete process

The KSC reorganization shifted into high gear over Memorial Day weekend when about 600 workers were moved to new locations at the center during the KSC 2000 Major Move.

The big round-the-clock move, conducted by about 200 permanent and 150 temporary workers, was used to group employees in realigned directorates. The effort is part of positioning KSC as the Spaceport Technology Center.

"We thoroughly prepared for the move to make it as painless as possible," said Bill Holden, deputy of the KSC 2000 move project team. "But it's inevitable with a move of this scale that some workers will be inconvenienced. We hope that everyone will have patience and remember how important this move is to achieving the Center's goals."

Most of the moves affected NASA employees in Headquarters. About 140 workers were

(See Move, Page 7)

KSC unveils winners of Honor Awards

Kennedy Space Center held its annual Honor Awards ceremony on May 25 at the Visitor Complex. More than 200 individual employees and work teams were honored for contributions they made to the KSC mission during 1999.

A complete listing of award winners from the ceremony begins on Page 3.



The Space Shuttle Atlantis soars into the predawn sky on May 19, with the exhaust from the solid rocket boosters providing illumination. After three previous weather scrubs, conditions were ideal for a launch.

Station gets boost from crew

On the fourth attempt, the weather was perfect.

Space Shuttle Atlantis pierced the pre-dawn dimness on May 19, carrying a crew of seven on a course to the International Space Station.

Atlantis docked with the station, and two astronauts completed a space walk of nearly seven hours, making repairs and attaching supplies. The mission will prepare the Station for the arrival of the Zvezda Service Module, expected to be launched by Russia in July 2000.

It was the first rendevous with the Space Station since STS-96, about a year earlier.

Before undocking, the crew used the Shuttle's thrusters to lift the station into a higher orbit. The 98th Space Shuttle mission concluded with a landing at Kennedy Space Center early on the morning of May 29.

Proximity is danger for cranes

Employees urged to keep distance

The bald eagles nesting along Kennedy Parkway lately have had competition for the attention of KSC employees. And while the desire for a closer look is natural, workers need to keep some distance from the Center's feathered trio.

A family of sandhill cranes — two adults and a chick — have become residents in the Vehicle Assembly Building area. The large birds, distinguished by a bright red patch on their foreheads, have shown the ability to stop traffic as they cross Kennedy Parkway.

The cranes' choice of territory puts them at risk from more than just fast-moving cars. Dorn Whitmore, a ranger at Merritt Island National Wildlife Refuge, urges KSC employees to resist the temptation to approach or feed the birds

"People think it's good for the birds, but it's not," Whitmore said. "The birds are wild, and they need to be left to feed on grasshoppers, bugs, frogs and lizards. They learn (if fed) to associate humans with food and they bond with people and then they're always going to be around, and that's not healthy for



A sandhill crane and its chick search for bugs in the grass around the Vehicle Assembly Building. A family of two adults and their fledgling have been seen often in the area lately.

them. If they lose their fear of humans, that often leads to their deaths."

Feeding could cause the birds to become a nuisance, in which case rangers would have to remove them

As evidence of those dangers, Whitmore said that rangers were forced to capture another adult sandhill crane near the Space Station Processing Facility on May 17. KSC employees had called the Refuge to report the bird hanging around near the facility and acting strangely.

Joanna Taylor, another ranger at the Refuge, said the bird was taken to a local wildlife care agency. She said the crane appeared to be ill and suspected human feeding as the cause.

Whitmore said sandhill cranes were first seen on the refuge only two or three years ago. He estimates about six cranes now live on the refuge, and the chick is believed to be the first born on the 140,000-acre preserve.

There are two varieties of sandhill cranes – one that lives year-round in Florida and a larger sub-species that migrates from Northern states. Whitmore said the family living near the VAB appears to be the Florida strain.

Whitmore added that the refuge may place signs along Kennedy Parkway warning drivers about the cranes.

Another stage

is set for TDRS

At Hangar J, Cape Canaveral Air Force Station (CCAFS), work is begun on the Centaur upper stage that will be used with an Atlas IIA rocket to launch the latest Tracking and Data Relay Satellite (TDRS) June 29 from CCAFS. The Atlas/Centaur launch vehicle is manufactured and operated by Lockheed Martin. Atlas IIA is capable of lifting payload systems to geosynchronous transfer orbit.

Flag gets salute on launch day

Flags generally spend their entire lives flying in one location, but the banner waving near the countdown clock for the launch of STS-101 was a well-traveled piece of fabric.

The flag made an appearance on the shore of the turn basin near the KSC Press Site as part of the "Old Glory Travels America's Freedom Road Tour." Since June 13, 1999, the flag has been transported to 11 states and taken part in 59 events at such sites as schools, government centers, national parks and military installations.

The tour is operated by Century Link America, an organization based in Valley Forge, Pa. Dave Pawlewicz, the project developer, said the tour will end when the flag and materials associated with it are inducted into the Smithsonian Institution next year.

"The idea was to take the same flag and travel all around the country with it, to historical sites and schools, wherever we can honor the history of the country and its spirit," Pawlewicz said. "At each stop we try to get people involved and try to capture the spirit of what they do."

The appearance at KSC for the launch on May 19 marked the flag's second brush with the space program. It had previously flown at Johnson Space Center during a ceremony for the return of the STS-93 crew featuring commander Eileen Collins.

The flag also flew at the Astronaut Memorial Foundation in late April and was at the Press Site for the three previous launch attempts of STS-101.

The flag tour's planned future events include stops at Normandy American Cemetery in France, a Pacific Fleet ceremony at Midway Island, the Republican National Convention in Philadelphia, the Democratic National Convention in Los Angeles and the 2000 Olympic Games in Sydney, Australia.



1999 Kennedy Space Center Honor Awards

The Kennedy Space Center Honor Awards ceremony was held May 25 in the Visitor Complex's IMAX II Theater. More than 200 employees were recognized for their efforts in 1999 that contributed significantly to helping advance the center's mission. Among the honors presented were the KSC Director's Award, the Equal Opportunity Award and Medal, two Presidential Rank Awards, the Secretary of the Year Award, Outstanding Leadership Medals and four service awards. Individual and group awards also recognized contributions made to the center.



Stephen C. Robling

KSC Director's Award

The Director's Award is the highest award that the center confers on an employee. The award honors an employee who has exemplified through personal effort and innovation the highest standards and commitment to the application of continual improvement principles and practices or for the accomplishment of a job-related task of such magnitude and merit as to deserve special center recognition.

The award is given to Stephen C. Robling for leadership in developing a world-class metric-based Shuttle surveillance process and implementation of metrics to evaluate KSC's implementation of NASA's strategic goals.

The Honoree Award is the highest form of recognition bestowed upon an employee by the NASA Space Flight Awareness Program. Recipients are selected for their professional dedication and outstanding achievement in support of the human spaceflight program.

STS-96

NASA

Robert J. Beil
Louise Y. Boyd
Gregory R. Clements
Roy Mitch Colvin II
Denise R. DeLaPascua
E. Ellen Dozier
Stephenie M. King
John T. Madura
Paul A. Mogan
Cary J. Peaden
Joan J. Robbins
Susan D. Sitko

CONTRACTOR The Boeing Company

Michael S. J. Cianciotto Paul J. Cummins Scott R. Cummins Eric E. Herrburger Robert G. Miller Hubert R. Ridens Sharon L. Tolbert James B. Werpy

Space Gateway Support

Claudia L. Dorn Weldon R. Dupriest Wendy J. Law

Lawrence W. Salberg William J. Sokol

Dynacs Enginnering

Barry J. Meneghelli

Rocketdyne

Ray C. DeLaune

United Space Alliance

Russell X. Brucker Ronald A. Butler Mary J. Curnutte Cris E. Curtis Georgia A. Durham Stephen A. Friend Joe R. Fuqua Daniel J. Gompers Donald W. Hedman Beckey M. Henn Steven P. Lloyd Michael D. Parker Tommy G. Shinholster

USA Subcontractors

Kris Balukonis – Hamiliton Standard, Space Systems International, Inc.

George D. Davis – Allied Signal, Inc., Instruments Systems

USBI Co.

Donald M. Beary Trina L. Bridges Carol L. Cabot Michael A. Carpenter Evelyn E. Garcia Douglas O. Keueneke Michael A. Lanum Stacy L. Shoemaker

STS-103

NASA

Spaceflight Awareness Awards

Juan P. Calero Kenneth A. Hale Maxine S. Johnson Ronnie R. Lawson Lawrence D. Maggie Kenneth L. Newton James P. Niehoff Jeffrey G. Spaulding Stephen J. Swichkow

Karon J. Buchner

CONTRACTOR

United Space Alliance

Albert A. Barbuscia Tamora E. Blaue Robert C. Brock Martin L. Carlson Larry A. Carr Duc M. Chau Vernon D. Cheney Betty J. Clark Kimberly S. Falzone Michael W. Fowler Terryson Fredricks Mark A. Grinder Barbara J. Harris Michael H. Olka Anil K. Patel Rodney G. Pratt Linda K. Smith Hal L. Snow Michael D. Stoner Dale S. Walker Judith R. Weaver Judy A. Worrells

USA Subcontractors

Bill Keenan - Hamilton Sundstrand, A United Technologies Company

Keith F. Palmer - Olsten Staffing Services, Inc.

The Boeing Company

Craig C. Catizone
Carol A. Hoar
Thomas S. Livengood
Tara S. Miller
Janet C. Ruberto
Brian D. Scofield
Mitchell E. Sestile
Larry A. Wood

Dynamac Corporation

Neil C. Yorio

Dynacs Engineering Co., Inc.

David P. Floyd

Lockheed Martin Space Operations

Kennth A. Castner

Space Gateway Support

Thomas M. Buchman James L. Fisher Gregory M. Hooper Charles A. Malloy Ricky D. O'Quinn

Rocketdyne

Michel Hedrick

Wiltech Corporation

Michael L. Kosiba

Outstanding Leadership Medals

The NASA Outstanding Leadership Medal is awarded for notably outstanding leadership that has had a pronounced effect upon the technical or administrative programs of NASA.

The award may be given for an act of leadership or for sustained contributions based on an individual's effectiveness as a leader, the productivity of an individual's program or demonstrated ability to develop the administrative or technical talents of other employees.

Michael J. Benik received the award for exceptional management and leadership demonstrated in forming the key engineering organization required for the Expendable Launch Vehicle Program transition to Kennedy Space Center.

David A. King was honored in recognition of outstanding leadership and contributions to the Nation's Space Shuttle Program.

Ann D. Montgomery received her award for demonstrating outstanding leadership for the Kennedy Space Center Safety and



Michael J. Benik

Mission Assurance organization through a period of rapid change and increased demands.

Michael A. O'Neal was honored for exceptional leadership and management of the Exploration Think Tank at Kennedy Space Center.

Kenneth J. Payne was given the award for outstanding leadership in building a success oriented, proactive, positive work environment ensuring the effective utilization of Kennedy Space Center and Logistics program assets.



David A. King



Ann D. Montgomery



Michael A. O'Neal



Kenneth J. Payne

Chandra X-ray **Observatory Mission Awards**

Exceptional Achievement Medals

The Exceptional Achievement Medal is awarded for a specific accomplishment or contribution clearly characterized by a substantial and significant improvement in operations, efficiency, service, financial savings, science or technology that contributes to NASA's mission.

David F. Downing Dian L. Hardison

Group Achievement Award

The Group Achievement Award is given in recognition of an outstanding accomplishment made through the coordination of many individual efforts that has contributed substantially to NASA's mission. This award recognizes the accomplishments of either a group comprised of all government employees or a group of both government and non-government personnel.

KSC STS-93 Chandra/Inertial Upper Stage Processing Team

NASA Group Achievement Awards

The Group Achievement Award is given in recognition of an outstanding accomplishment made through the coordination of many individual efforts that has contributed substantially to NASA's mission.

This award recognizes the accomplishments of either a group comprised of all government employees or a group of both government and non-government personnel.

KSC Technology Roadmap Refinement Team FIRST Robotics Competition Planning Team Joint Base Operations Support Contract Action Team Expendable Launch Vehicles Resources Management Office Kennedy Space Center X-33 Umbilical Test Team Wiring Inspection and Repair Multi Element Integrated Test Lab Emulator Development Team

KSC Group Achievement Award

KSC Year 2000 Team

Strategic Leadership **Awards**

This award embodies the future direction of KSC through demonstrated leadership and initiative, drive, break-through performance and change; production of results; action on problems and implementation of solutions, and, supporting, encouraging, and motivating others to make forward choices on behalf of NASA and KSC.

The award recognizes and motivates employees' commitment in supporting and implementing the Agency, enterprise, strategic plans, and the KSC Implementation Plan.

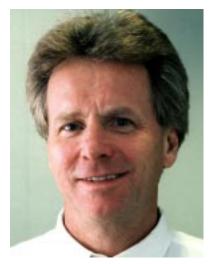
Rita Willcoxon received the award in recognition of outstanding engineering leadership in development of the Mars Ascent Vehicle Project as well as



Rita Willcoxon

establishing a long-term technical partnership between Kennedy Space Center and the Jet Propulsion Laboratory.

John Straiton was honored for providing outstanding leadership and guidance to the Multi-Element Integrated Test team during



John Straiton

planning, requirements development, and testing activities.

Jan Heuser received the award in recognition of outstanding efforts to establish a partnership with the State of Florida and to develop and carry out a successful



Jan Heuser

strategy to fund and construct the Space Experiment Research and Processing Laboratory. These efforts and this successful project are pathfinders for future projects with the State and other new partnerships for the Kennedy Space Center.

Distinguished

This medal is awarded to any individual who is not an employee of the Federal Government or was not a Government employee during the period in which the service was performed. The award is granted only to individuals whose distinguished accomplishments

Patricia J. Stratton of United Space Alliance was given the award in recognition of the outstanding contributions made to the Kennedy Space Center mission of safely and successfully processing the Space Transportation System.

Randall E. Duncan of United Space Alliance was honored for Preparation of Orbiter Electrical Power Distribution and Control System.

Michael D. Stirling of The Boeing Co. was honored in recognition of outstanding accomplishments during the evaluation and protection of orbiter electrical wiring.

Exceptional Service Medals

Service Medal

contributed substantially to the NASA mission.

exceptional accomplishments in Test, Checkout, and Launch

The Exceptional Service Medal is awarded for significant performance characterized by unusual initiative or creative ability that clearly demonstrates substantial improvements or contributions in engineering, aeronautics, space flight, administration, support or space-related endeavors that contribute to the mission of NASA.

Nancy Bray Brenda B. Brooks Barbara L. Brown Erik C. Denson Dennis Ray Fougnie William G. Franklin Ralph Fritsche Laura N. Gosper William A. Holden II Lawrence T. Mauk Steven J. Sullivan David A. Wansley

Public Service Group Achievement Awards

Delaware North Project Development Team **Public Affairs Volunteers** Checkout and Launch Control System Rush Construction Inc. STS-93 Temporary Lightning Protection System Spaceflight and Life Sciences Training Program Implementation Team

Orbital Pegasus Program Team Boeing Expendable Launch Vehicle Support Team

Exceptional **Achievement Medals**

The Exceptional Achievement Medal is awarded for a specific accomplishment or contribution clearly characterized by a substantial and significant improvement in operations, efficiency, service, financial savings, science or technology that contributes to NASA's mission.

> William M. Knott James S. Wood Bruce H.S. Anderson T. Patrick Breen Robert W. Page Patrick A. Simpkins John C. Van Hooser Jr. Connie H. Wilcox Rita G. Willcoxon

Secretary of the Year

This award is granted to a KSC secretary who has demonstrated exemplary performance over time, characterized by a high degree of personal integrity, judgment and responsibility.

The 1999 recipient, Penny Myers, demonstrated outstanding performance, initiative, professionalism, and exceptional contributions to the operation of the Office of the Deputy Director for Launch and Payload Processing.



Penny Myers

Equal Opportunity Award

This award is granted for outstanding achievement and material contribution to the goals of NASA's Equal Employment Opportunity programs either within government or within community organizations or groups.

Quentin W. Worthy was honored for outstanding contributions towards equal opportunity at John F. Kennedy Space Center through exceptional leadership and continued community support.



Quentin W. Worthy

Certificates of Commendation

This award recognizes exceptional individual accomplishments or outstanding management of a program that affects the entire center or contributes significantly to the Center's mission.

John Halsema Sheryl D. Koller Justin Beaver Alexander Biamonte Pamela Bohn Daniel Diolosa Kurt W. Leucht William Glenn Seaton Judson C. Bailey Rick L. Deakins Robert A. Gerron Elizabeth C. Godfrey J. Ronald Goodin Bruce L. Jansen Richard G. Scaltsas John Bryan Boatright Sue G. Dickinson Trung T. Nguyen Herbert E Peete Gerald M. Ross Alberto Silva Annette C. Dittmer Cheryl F. Ford Discksy M. Hansen Mary H. Poitier James V. Thompson David M. Wilson Doretha Worthy Arthur B. Maples Jacqueline W. Quinn David A. Tipton Howard King Charles L. Davis Diane H. Holden

Dionne B. Jackson

C. Wayne Ranow William E. Roy Thomas A. Schehl Joseph Tellado Javan M. Banks Peter N. Knudsen Michael J. Lonergan Bradford P. Lytle Michele R. Taylor Karen G. Thompson Jan A. Zysko Chris Comstock Polly Gardiner Robert Kuczajda Pam Meier Choung Nguyen G. Thomas Pentrack Shannon Potter Stephanie Sowards Stephanie Stilson Frank Valdes Gloria Vigilante Bryce D. Collins David A. Culp Steven E. Parker Greg S. Breznik Robert J. Frostrom Jr. Douglass E. Lyons Peter P. Nickolenko Timothy L. O'Brien Laurel L. Patrick Gary D. Thompson Gennaro Caliendo Barbra M. Calvert John S. Gurecki Benjamin G. Jiminea Gregory T. Meeks Omar Baez, Jr. Brian A. Beaver Pamela M. Biegert Jacob R. Rogers III Brent L. Seale

James M. Shaver

Silver Snoopy Awards 1999 Recipients

The Silver Snoopy Award honors persons who contribute most to the safety and success of human space flight. It is given to no more than 1 percent of the workforce each year.

NASA

Gary B. Armey
Edward Bollenback
Fredrick W. Frazier
Wade T. Graves
Susan L. Hutchison
David A. Kruhm
Dorothea C. Kuzma
Sharon L. Lowry
Albert J. Mariano
Jose M. Perotti
Sharon P. Walchessen

Contractor

United Space Alliance

Henry C. Arab
Norman V. Beyer
Helen R. Bowen
Anita M. Clancy
Sabato Daniele
William F. Duckworth
Ross C. Goodwin
Stanley D. Hicks
Bobby G. Holder
Carl D. Hoogerland
Richard P. Jacques
Lester E. Jensen
Donna E. Masters
John L. Phipps
Junior W. Ray

Benjamin P. Rogers Donald F. Suarez Lisa R. Waters Frederick A. Zayas Richard J. Zeitler

The Boeing Company

Louis R. Banchand Kevin A. Flautt Mark D. Hutchins Martha G. Masiello David E. Moore Kenneth R. Stein John A. Watkins

Dynacs Engineering

Cindy L. Wade

Space Gateway Support

Cecil G. Boggs Larry D. Davis Robin Rowe Kramer Donald E. Lawson Justin T. Reed

USBI Co.

Janice M. Barnes James S. Bolton Myron W. Griffin Joseph F. Kinsley Paul D. MacInnis Vipul B. Patel David L. Powell Kent E. Schroeder William D. Strahan Katheryn Theisen

Distinguished **Executive Rank** Award



James Jennings

James Jennings, Kennedy Space Center's Deputy Director, received this award for leading the Center to achieve a new strategic direction and leveraging its resources, knowledge and capabilities to begin its transition as a center of spaceport technology for the United States, the world and beyond.

He is a principal architect of the Center's internationally acclaimed business management system and leader of NASA enterprise business initiatives enabling over \$500 million in cost reductions and avoidance for the Agency.



NASA employee Lisa Fowler prepares to move from her office at the KSC Press Site into a new location in the Headquarters Building. As a result of the reorganization at the center, Fowler has new duties in the External Affairs and Business Development Office.

Move ...

(Continued from Page 1)

"pre-moved" as part of the whole shifting effort.

Before the move, which began at 4 p.m. on Thursday, May 25, employees boxed up their possessions and were encouraged to take the opportunity to recycle and excess unneeded items. Boxes to be moved were labeled.

"I didn't realize I'd collected so much stuff over the years. It was good to sort through everything

"We thoroughly prepared for the move to make it as painless as possible."

> - BILL HOLDEN, M OVE PROJECT TEAM

and just take what I really needed," said Lisa Fowler, a NASA employee who was moved to Headquarters during the Major Move.

The Memorial Day move will be followed by a second big move during the first week of July. About 550 workers in the Space

Shuttle Processing Facility will be moved that week. That number includes about 300 NASA employees and 250 Boeing employees.

Employees who were moved have been temporarily assigned phone numbers at their new locations. However, within the coming months, Center employees will be assigned new phone numbers that will move with them no matter where they work on center.

"Because of a new switching system, moving will be easier in the future," Holden said.

2000 Silver Snoopy Recipients (through May 22)

NASA

Perry L. Becker Cristina Guidi Brian E. Luther Bob R. Pirkle Marie B. Reed Jorge E. Rivera Rosamund L. Rock Lori L. Weller

Contractor The Boeing Company

David B. Cunneen John F. Van Duesen Nathan L. Findlay Karen E. Geiger Sandra K. Grizzle Charles J. Hardison Lisa Renee Smith David F. Stuart

Scott L. Southwell

The Bionetics Corporation

Ramona Bober

Dynacs Engineering K. Wayne Heckle Sr.

United Space Alliance

Gerardo J. Lindauer

Forty-year service awards

Russel E. Rhodes, Shuttle Processing Direc-

Ralph H. Barksdale, ELV and Payload Carriers **Programs Office**

Roland E. Norris, Shuttle **Processing Directorate** Roelof L. Schuiling, Space Station and Shuttle Payloads Directorate

Page 8 SPACEPORT NEWS June 2, 2000

State of Florida resolution honors space program

The Florida Legislature passed the following resolution during its recent session:

"A Resolution commending the men and women of the Space Shuttle Program for their contributions to the United States Space Program and to the people of Florida.

"WHEREAS, the Space Shuttle is the world's most versatile launch vehicle having carried more than 2.6 million pounds of cargo, more than 700 major payloads to orbit, and more than two-thirds of the humans ever launched to space; and "WHEREAS, the Space Shuttle, with unmatched capabilities and 75 percent of its operational lifetime still ahead, will serve as our nation's bridge to the future well through the first decade of the 21st century; and

"WHEREAS, the most adaptable, most capable and most critical element of the Space Shuttle Program are the men and women who prepare, maintain and launch Columbia, Discovery, Atlantis and Endeavour; and

"WHEREAS, their commitment to safety, dedication to mission

success and continual pursuit of excellence provides inspiration to America's youth; and

"WHEREAS, the Space Shuttle team will soon launch STS-101 on a mission to the International Space Station and later this year will launch the 100th Space Shuttle mission from the Kennedy Space Center; and

"WHEREAS, the State of Florida is today the proud home of more than 10,000 workers in the Space Shuttle Program,

"NOW, THEREFORE, Be It

Resolved by the House of Representatives of the State of Florida:

"That the House of Representatives of the State of Florida hereby recognizes and commends the men and women of the Space Shuttle Program for their contributions to the United States Space Program and the people of the State of Florida.

"BE IT FURTHER RESOLVED that a copy of this resolution be presented to representatives of the Space Shuttle Program as a tangible token of the sentiments expressed therein."

New model bolsters X-37 tests

Marking a major milestone in the X-37 project, an 85-percent scale test vehicle of the experimental space plane was delivered to NASA May 19 for flight testing.

The X-40A test vehicle, first built for the Air Force by the Boeing Co. at its Seal Beach, Calif., facility and successfully flight tested at Holloman Air Force Base, N.M., was shipped from Boeing to NASA's Dryden Flight Research Center at Edwards, Calif. The X-37 is managed by NASA's Marshall Space Flight Center in Huntsville, Ala. At Dryden, the X-40A will undergo a series of ground and air tests later this year to reduce possible risks to the larger X-37 — including a drop test from a helicopter to check guidance and navigation systems planned for use in the X-37.

The X-37 is designed to demonstrate technologies in the orbital and reentry environments for next-generation reusable launch vehicles that will increase both safety and reliability, while reducing launch costs from \$10,000 per pound to \$1,000 per pound.

The X-37, carried into orbit by the Space Shuttle, is planned to fly two orbital missions in 2002/2003 to test reusable launch vehicle

Celebrating a musical heritage



Allan De La Cruz, left, and Sonnie L. Burda entertain the audience at the Asian-Pacific Heritage Month Luncheon held May 17 in the Mission Briefing Room. De La Cruz, a medical/surgical registered nurse, performs often at churches in the Orlando area. Burda, a native of the Philippines, has served as musical director for the Celestial Angels, a choral ensemble at Adventist University in the Philippines.

technologies.

Kennedy Space Center is involved in the X-37 government team, led by the Marshall Center. Other team members include NASA's Ames Research Center in Mountain View, Calif.; Johnson Space Flight Center in Houston; Goddard Space Flight Center in Greenbelt, Md.; Langley Research Center in Hampton, Va.; Dryden Flight Research Center and USAF's Air Force Flight Test Center, both at Edwards Air Force Base in Edwards, Calif.; and the Space and Missile Systems Center and the Air Force Research Laboratory in Albuquerque, N.M.



John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by the Public Affairs Office in the interest of KSC civil service and contractor employees.

Contributions are welcome and should be submitted two weeks before publication to the Media Services Branch, AB-F1. E-mail submissions can be sent to Gary.White-4@ksc.nasa.gov

Managing editor. Bruce Buckingham Editor. Gary White

Editorial support provided by InDyne Inc. Writers Group. NASA at KSC is located on the Internet at http://www.ksc.nasa.gov

USGPO: 533-128/00033