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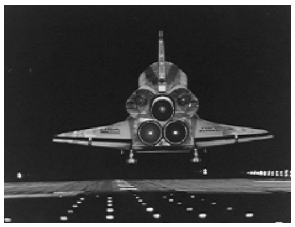
Spaceport News

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

John F. Kennedy Space Center

Mission update



Mission: STS-72 on Endeavour

Landing date, time: 2:41 a.m., Jan. 20, 1996, at Kennedy Space Center's Shuttle Landing Facility

Mission: NEAR expendable vehicle launch on a McDonnell Douglas Delta II rocket

Launch date, time: Feb. 16, 3:53 p.m. from Launch Complex 17, Pad B, Cape Canaveral Air Station

Mission synopsis: The Near Earth Asteroid Rendezvous (NEAR) will measure the composition and structure of the asteroid Eros and provide fundamental information about objects that make close encounter with Earth.

Mission: STS-75 on Columbia

Launch date, time: Feb. 22, 3:08 p.m. from Launch Pad 39B

Synopsis: The seven-member international STS-75 crew will conduct scientific investigations with both the Tethered Satellite System-1R (TSS-1R) and United States Microgravity Payload-3 (USMP-3) primary payloads during the 75th Space Shuttle mission.

Landing date, time: March 7, 7:38 a.m. at Kennedy Space Center's Shuttle Landing Facility

51-L crew remembered

KENNEDY SPACE CENTER commemorated the 10th anniversary of the Challenger accident Jan. 29 with 73 seconds of silence followed by a flyover of T-38 jets by members of the astronaut corps and the dropping of a wreath at sea by Launch Director Jim Harrington. A similar observance was held simultaneously at the NASA Johnson Space Center in Houston, TX. The actual anniversary date of Jan. 28 was marked by observances planned by The Astronauts Memorial Foundation and the City of Titusville. In the photo at left the T-38 jets fly over Spaceport USA during the Jan. 28 ceremony. For more photos, see page 3.

Saturn V preservationists dust off clues to rocket's past

By Barb Compton

Beneath the seven layers of paint and years of corrosion that have accumulated on the Saturn V rocket located just south of the Vehicle Assembly Building, historians hope to uncover evidence about where each piece originated and how they came to rest at Kennedy Space Center.

Four representatives from the Smithsonian Institution's National Air and Space Museum (NASM) recently spent several days at KSC overseeing the first phase of the cleaning, preservation and stabilization of the rocket. When it is completed this spring, the Saturn V will be relocated to the new multimillion dollar Apollo/Saturn V Center located near the Banana Creek Viewing Site.

The preservation project and the new center are being paid for by revenues from the public visitor program at Spaceport USA. The rocket, one of only three remaining, is on indefinite loan to KSC from the NASM. The other two rockets are at the Marshall Space Flight Center in Huntsville, AL, and the Johnson Space Center in Houston, TX.

Preservation work began in mid-January when the first stage of the launch vehicle was moved back about 12 feet to make room for a protective tent which was placed over the remaining stages. When contractors from Thomarios Painting, the company selected by Spaceport USA concessionaire Delaware North Park Services for the rocket restoration, began the initial cleaning, the tough task of documenting the history of the remaining stages became apparent.

THE SATURN V located near the Vehicle Assembly Building is under wraps for protection from the elements as preservation efforts are underway.

"There is extensive damage to almost every stage," said Al Bachmeier, NASM's deputy assistant director for Collections Management. Bachmeier, Frank Winter, curator of Rocketry for NASM, Scott Wirz, museum technician, and Bayne Rector, NASM chemist, pored over the rocket's three stages as the cleaning began, looking for additional clues to the vehicle's origins. Serial numbers have been painted over or worn off and records scattered to national archives across the United States.

(See SATURN V, Page 6)

Employees of the month

HONORED IN JANUARY are, from the left: Jim Neff, Installation Operations Directorate; Kim Cochrane, Administration Office; Donna Winchell, Comptroller's Office; James Fowler, Safety and Mission Assurance Directorate; Ember Smith, Deputy Director's Office; James Shaver, Payload Operations Directorate; Peggy Parrish, Procurement Office; Mark Shugg, Shuttle Operations Directorate; Scott Colloredo, Engineering Development Directorate; and Marcia Groh-Hammond, Logistics Directorate.

MAXINE JOHNSON, secretary to Launch Director Jim Harrington, was installed Jan. 13 as president of the Titusville Drove No. 183 of the Benevolent Patriotic Order of Does. Handing the gavel over to Johnson is past president Beverly Finn. The installation was held at the B.P.O. Elks Lodge in Titusville.

EUGENE HATTEN, JR., workforce diversity director for the Chrysler Corp., sponsor of the Medalla De Oro award, stands with winners, from left, Oscar Gamboa, Hispanic program manager, NASA-KSC; Margaret Gonzalez, publisher, GWR agency; and Keith Marrocco, Texas A&M student chapter faculty adviser. Not pictured is Richard Navarro, Northrop Grumman corporate employment director.

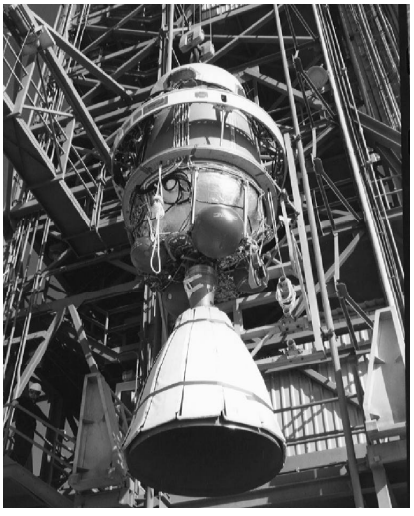
Gamboa honored at MAES conference

Oscar Gamboa, the Hispanic program manager for the Equal Opportunity Program Office, was recently honored by the Society of Mexican American Engineers and Scientists (MAES) for his accomplishments within the Hispanic community.

Besides dramatically increasing the percentage of minority engineers at Kennedy Space Center, Gamboa has served on a Brevard County Commission task force to increase the participation of women and minorities in the county, and worked with the Brevard County School District to develop hiring practices that include minorities.

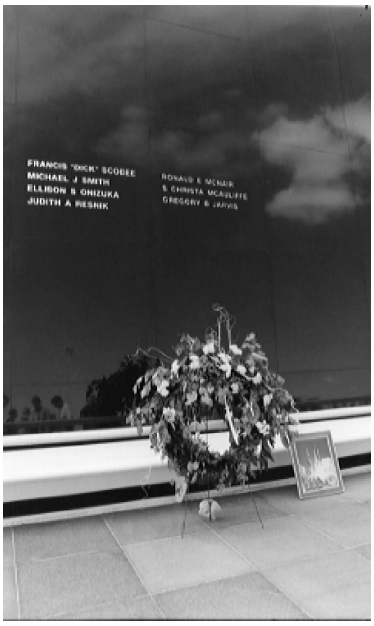
The Medalla De Oro award which Gamboa received was accompanied by a $2,000 scholarship which was presented to Albert Meza of the University of Houston.

KSC played an active role in the conference, sponsoring four booths and hosting participants for the night launch of STS-72 on Jan. 11. The conference, with the theme "Today's Hispanics: Opening Minds Through Science and Engineering," was held Jan. 9-13 in Lake Buena Vista.



PRELAUNCH preparations for the Near Earth Asteroid Rendezvous (NEAR) mission have been proceeding smoothly at Cape Canaveral Air Station. In the photo above, NEAR is transported from NASA Hangar AE to the Spacecraft Encapsulation and Assembly Facility (SAEF-2) at Kennedy Space Center on Jan. 25. There the spacecraft was scheduled to be fueled with its control propellant, the solar arrays attached and the mating to the solid propellant upper stage completed. At the left, the second stage is hoisted onto the gantry at Launch Complex 17 in preparation for mating with the Delta II first stage. NEAR is scheduled for launch Feb. 16 at 3:53 p.m.

KSC honors Challenger crew by looking toward future



NKMA announces $500 scholarships

The NASA Kennedy Management Association plans to award scholarships of at least $500 each to promote educational opportunities for high school seniors, college and vocational school students who are academically talented and who have demonstrated a commitment to excellence.

Applications are due March 15. To qualify, applicants must be a civil service employee, their spouse or dependent. Contact Miguel Rodriguez at 867-3692.

STS-73 crew takes to air waves

THE CREW of STS-73 take on a more down-to-Earth mission as they appear on the television series "Home Improvement" Tuesday, Feb. 13 at 9 p.m. on ABC-TV (Channel 9). Mission Commander Ken Bowersox is pictured above with the show's star Tim Allen. The episode, titled "Fear of Flying," will feature footage shot while the crew was on orbit. Other crew members who will be featured are Catherine "Cady" Coleman, Kathryn Thorton, Fred Leslie and Al Sacco.

Era ends with closing of Hangar AO

By George Diller

An era ended on Jan. 29 when 35 veteran spacecraft and expendable vehicle launch team members of KSC and the Jet Propulsion Laboratory gathered at NASA Spacecraft Hangar AO to recognize and remember NASA's accomplishments in that facility.

"We are faced with budget cuts, downsizing and streamlining and this is one of the victims of that process," said John Conway, director of KSC Payload Operations. "Also, we are no longer flying the number of scientific payloads we once did," he added.

Payload processing has ended at Hangar AO, one of the most historical processing facilities at Cape Canaveral and KSC. Under budget pressure to close facilities and unable to find or justify the amount of money required to replace an air handling system for its Class 100,000 clean room, the decision was made to turn Hangar AO over to someone else. While no firm decisions have been made, it appears that the hangar may take on a new role in the current space era under the stewardship of the U.S. Air Force or a commercial launch services company.

Pioneer 10 and 11, Surveyor, Lunar Orbiter, Mariner, Pioneer Venus, Ulysses, Viking and Voyager are some of the most notable payloads to pass through the hangar's doors.

The first payload to be processed there was Mariner 4, a mission to orbit Mars launched on an Atlas Agena rocket in November 1964. The last was the X-ray Timing Explorer launched aboard a Delta II rocket in December 1995.

Bill Fletcher, in charge of KSC payload processing facilities for most of the Hangar AO era, recalls that the hangar was one of the most versatile with a clean room capable of handling as many as five similar payloads at a time. It also had space for the associated ground checkout stations and up to 72 payload personnel.

The hangar also held a Mission Control Center on the second floor from which the progress of a spacecraft could be followed after leaving Earth orbit.

"It was a party to all planetary missions," recalls Skip Mackey, manager of telemetry for expendable vehicles at KSC.

At the commemorative ceremony, team members enjoyed a cake decorated with a black border and flanked with black balloons and reminisced about the high profile days which Hangar AO enjoyed.

A TRUCK brings NASA's X-ray Timing Explorer (XTE) to Hangar AO for approximately two months of checkout, testing and launch preparations in May 1995. The payload was the last processed in the facility.

Tony Spear, now a JPL mission manager for an upcoming Mars flight, recalled having his picture taken with former President Lyndon Johnson at Hangar AO in 1964. The JPL facility manager at the time, Hank Levy, insisted that "LBJ is not exempted from donning clean room attire before entering the high bay."

Dave Bragdon, a member of the KSC spacecraft team affectionately called "F-Troop," recalls the changes to the hangar when General James Abrahamson, NASA associate administrator for Space Flight in the mid-1980s, directed an upgrade to the facility, making it one of the most flexible and desirable facilities on the Cape.

The upgrade also resulted in a change to an off-yellow color from what had become the almost legendary two-tone green.

KSC's Terry Terhune, also a spacecraft veteran of the 1960s and 70s, closed the commemorative ceremony with one of his famous limericks:

"Farewell to the building called AO;

It processed planetaries so long ago;

Here before each mission was given permission

to launch in an era only few of us know."

Management changes announced at NASA centers

NASA Administrator Daniel Goldin recently announced top management changes at several NASA centers.

Dr. J. Wayne Littles was named the new director of the Marshall Space Flight Center in Hunstville, AL. Littles will assume the post Feb. 3. He currently serves as the associate administrator for the Office of Space Flight and he will replace G. Porter Bridwell who announced Jan. 11 he is retiring from NASA after 34 years of service.

"Dr. Littles has the necessary managerial and technical experience to lead Marshall into the 21st century," Goldin said. As the head of the Office of Space Flight, Littles directed both the Space Shuttle and Space Station programs for NASA. Most recently he has been leading the effort to consolidate Shuttle operations under a single prime contractor.

George Abbey has been named the new director of the Johnson Space Center in Houston, TX. Goldin said that Abbey "has distinguished himself as an innovator and pioneer at all levels of agency management."

Abbey had been serving as acting director at Johnson since August 1995. He joined NASA in 1967 as technical assistant to the manager, Apollo Spacecraft Program. He was appointed deputy associate administrator for Space Flight at NASA Headquarters in March 1988 and ascended to the position of senior director for Civil Service Policy for the National Space Council, Executive Office of the President in July 1991.

Dr. Henry McDonald will take over as director of the Ames Research Center in Mountain View, CA, effective March 4.

"Dr. McDonald brings to Ames strong research experience in information systems applications, computational physics and aerodynamics, combined with technical and managerial skills that will reinforce NASA's commitment to aeronautical and space research for a stronger America," Goldin said.

McDonald was formerly the assistant director of computational sciences and professor of mechanical engineering at the Applied Research Laboratory, Pennsylvania State University. He was also founder, president and chief executive officer of Scientific Research Associates, Inc., Glastonbury, CT, where he was responsible for manage-

(See CHANGES, Page 5)

EEO counselors help co-workers deal with discrimination issues

Kennedy Space Center employees routinely help each other with challenges on the job but there is a select group who volunteer their time to assist those who feel they have been a victim of discrimination in the workplace.

The KSC Equal Opportunity Program Office (EO) offers peer counseling services to employees who feel they have been discriminated against on the basis of race, color, religion, sex, age, national origin or physical or mental handicap.

The volunteer counselors are trained in EEO law and counseling techniques and receive periodic update training. They do fact-finding and attempt to resolve employee complaints at the lowest possible level.

If an individual feels they have been discriminated against, they must contact a counselor within 45 days of the alleged incident. If resolution is not achieved, the employee has the option of participating in an Alternative Dispute Resolution process involving a management representative and an appointed mediator. If resolution is still not achieved, the employee may then file a formal complaint.

The EEO counselors potentially save NASA tens of thousands of dollars a year in court costs, attorneys fees, and hours of investigation and litigation by resolving complaints at the lowest possible level.

Brenda Willis, RM-SYS, and Cedric Hill, TV-MSD, recently retired from the group. Willis served for more than 23 years and was among the first volunteer counselors.

FROM THE LEFT are new EEO counselors Louise Boyd, Frank Merceret and Connie Dobrin, retiring counselor Brenda Willis, new counselor Thomas Yensco, counselors Betty Valentine and Rose Rayfield, and new counselor Pam Mullenix.

The Equal Opportunity Program Office recently added five new counselors for a total of nine. Counselors get involved for many reasons, from a basic concern for people to the utilization of special skills and training.

The new counselors are:

Louise Boyd, 867-7881, management analyst and program manager for civil service salaries and benefits in the Workforce Management Office. Boyd has worked for NASA since July of 1982. She said she got involved initially because of her interest in people.

"I like people -- I interface heavily with the personnel side of the house so it seemed like a natural transition."

Connie Dobrin, 867-3431, property administrator in the Procurement Mission Support Office. Dobrin started working at KSC nearly 20 years ago. After hours she volunteers as a counselor at a rape crisis center. "I'm interested in the problems people have," she said. "I want to understand — to listen better."

Frank Merceret, 867-2666, chief of the Applied Meteorology Unit and deputy to the lead of the KSC Weather Office. Merceret came to KSC in 1991 after working for the NOAA Environmental Research Laboratory's Hurricane Research Division and then practicing law for seven years as a criminal prosecutor for the State of Florida in Miami. He worked as an EEO counselor when he was with NOAA and he said that those skills, combined with his experience negotiating legal settlements, should enable him to serve his co-workers effectively as a counselor. "I want to make social as well as technical and managerial contributions to the organization," he said.

Pam Mullenix, 867-2552, currently on special detail with the Office of the Chief Counsel. She has worked at KSC since 1986 and is considering going to law school. Mullenix volunteers to serve as a counselor because "it's an opportunity to help when people need help," she said.

Thomas Yensco, 867-9889, a quality engineering technician since 1989. Yensco has worked with the government and in the Air Force reserve for 23 years.

During that time he said he has seen the military evolve from a white-male-dominated organization to one that is more representative of the country's diverse population. He is interested in seeing the government achieve that mix while protecting those who have worked their way through the system. Yensco has a minor degree in psychology and said the position would give him good training and "allow me to give something back."

The new counselors join Rose Rayfield, 867-2622, PA-PSE; Bob Deliwala, 867-7969, DM-MED, Joe Gacek, 799-7262, RM-ENG, and Betty Valentine, 867-3749, CM-PMO, to complete the volunteer staff. Counselors can be contacted directly or through the EEO office, 867-2307.

Ombudsman program established to address procurement concerns

A new NASA Ombudsman Program has been created to address the procurement concerns of NASA contractors before they become problems.

The idea for this program was conceived when NASA Administrator Daniel Goldin made a commitment to NASA contractors to establish a program to improve communication between government and industry. The intent is to provide offerors, potential offerors and contractors with a single point of contact to address their concerns if issues arise.

The Agency-wide ombudsman is Tom Luedtke, 202/358-3082.

Deputy Director Gene Thomas, 867-2355, is representing KSC.

Changes. . .

(Continued from Page 4)

ment of the company's computational physics laboratory.

Dr. Ken Munechika, currently director of Ames, has been named to the newly-created position as director of the Moffett Federal Airfield, effective March 4.

"This move represents the increasing importance of California's Moffett Field to its current and future occupants and to the Silicon Valley," Goldin said. Munechika will be responsible for seeing that the resident agencies and Ames are provided with all the services normally associated with a federal airfield.

Goddard Space Flight Center Director Joseph Rothenberg announced that Alphonso Diaz has been named deputy director of that center, effective Feb. 4. Diaz previously served as deputy associate administrator for Space Science at NASA Headquarters.

Saturn V. . .

(Continued from Page 1)

When the Saturn V vehicles were no longer needed after Skylab was launched in 1973, records were deposited in national archives facilities. Although paperwork exists to accompany each piece of the hardware, much of it is inaccessible because of the volume of material it was deposited with. Hardware was in such demand after the success of the program that it wasn't uncommon for components to be split up and sent to different locations.

Although the Smithsonian representatives have been able to piece together details on the origins of the KSC vehicle, they are eager to receive any additional information to better document where the pieces came from.

They have been able to provide this accounting of each of the stages and its known history:

Stage 1 — The S-IC-T first stage booster is a ground-test vehicle. It is believed to have come from the Marshall Space Flight Center. NASM is interested in finding out what happened to this stage between the time the testing program was completed and its arrival at KSC in the mid-70s.

Stage 2 — NASM believes the second stage (S-II) was from the vehicle intended to launch Apollo 18, which was cancelled. They have had difficulty in confirming this, however, because there is no evidence of a serial number.

Stage 3 — The third stage (S-IV-B-500F) was originally manufactured as the third stage for the Saturn 1B vehicle and was used in facilities tests in the Vehicle Assembly Building and at the pad. The stage was later modified to meet the Saturn V third stage configuration. It was further modified for use in the Skylab program and NASM would like to learn more about some of those other uses.

The command module revealed a little more of its history — Wirz spotted a serial number immediately upon poking his head into the doorway. NASM belives the module was originally part of boilerplate series 18, created for swing arm and umbilical tests at KSC. That boilerplate was taken apart and used as part of boilerplate series 30 which was created as a backup for Apollo 6.

The first step in the preservation is a pressure cleaning with a disinfectant and a general cleaning solution to remove mold and mildew. The next step is to spray the rocket with a baking soda mixture — a method known as Armex. Bachmeier said it is the first time the Smithsonian has used such a method for a museum object but that it seems to work well except for the extremely damaged areas.

Most of the damage appears to be corrosion of the aluminum skin from salty air and humidity. But paintings every three years with oil-based enamel have provided some protection from the elements, he said.

Once the pressure cleaning and the Armex process are complete, the vehicle will be cleaned with deionized water to remove chlorides and contaminants. The cleaning, which began in the middle of January, was expected to last three weeks. Then the vehicle will be painted with an industrial quality polyurethane paint to match the Apollo 11 color scheme which was selected for the project by NASA and NASM. The Saturn V will be transported to the new facility sometime this spring and final touch-ups will be completed in the new building.

The 363-foot-tall vehicle is the largest artifact ever restored for NASM and the only Saturn V rocket to be placed in a controlled environment for preservation. Anyone with any information on the vehicle is encouraged to contact Scott Wirz at 301-238-3149; Frank Winter at 202-357-2828; or Carol Cavanaugh, the KSC project manager for the Saturn V rocket preservation and stabilization, at the Public Affairs Visitor Center Branch, 867-2363.

KSC HOSTED its first Community Involvement Expo, sponsored by KSC Public Affairs, the Brevard Community Center and the Brevard Retired Senior Volunteer Program Jan. 19 in the Operations and Checkout Building Mission Briefing Room. Thirty one exhibitors from across the county displayed their services and gave employees the opportunity to match their skills with community needs.

KSC EMPLOYEES, guests and community leaders enjoy a preview of Spaceport USA's Payload Processing Exhibit and Launch Status Center during opening festivities Dec. 14. The exhibit features video of KSC employees talking about their payload processing roles as well as what working for the space program means to them.

John F. Kennedy Space Center

Spaceport News

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