January 16, 1998

paceport News

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John F. Kennedy Space Center



Explorer I catapulted U.S. into space age 40 years ago

remained in orbit until 1970. Its 20 pounds of scientific instruments discovered the Van Allen radiation belt around Earth.

Most important, it boosted national morale and placed the American space program on a

positive footing. The country's image had been dealt a major blow with

the Soviets'

launch of

the first artificial satellite, Sputnik, on Oct. 4, 1957. The first U.S. attempt to launch a satellite as part of the International Geophysical Year was a humiliating failure witnessed by the world. On Dec. 6, 1957 — just a month after the Soviets had sent up Sputnik-2 carrying the dog Laika — the U.S. Navy's Vanguard launch vehicle topped by a threepound satellite rose a pathetic two feet off the pad, then settled back down and exploded.

NASA didn't even exist yet: Explorer I was launched by the Army Ballistic Missile Agency (ABMA).

With Vanguard unable to deliver, the ABMA crowd that included Werhner von Braun and future KSC Director Kurt Debus got the signal to press ahead with the Jupiter-C carrying the Explorer I.

It was a launch that almost didn't happen.

In a vivid account of the final moments inside the blockhouse at Complex 26 on Cape Canaveral, then-Public **Information Officer Gordon** Harris recounted that at ignition minus 1 minute, 40 seconds, it was reported that a jet vane deflection had

(See EXPLORER, Page 6)



CLOCKWISE from above — The Jupiter-C launch vehicle awaits liftoff at Launch Complex 26. The press was advised on a confidential basis about the impending launch under an agreement that they could not go public with the story until there was "fire in the tail," according to a 1983 press release on the launch's 25th anniversary. The Jupiter-C was erected at the pad in darkness, and canvas shrouds were draped from the service tower prior to launch day to conceal the vehicle. Photo at lower left did not have an official caption, but appears to show a technician with the Explorer I spacecraft. At upper left is the blockhouse; middle above, members of the Firing Laboratory below the vehicle stack at the pad, including Kurt Debus at right. At center, a congratulatory telegram from Walt Disney to the launch team on the successful mission.



he gates of heaven are opening," the Pacific Rocket Society telegraphed the Army **Ballistic Missile Agency** (ABMA) after the successful launch of the first U.S. satellite, Explorer I, on Jan. 31, 1958.

Explorer I was launched on a Jupiter-C

launch vehicle just 70 feet tall, less than half the height of the **Space**

Shuttle. The payload itself was a diminutive 80 inches long and six inches in diameter. But Explorer I made up in sturdiness what it lacked in size. It transmitted data back to Earth for four months, and



SATELLITE instrumentation for Explorer I was provided by Dr. James Van Allen of the State University of lowa to collect cosmic ray measurements; here a technician works on the spacecraft.

KSC employees invited to visit new tour attractions

The KSC Visitor Complex extends a special invitation to KSC employees to experience two new tour attractions at the space center.

One site, the Launch Complex 39 Observation Gantry, is located in the heart of the LC 39 area. The second, the International Space Station Center, is located adjacent to the Space Station Processing Facility in the KSC Industrial Area. The

attractions will officially open Jan. 16 during a ribboncutting ceremony.

Details of the special invitation are as follows:

- The free bus tours are being offered to employees the weekend of Jan. 17, 18 and 19, a three-day federal holiday weekend in honor of Dr. Martin Luther King's birthday.
 - Each KSC employee may

(See TOUR, Page 6)

Kenneth Payne named director of KSC Logistics Operations

Kenneth Payne, a veteran leader in the field of acquisition and logistics management, is being named director of Logistics Operations at the Kennedy Space Center, effective Feb. 1, 1998, by Center Director Roy Bridges.

"I am very pleased that Ken Payne is joining our KSC staff," said Bridges. "He is a man with world-class credentials in leading change in large, high-technology acquisition and logistics organizations."

Payne's responsibilities as Logistics Operations director will include management of the contract for Space Shuttle orbiter flight hardware spares, repairs, and all the associated planning and management of the supply vendor infrastructure. He also will oversee technical management of logistics functions of repair and spares for all launch processing ground systems and facilities for both Shuttle and payloads processing, as well as Center support.

Other responsibilities include management of all Center logistics functions such as supply, transportation, equipment management, property disposal, and associated technical training.

Payne, a member of the Senior Executive Service, currently serves as deputy director of Requirements,

Majestic sight



THIS Southern Bald Eagle was photographed as it soared lazily overhead in the Schwartz/Contractors Roads area of Launch Complex 39 one sunny afternoon. Scheduled to be completed this week was an annual aerial survey of the eagles' nests on the space center. The birds typically arrive around September and stay until April or May. The survey, conducted by a Merritt Island National Wildlife Refuge biologist, is conducted when the birds are well into their winter nesting and will have given birth to eaglets, if any.

Headquarters Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio. The directorate is the command focal point for program and product management policy, processes and resources.



Payne

Payne is a certified Acquisition Program Manager and Logistician who has managed major programs through their life cycle. He began his federal civilian career in 1972 following graduation from Georgia State University, joining the Defense Contract Administration Services District in Alabama as an analyst. After a period of service with the Defense Logistics Agency, Payne moved to the Air Force in 1987, where he took on assignments of increasing responsibility, including deputy director, Plans and Programs for the Ogden Air Logistics Center; deputy and then acting F-16 system support manager; and deputy system program director for the F-16 and C-17 programs. He is a former Army infantry officer with combat experience in Vietnam.

Rothenberg tapped for top Space Flight post

Joseph Rothenberg, director of NASA's Goddard Space Flight Center, Greenbelt, Md., has been named Associate Administrator for the Office of Space Flight. He succeeds Wil Trafton, who recently joined Lockheed Martin International Launch Services as executive vice president.

Rothenberg also will lead the Human Exploration and Development of Space enterprise, an element of NASA's Strategic Plan. Goddard Deputy Director Alphonso Diaz succeeds him as center director at Goddard.

As associate administrator, Rothenberg will be responsible for all NASA human space flight programs, as well as a variety of expendable launch vehicle operations and tracking and communications functions. One of his most notable career achievements was the project leadership he provided which resulted in the highly successful Hubble telescope repair mission.



HONORS – Paul Batastini (second from right) accepts the Key Control Custodian of the Year Award from KSC Protective Services Chief Cal Burch (right) and Patricia Townsend (far left), USA NSLD Security manager, and E. A. Wilson, director of Florida Security Operations for USA. Batastini's wife, Sandy (middle) won the award in 1992.

USA worker earns key custodian honors

United Space Alliance (USA) Florida Ground Operations employee Paul Batastini has received the sixth annual Morgan H. Carter Sr. KSC Key Control Custodian of the Year Award.

Batastini, a member of USA's NASA Shuttle Logistics Depot (NSLD) security staff, is responsible for about 400 different series of KSC controlled keys. His coordination efforts with the KSC Locksmith Office ensures that keys are issued to NSLD personnel in a timely, accurate and efficient manner.

During the transition from Rockwell to USA, Batastini was responsible for ensuring all key/core-related issues were addressed. This included ensuring all NSLD office and warehouse locks were correctly cored to allow proper access. He also coordinated a large number of employee turn-ins and new key issues, both at the NSLD and on KSC. He accomplished all this work with no lost work force time.



Health packet focuses on disease-fighting foods

Information is available at all medical facilities about foods that fight disease: fruits and vegetables, whole grains, fish and other nutriments.

Information about how to cook food to ensure maximum nutrition, natural and home remedies that work, and what foods fight specific diseases, also is included.

63 NASA workers become first group to leave under latest buyout offer

Editor's Note: By Jan. 3, 63 NASA employees became the latest group to take advantage of the buyout opportunity. More employees are expected to accept the offer by the end of this month, and NASA employees in two areas, Quality Assurance and Health and Safety, may sign up through Sept. 30 of this year. Early-out personnel must depart by March 31. Individual writeups on four high-level officials are provided on the following pages. The space center extends its thanks and best wishes to these employees for their years of service to the U.S. space program.



Ackerman, Dawn A., GG-C2

Alers, Nicholas V., FF-D3-A

Alloway, Edgar, EY-G

Bessinger, Donald J., EC-B

Blocker, Lonnie, LO-PMD-1

Blum, Joel S., DE

Branning, William W., BF

Brown, Christopher L., FF-S2

Brown, David, BF-B1

Carroll, Darren T., LO

Carter, Frances H., DE-TPO

Cartier, Kyle, FF-D2-C

Chandler, Daniel B., EY-N

Cottrell, James L., BR

Cristofano, Salvatore J., MS

Curington, Floyd A., BL

Davis, S. Barry, DL-ICD-A

Deshotel, James H., FF-S1B

Dutro, Ralph C., EY-N-A

Everette, Robert B., FF-Y

Garand, James M., HM

Goff, Joylyn Sue, OP-M

Goforth, Bobby W., BF-A3

Gregory, Sandra A., El

Gruhler, Elizabeth S., LO-SOD-2A

Hall, Cindy J., BB-3

Hall, Richard L., EY-B5

Hall, Rodger, BC-A2

Halsema, Donald F., PZ-D

Harer, Kathleen F., DE-TPO

Harrington, James F., PH

Head, Freddie, BF-B

Hunt, Darleen A., AB

Hurst, Jack G., FF-SI-B

Jackson, Annita L., HM-A-3

Johnson, Ivory D., LO-ENG-1

Johnson, James F., PZ-B2

Kelley, James A., El

Kennedy, Madeline Sue, BB-B

Kozmoski, Theresa A., AB-D

Lovall, Donald D., DL-DLD

Marin, Jose A., DE-CLC

McBrearty, John Carl, PH-B3

Merrilees, G. R., AB-F2

Mickler, John L., EY-E

Murray, Michael, LO-SOD-2

Owen, Lonnie E., EC-B

Parrish, Carrie Lee, DE-TPO

Plummer, Tanya E., EC-C-B

Rayburn, Larry M., PK-H6

Redding, Eric F., PZ-A

Sarver, Charlene A.. EI-F

Sestile, Eugene M., PH-B2

Sewell, Nancy E., BB-3

Squires, Marlene K., MK-SIO

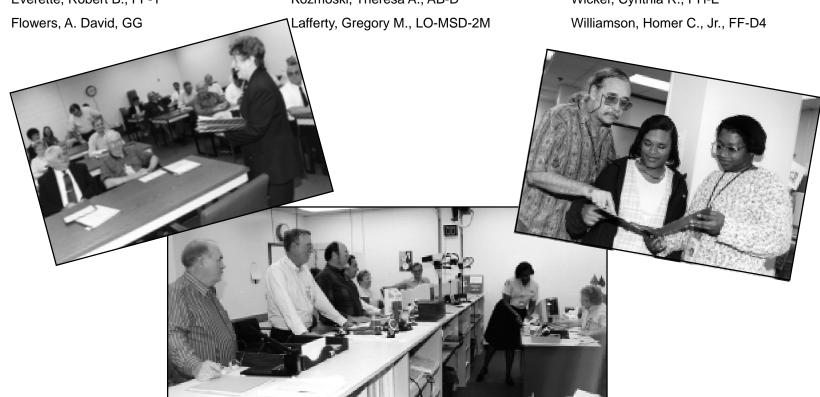
Stefanovic, Terry A., DE-TPO

Stewart, Mark A., PK-G3

Towery, Delmar E., LO

Violette, Norbert G., FF-R-A

Wicker, Cynthia R., PH-E



Retiring NASA managers represent every facet of space program

Editor's Note: Jim Harrington comes from the world of human spaceflight. Sal Cristofano culminated his career in the payloads community. Dave Flowers helped run the business side of the house, while Floyd Curington devoted his aerospace career to expendable launch vehicles.

James F. Harrington

Jim Harrington didn't think it would be too hard to make the transition from Shuttle launch director to world traveler and avid golfer.

"It's a decision I thought about quite a bit before I made it," he said of his intention to retire Jan. 3 after more than 40 years in the space business. While he indicated his willingness and availability to support the Shuttle program in any way he can after he leaves, his goals were clear: spend time with his wife, Jean, travel and play golf.

Harrington's entire professional career was dedicated to living, working and breathing the space program. He never worked anywhere else. As a newly minted electrical engineer, degree from the University of Miami tucked under his arm, the North Carolina native joined General Dynamics Astronautics on Cape Canaveral in 1957, the same year the Soviet Sputnik hurtled into orbit and the Space Age began.

Harrington's first job as the race into space heated up: senior flight test engineer on the Mercury-Atlas launch team. He also worked for Grumman as a test conductor for the Lunar Module prior to joining NASA in 1966 as senior test supervisor for Apollo 6, 9, 12 and 15.

Harrington served as operations chief for the Atlas Centaur expendable launch vehicle program from 1972-1976. He also held a wide variety of positions in testing and preparing Space Shuttles for launch, including: senior test conductor for the Orbiter Processing Branch; vehicle manager, STS-1; branch chief, Orbiter/ ET Processing; and Ground Operations manager, STS-1 through 6.

He served as panel chairman for operations on the Shuttle Processing Contract Source Evaluation Board (SEB). Following the SEB assignment, Harrington served as flow director for STS-9 (Columbia), STS-8 through 51L (Challenger), and STS-51C (Discovery).

Harrington was appointed deputy director, Shuttle Operations, in 1986, and director in July 1988. He moved Between the four of them, these space program veterans have nearly 150 years of experience in advancing the goals of the U.S. space program. While the center extends its thanks for their long service to the country, it also wishes them best wishes as they find new paths to explore.



HARRINGTON and wife Jean were on hand to greet the crew of Mission STS-87 upon their return from orbit in December. Here, the Harringtons chat with Commander Kevin Kregel underneath the orbiter Columbia at KSC's Shuttle Landing Facility.

from the Shuttle Operations Directorate in February 1994, to serve as director, Safety and Reliability, and then returned to Shuttle operations to assume the post of launch director effective Jan. 22, 1995. He joined the ranks of Senior Executive Service (SES) management in 1988.

The thrill of watching a Space Shuttle lift off and knowing he had a critical role in making it happen isn't what Harrington considers to be the highlight of his tenure as launch director. It was the teamwork.

"Being able to work with the KSC launch team and seeing them perform is the best thing about this job," he observed.

Harrington received Certificates of Commendation in 1970 as lead test supervisor, Apollo, and again in 1982 on the STS-3 White Sands, New Mexico, landing turnaround. He was the recipient of three Exceptional Service Awards: in 1971, for his notable contributions to the success of the Apollo 15 mission; in 1981, for STS-1; and again, in 1989, for his contributions to the successful return to flight with the launch of STS-26.

As director, Shuttle Operations, he was awarded the Outstanding Leadership Medal in June 1990. Harrington received a Silver Snoopy award in March 1994.

Harrington and his wife will continue to reside in Melbourne. They have two grown children, Kristin and James.

A. David Flowers



Flowers

A. David Flowers retired Jan. 3 from the post of chief financial officer at Kennedy Space Center after 35 years of government service.

As chief financial officer for the past four years, he was responsible for the

centralized planning and analysis of all space center resources and financial management activities.

Flowers began his career as an engineer and worked on all the manned space programs except Mercury. A native of North Carolina, he holds a bachelor's degree in mechanical engineering from North Carolina State University.

He served in the Air Force from 1962 to 1965, and worked on the Atlas-Agena and Gemini programs. He joined KSC in 1965 and worked in the Apollo Project Office. He held positions of increasing responsibility at the space center: test supervisor in Launch Operations; orbiter manager in the Shuttle Project Office; chief of the Performance Management System Office in the Shuttle Project Office; chief of the Requirements Analysis Office within the Comptroller Office; and chief of the Project Control Office for the Space Station Project Office.

Flowers was named the associate director of Payload Management and Operations in 1989, and served in that position until his appointment as chief financial officer in October 1993. Among his numerous awards are two NASA Exceptional Service Medals and the KSC Equal Opportunity Award.

The best part of working at KSC, he said, was "the many dedicated people out here who are willing to work well beyond their assignments. I wish everybody goodbye and good luck."

Flowers listed two major activities on his retirement agenda — playing golf and spending time with his five grandchildren. He and his wife, Ruth, who retired from NASA in 1994, live in Titusville. They have two grown children, Diane and David Flowers Jr., who works for NASA in the Space Station Hardware Integration Office at KSC.

Salvatore J. Cristofano



Cristofano

Sal
Cristofano
completed a
career Jan.
3 that
spanned
four
decades and
carried him
across the
country
from

Washington state to Florida.
Originally from Canton,
Ohio, Cristofano began his
aerospace career in April 1961
as a test engineer at Boeing's
Hazardous Test Site in
Marysville, Wash. He worked
on both the Saturn V launch
vehicle and Apollo spacecraft
during the 1960s, and joined

After participating in both the Skylab and Apollo-Soyuz Test Project programs, Cristofano began work on the

NASA in 1966 at KSC.

Floyd A. Curington



Curingto

Floyd A. Curington, acting director of Expendable Vehicles, retired Jan. 3 from 33 years of federal service.

During his tenure he participated in the Viking missions to Mars and Voyager interplanetary explorations.

Curington began his career in 1964 supporting hydraulic operations in the Facilities Group at Saturn/Apollo Launch Complexes 34 and 37 on Cape Canaveral.

He also provided support at Complex 19 for the Gemini program. In 1966 he transferred to the payload operations division of the Shuttle program in the mid-'70s. He initially was involved with developing vertical payload processing concepts and facilities for the Shuttle.

Cristofano moved to NASA Headquarters in 1983 to support the Shuttle Centaur program. After the Challenger accident, he headed a team to develop alternate methods for launching high-energy missions such as Galileo, Ulysses and Magellan. He was appointed to the Senior Executive Service in 1986.

Cristofano returned to KSC in 1994, serving as the Payload Carriers Program manager first in Washington, D.C., and continuing in that capacity when the program was transferred to Florida.

For Cristofano, there was no debating the highlights of nearly 30 years in the aerospace business: the first Saturn V launch and the launch of Apollo 11.

He was noncommital about his retirement plans, noting only that relaxation and fishing were on the agenda.

Unmanned Launch Operations Directorate.

Curington is proud to have the distinction of having supported every planetary payload having flown on an expendable vehicle and he is proudest of his contributions to the Pioneer, Viking and Voyager programs.

He also contributed to the success of the Cassini mission to Saturn last year, working to integrate the NASA/Air Force/contractor team on this complex mission.

Said Curington, "The planetary missions of the 1970s made for a lot of very fun days to come to work."

Curington became the acting director of Expendable Vehicles in 1994. In this position he had a significant role in shaping NASA's launch services contracts with the private sector and the associated government oversight responsibilities that are the foundation for the directorate's operations today.

Destination: The Moon



FIRST NASA spacecraft with a lunar destination since the Apollo missions of the 1960s and early 1970s begins its four-day journey from Launch Complex 46 on Cape Canaveral Air Station. The Lunar Prospector spacecraft lifted off atop a Lockheed Martin Astronautics Athena II rocket at 9:28 p.m. EST, Jan. 6, and is now orbiting the moon.

STS-89 liftoff set for Jan. 22

David Wolf can start packing his bags for the return trip to Earth from the Russian Space Station Mir. His replacement, Andy Thomas, and six other crew members are slated to lift off from KSC on Jan. 22 to bring him home.

STS-89, the first Shuttle flight of 1998, will be the 89th Shuttle flight in program history. This eighth docking between the U.S. Space Shuttle and Russian Space Station Mir will be the first conducted with an orbiter other than Atlantis. The Space Shuttle Endeavour returns to flight after completing a year and a half of modifications and upgrades.

The STS-89 crew, in addition to Thomas, includes Commander Terrence Wilcutt; Pilot Joe Frank Edwards; and Mission Specialists James Reilly, Michael Anderson, Bonnie Dunbar and Salizhan Sharipov (Russia).

The launch window opens at about 9:43 p.m. EST, with the preferred launch time 9:48 p.m.. Liftoff will be from Pad 39A. Landing would occur on Jan. 31 at about 5:36 p.m. EST at KSC's Shuttle Landing Facility. Besides the crew exchange, some 7,000 pounds of experiments, supplies and hardware are scheduled for transfer between the two spacecraft.



STS-89 CREW arrives at KSC Jan. 14 for Terminal Countdown Demonstration Test activities. From left to right are Mission Specialists Salizhan Sharipov; Bonnie Dunbar; and James Reilly; Commander Terrence Wilcutt; Mission Specialist Andrew Thomas; Pilot Joe Edwards Jr.; and Mission Specialist Michael Anderson.

Explorer I ...

(Continued from Page 1) occurred. By this time, the entire team was on its feet.

"What do you want to do?" Test Coordinator Robert Moser asked Debus, then-director for the ABMA Firing Laboratory that included the 54 men inside the blockhouse just 100 yards from the rocket.

Debus calmly looked through the window at the vehicle on the pad.

"I had looked at the vane in question and did not see any motion," Debus later recalled

on the 25th anniversary of the event. "This had to be, therefore, an indication only. I waved my hand to continue."

Seconds later, at 10:48 p.m., the vehicle roared to life. Less sophisticated spacecraft hardware included a solidfueled upper stage that had to be fired manually through a radio relay by personnel three miles from the launch site.

An agonizing 95-minute wait ensued before the spacecraft's course was picked up by a tracking station on the West Coast to confirm its orbit.

While the size and scale of

the Jupiter-C and the Explorer I mission appear small both literally and figuratively compared to the later successes of the Apollo lunar landing, Skylab and Space Shuttle efforts, its place in history remains large as a turning point in the then nascent space race between the United States and Soviet Union.

"I knew you could do it," wrote one well wisher to the Explorer I team. "Tell the world that we have just begun

After the launch, ABMA

Director Maj. Gen. J.B. Medaris commissioned a booklet reprinting just some of the thousands of congratulatory messages the team received from around the world, including those shown here.

"I know that you will share my enjoyment of these statements," he wrote in the introduction, "and my gratitude that we restored in some measure, the confidence of our people and our friends in many lands in the capabilities of the United States."

Tour ...

(Continued from Page 1) bring up to three guests free on the tour.

- Special tickets can be picked up by employees, with their KSC badge, Tuesday, Jan. 13, through Friday, Jan. 16, at the IMAX ticket counter in the Galaxy Center at the KSC Visitor Complex. The counter is open from 9 a.m. to 6 p.m.
- Badged employees and their guests may use the ticket on a given day to travel by bus to the different tour sites, beginning at the KSC Visitor Complex. The Apollo /Saturn V Center and the LC 39 Observation Gantry are on one bus route from the Visitor Complex, while the **International Space Station** Center is reached by another.
- These two new tour destinations will be open to KSC employees only by taking the Visitor Complex bus tours. Employees may not visit the locations on their own due to operational constraints.

The new attractions represent the second phase of a comprehensive effort to make the American space program as accessible as possible to members of the general public visiting KSC.

"These new attractions, along with the Apollo/Saturn V Center, give the visitor unprecedented access to the U.S. space program and Kennedy Space Center. Now,



A VIEW TO FOREVER the observation deck six stories up on the new LC 39 Observation Gantry. visitors have unprecedented views of the launch pads and the

instead of a tour largely limited to driving around our facilities, visitors can spend as much of their day as they wish in the heart of our operational sites, getting an up close and personal view of both history and the future," said James Ball, chief of the NASA Public Services Office at KSC.

The 60-foot-tall LC 39 Observation Gantry features a top-level observation deck with a surrounding open-air walkway. From here, visitors have a 360-degree panoramic view of KSC's Launch Complex 39 area.

In addition to unparalleled views, the LC 39 Observation Gantry offers several other experiences to pull the visitor into the midst of the Shuttle program. Shuttle astronaut Marsha Ivins appears in a film presentation to explain how a Shuttle is prepared for launch. An exhibit gallery highlights components of the Shuttle and the launch facilities, including a sample of the protective tile

surrounding area.

that shields the orbiter from the extreme temperatures of space and re-entry, and an actual Shuttle main engine suspended between two floors. Also located here is the Shuttle Science Research Station which features two interactive exhibits. Visitors can use touch-screens to gather information about the Shuttle program, provided by

actual KSC personnel.

The International Space Station Center also is designed to make visitors feel like participants rather than remote observers in America's space program. The space station experience begins with a film hosted by Robert Cabana, commander of the first U.S. assembly flight set to occur in July 1998.

Cabana talks about the purpose of the station and the challenges of designing and constructing such a mammoth research laboratory. Full-scale mockups of station modules, through which visitors can walk, are on display. Guests can then take an elevated walkway to a gallery overlooking the work area where actual International Space Station hardware is being prepared for flight into space.



John F. Kennedy Space Center

Spaceport News

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