1998 Spaceport News Summary

There were several banners used in 1998; all with the Spaceport News logo as shown above, and different variations on the left hand side of the page, including Mission updates, NASA 40th anniversary features and a few other variations.

Introduction

The first issue of the Spaceport News was December 13, 1962. The 1963, 1964 and 1965 Spaceport News were issued weekly. The Spaceport News was issued every two weeks, starting July 7, 1966, until the last issue on February 24, 2014. Spaceport Magazine, a monthly issue, superseded the Spaceport News in April 2014, until the final issue, Jan./Feb. 2020. The two 1962 Spaceport News issues and the issues from 1996 until the final Spaceport Magazine issue, are available for viewing at this website. The Spaceport News issues from 1963 through 1995 are currently not available online.

In this Summary, black font is original Spaceport News text, blue font is something I added or someone else/some other source provided, and purple font is a hot link.

All links were working at the time I completed this Spaceport News Summary. The Spaceport News writer is acknowledged, if noted in the Spaceport News article.

Followup From the 1997 Spaceport News Summary

The following is on page 32 of the 1997 Spaceport News Summary.

"… the STS-84 astronauts return to Houston on May 25 after spending the night in Florida. From left are Mission Specialists Edward Lu, Jean-Francois Clervoy, Jerry Linenger and Elena Kondakova; Commander Charles Precourt and Mission Specialists Carlos Noriega. Not shown in this photo is STS-84 Pilot Eileen Collins. Linenger observed that he felt much better than expected after a 132-day stay in space — the second longest in U.S. history — which included an extended stay aboard the Russian Space Station Mir. The sixth docking between the U.S. Space Shuttle and Mir also was one of the smoothest Shuttle flights to date."

Puzzle – The above photo is rather curious, in the sense that Armando, Oliu, Pete Chitko and I are unable to figure out exactly where it was taken. There appears to be a gas station in the upper right. May 25, 1997 was a Sunday. The building in the upper left includes some vaulted windows, which are also interesting. The photo does not jive with anything I know of at KSC or CCAFS. I did some Google map 3D satelliting around KSC, CCAFS, Patrick Air Force Base, JSC and Ellington Field, without success. Maybe I did not look hard enough. In any case, if someone knows the answer to the puzzle, please let me know.

Puzzle Solved. We have an answer. The following are responses from Eric Thaxton, Bill Haase, Robert Johnson, Greg Katnik and Charlie Precourt:

-Eric. "…The photo on page 32 looks like it was taken from the East side of the NASA hanger at PAFB (where the NASA helicopters are stored and where NASA 4 used to be stored). The gas station was straight East of the hanger (it is gone now). If I remember correctly, the road behind them is Redstone Road...".

-Bill. "…Yes, the picture was taken in front of Hgr 751, Patrick AFB…where we kept NASA 4 and (4) Huey helicopters (from the '60's until they were moved to KSC in 2008)…".

-Robert: "…I think I know the location of your mystery photo. It's PAFB just outside the old NASA Hanger where the astronauts used to park their T-38's. I believe that is old enlisted quarters and one of the base gas stations in the background – looking east toward the ocean…".

-Greg: "…For the photo on page 32, I think that is Patrick AFB. The building in the background may be the BOQ (Bachelor's Officer Quarters) or the TOQ (Transient Officers Quarters).

And from Charlie Precourt,: "Yes that's it! We visited there as a crew but I think it was either before flight or well after the flight on a post flight tour."

Thanks a bunch Eric, Bill, Robert, Greg, Charlie, Kelvin Manning and Phil Weber (for the assists)!!!!!

From the January 16, 1998, Spaceport News Summary

On page 5, **"Destination: The Moon".** The caption for the following photo is "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."

Also on page 5, **"STS-89 liftoff set for Jan. 22".** A portion of the article reads "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 upgrade…

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."

From The January 30, 1998, Spaceport News

On page 1, **"STS-89 lights up the sky".**

"THE SHUTTLE Endeavour cuts a bright swath as it heads toward the Russian Space Station

Mir. Endeavour lifted off at 9:48:15 p.m. EST, Jan. 22, from Pad 39A. STS-89 is the eighth docking with Mir, the first for Endeavour. All previous dockings were made by Atlantis. This also marked the first flight of three Block IIA main engines, featuring a Large Throat Main Combustion Chamber (LTMCC) that reduces overall engine system pressures and temperatures. Endeavour is set to land at KSC Jan. 31 at 5:36 p.m., leaving Andy Thomas on Mir and returning David Wolf to Earth along with six other crew members."

Also on page 1, under "**Mission Update; Super lightweight tank**".

"Ready to ship — The first super lightweight tank rolls out of the NASA Michoud Assembly Facility in New Orleans. It is due at KSC Feb. 3 to begin preparations for flight on STS-91, targeted for launch May 28."

Wikipedia has a good read on the Space Shuttle external tank, including the super lightweight tank.

On page 4, **"Hope it wasn't a favorite!".**

"CENTER Director Roy Bridges (right) performs the tradition of cutting the tie on new Launch Director Dave King in the Launch Control Center following the liftoff of the Shuttle Endeavour on STS-89 Jan. 22. The tradition has its origins in the military, when a pilot who completed his first solo flight went through the same rite of initiation. The STS-89 countdown and launch was King's first in his new role as launch director."

On page 5, **"Russian Phase I manager may also get ride on Shuttle//John Glenn to return to space on STS-95 this fall".** The article reads "With U.S. Senator John Glenn already booked to fly on the Shuttle this October, another surprise guest also may get a ride into space this year: Valeriy Ryumin, Russian Phase I Mir-Shuttle Program manager. The Russian Space Agency has nominated Ryumin, a spaceflight veteran, to fly the final mission to dock with Mir. He already is training with the STS-91 crew at Johnson Space Center…

Ryumin has spent 362 days in space over three missions. He first flew in 1979 on the Soyuz 25 mission, then on the Soyuz 32 mission to Salyut 6 (a 175-day stay in 1979) and for the last time as a member of the Soyuz 35 mission that lasted 185 days in 1980. Glenn was the first American to orbit the Earth, completing a three-orbit flight on Feb. 20, 1962. He did not fly in space again, but remains an active pilot.

At least eight NASA crew members over 55 years old have flown multiple missions. Story Musgrave was 61 years old when he flew on STS-80 in 1996, his sixth spaceflight. Shannon Lucid was 54 years old when she completed her record-breaking stay aboard Mir in 1996."

Wikipedia has a read on Valeriy Ryumin.

"JOHN GLENN (left) came to KSC for the STS-89 launch earlier this month. Showing him around the orbiter Columbia in Orbiter Processing Facility Bay 3 is astronaut Steve Oswald, now the deputy associate administrator for Space Flight at NASA Headquarters."

From The February 13, 1998, Spaceport News

On page 1, **"Spacelab gives way to International Space Station era".** In part, the article reads "On Feb. 4, a symbolic door closed on one of the most successful chapters in Shuttle program history. For the last time, a Spacelab module completed preflight

preparations in the Operations and Checkout (O&C) Building and was installed in the payload canister for transfer to the Orbiter Processing Facility.

This phase of the Shuttle program is winding down as the second phase of the International Space Station (ISS) program gets under way. Microgravity and life sciences research that formerly was conducted in Spacelab modules will eventually be conducted inside the completed ISS…".

On the left, "A SPACELAB module is transferred for the last time Feb. 4 from a test stand in the Operations and Checkout Building to the canister transporter. This module is configured as Neurolab, a life sciences research mission focusing specifically on the neurological system. Composed of the brain, spinal cord, peripheral nerves and sensory organs, the human nervous system is the most complex system in the body." On the right, "THE Spacelab commemoration ceremony in the O&C Feb. 6 featured a Brevard Symphony orchestra quintet and four speakers, including Center Director Roy Bridges, against the backdrop of the American flag, a banner hailing Spacelab as the pathway to the International Space Station and the payload canister transporter holding the STS-90 Neurolab module. At the end of the ceremony, the doors on the canister were shut completely for the last time on a flight-ready Spacelab module…".

On page 3, "**Director for a day**".

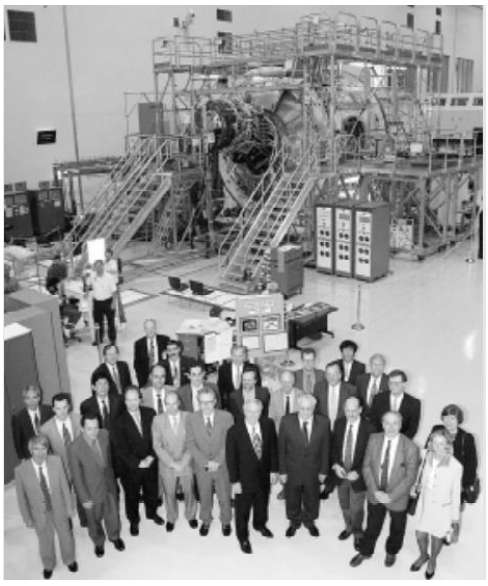
"EXPLORING OPTIONS — Astronaut High School Senior Jason Rodgers took advantage of

Brevard County's School-to-Work Program Feb. 4 to learn more about the responsibilities of the KSC director. Here, Rodgers (second from right) and Center Director Roy Bridges (right) meet in the Operations and Checkout Building with Darcy Miller, project engineer, Payload Processing (left) and John Lekki, lead electrical engineer, Payload Processing (behind Miller).

The School-to-Work program encourages students to spend a day in the workplace shadowing a professional in their chosen field. In addition to learning about a portable data collection procedure system from Miller and Lekki, Rodgers also got some insight into Bridges' daily schedule as head of KSC. Given Rodgers' choice of Bridges — a retired Air Force major general — as the professional he wanted to shadow, perhaps it's not surprising that the Titusville student will be attending the Air Force Academy after he graduates."

On page 4, **"VIP tour".** The caption for the below photo reads "SENIOR DELEGATION — Many senior government officials who participated in a Jan. 29 International Space Station signing in Washington, D.C., took advantage of the opportunity to see the hardware — including Node 1, behind them in the Space Station Processing Facility — at KSC the following day.

The 1998 Intergovernmental Agreement on Space Station Cooperation establishes the framework of cooperation among the partners on the design, development, operation and utilization of the station. State Department official Strobe Talbott was the U.S. signatory. Also participating were representatives of Russia, Japan, Canada, and participating countries of the European Space Agency (ESA), including Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, and the United Kingdom. Three bilateral memoranda of understanding also were signed. The new agreements supersede previous space station agreements among the United States, Europe, Japan and Canada signed in 1988, and reflect changes to the program resulting from significant Russian participation as well as program design changes undertaken by the original partnership in 1998. NASA Administrator Daniel Goldin is at front, center."



From The February 27, 1998, Spaceport News

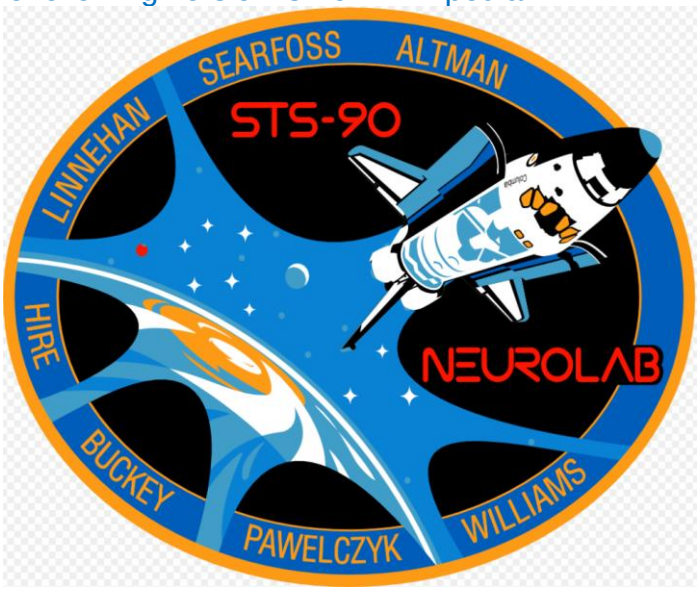
On page 1, the **"MISSION UPDATE"** for STS-90.

STS-90 Columbia, 90th Shuttle, 25th OV-102

Launch: April 16, 2:19 p.m. EDT (recently changed from April 2) Pad 39B, KSC Neurolab

Crew: Richard Searfoss; Scott Altman; Richard Linnehan; Dave Williams; Kay Hire; Jay Buckey; James Pawelczyk"

The STS-90 mission patch version from the Spaceport News is not of a fidelity to reproduce here. The following version is from Wikipedia.



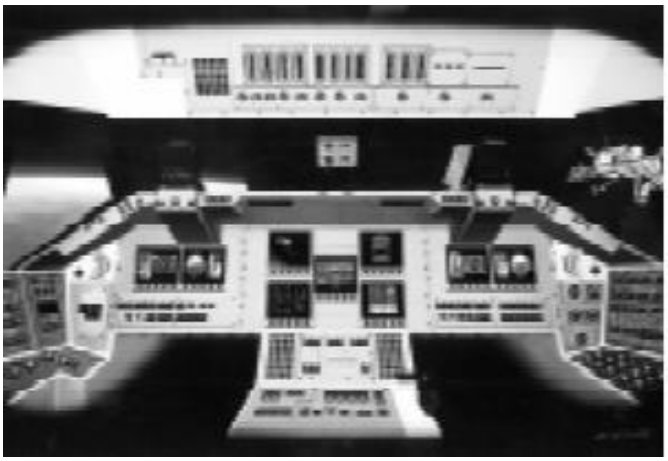
From Wikipedia, "The STS-90 crew patch reflects the dedication of the mission to neuroscience in celebration of the decade of the brain. Earth is revealed through a neuron-shaped window, which symbolizes new perspectives in the understanding of nervous system development, structure and function, both here on Earth and in the microgravity environment of space. The Space Shuttle Columbia is depicted with its open payload bay doors revealing the Spacelab within. An integral component of the mission, the laboratory/science module provided by the European Space Agency (ESA), signifies the strong international involvement in the mission.

The seven crew members and two alternate payload specialists, Chiaki Naito-Mukai and Alexander W. Dunlap, are represented by the nine major stars of the constellation Cetus (the whale) in recognition of the International Year of the Ocean. The distant stars illustrate the far reaching implications of the mission science to the many sponsoring agencies, helping prepare for long-duration space flight aboard the International Space Station (ISS). The moon and Mars are depicted to reflect the crew's recognition that those two celestial bodies will be the next great challenges in human exploration of

space and represent the key role that life science research will play in supporting such missions."

On page 3, **"Atlantis is first orbiter to get new advanced cockpit display".** Part of the article reads "The orbiter Atlantis, undergoing its second Orbiter Maintenance Down Period (OMDP) in California, has become the first vehicle in the fleet to receive a new state-of-the art cockpit display system. The Multifunction Electronic Display Subsystem (MEDS), built by Honeywell Space Systems/Satellite Systems Operation, is patterned after liquid-crystal display technology on the Boeing 777. It replaces the current electro-mechanical and cathode ray tube displays which were designed for the Shuttle in the 1970s…

After installation is complete, the orbiter will have nine displays on the forward flight deck and two on the aft to support payload operations. The displays offer state-of-the-art color and clarity. They also weigh less and use less energy than the existing displays…".



"ARTIST'S concept of the Honeywell Multifunction Electronic Display Subsystem (MEDS). All four orbiters will be outfitted with the display system and Honeywell also has been contracted to provide a unit for the International Space Station that will allow astronauts to interface with the station's robotic arm."

From The March 13 1998, Spaceport News

On page 4, **"NASA Engineering Day Feb. 9, 1998", by Ember Smith.** In part, the article reads "In conjunction with National Engineering Week Feb. 22-28, the Equal Opportunity Program Office invited about 100 local Middle School students, mostly minority and female, to KSC to participate in NASA Engineering Day activities Feb. 9… This year James Madison Middle School in Titusville, Andrew Jackson Middle School in Titusville, and Space Coast Middle School in Port St. John participated in the day's

events… Activities began at the U.S. SPACE CAMP, where instructors led the students through a morning of engineering activities, building and launching model rockets; building a mock-up of the Space Station; and taking part in a Strange Science show. Students were mentored by KSC engineers who volunteered their time to help the students…

One of the highlights of the day was the poster competition. Posters were created in advance by the students using the theme selected for the National Engineers Week: "Engineers: Turning Ideas into Reality." The posters were displayed in the Mission Briefing Room where JoAnn Morgan, associate director for Advanced Development and Shuttle Upgrades; Tip Talone, director, Space Station Hardware Integration Office; and Dr. Irene Long, director, Biomedical Office, served as judges…".

On the left, "STUDENTS began their day at the U.S. SPACE CAMP, where they built and then launched model rockets. Here, they prepare the rockets for liftoff." On the right, "…, one of the students poses in front of the many posters displayed in the Mission Briefing Room of the Operations and Checkout Building."

On page 5, **"Collins tapped as first female Shuttle commander".** Part of the article reads "The first woman to serve as pilot on a Space Shuttle mission also will be the first woman to serve as a mission commander. Eileen Marie Collins earned the first distinction in 1995 on STS-63. She'll earn the second later this year on STS-93… Collins became an astronaut in July 1991 and has flown in space twice. She is an Air Force lieutenant colonel who graduated in 1990 from the Air Force Test Pilot School at Edwards Air Force Base and has logged more than 4,700 hours in 30 different types of aircraft. She served as pilot on her first two Shuttle flights, STS-63 and STS-84 last year…".

“A suit technician helps astronaut Eileen Collins prepare for her second spaceflight.”

Also on page 5, **“A familiar face returns to KSC”.**

“KAY Hire, the first KSC employee to join the astronaut corps, recently returned to the space center to participate in a Crew Equipment Interface Test (CEIT). She is shown here at the hatch of the orbiter Columbia in Orbiter Processing Facility Bay 3.”

And lastly on page 5, **“X-38 drop tests planned this month”.** A portion of the article states “The first free-flight tests of the X-38 technology demonstrator were set to begin earlier this month at Dryden Flight Research Center in California. The X-38 is being developed as a crew return vehicle for the International Space Station. It was designed at Johnson Space Center and will be able to hold a seven-person crew.

The full-scale, unpiloted airframe shown above underwent captive-carry tests attached to a B-52 aircraft at Dryden last summer. Further tests could include an unpiloted spaceflight test in early 1999… About 100 people are currently supporting the effort at JSC and Dryden.”

"COMPACT in size, the X-38 demonstrator arrived at Dryden Flight Research Center last year to begin flight tests."

Wikipedia has a good read on the X-38. Several prototypes were built and drop tests were performed. Per Wikipedia, "…The X-38 program was cancelled in 2002 due to budget cuts….". The following is a neat photo and caption from Wikipedia.

"The X-38 Development Team with V131R, V132, and V201 on the east side of B220 at the Johnson Space Center at the close of the project (2003)"

John Muratore, in the blue cap, is standing right above the X-38 emblem. The Wikipedia read includes the disposition of the three vehicles shown in the photo.

From The March 27, 1998, Spaceport News

On page 1, **"SHUTTLE UPDATES"** for STS-91 and STS-88.

STS-91, Discovery 91st Shuttle, 24th OV-103, May 28, 8:05 p.m. EDT, Pad 39A, KSC, 9th Shuttle-Mir docking

The fidelity of the crew patches in the Spaceport News were not of high enough fidelity to reproduce here. The following patches and descriptions are from Wikipedia.

"This is the crew patch for the STS-91 mission – the ninth flight of the Shuttle-Mir Phase One docking missions. The crew will bring back Andrew S. W. Thomas, the last long-duration American crew member flown on the Russian Space Station Mir. This mission marks the end of the Shuttle-Mir Phase One Program and will open the way for Phase Two: construction of the International Space Station (ISS). The crew patch depicts the rendezvous of the Space Shuttle Discovery with the Space Station Mir.

The flags of the United States and Russia are displayed at the top of the patch and both countries are visible on the Earth behind the two spacecraft. The names of the American crew members surround the insignia on the outer areas, with the name of cosmonaut Valeriy Ryumin in Cyrillic at the lower right. The Alpha Magnetic Spectrometer (AMS) is an international payload planned to fly in the payload bay of Discovery. Two thin golden streams flowing into the AMS represent charged elementary particles. The detection of antimatter in space will help scientists better understand the physics and origins of the universe."

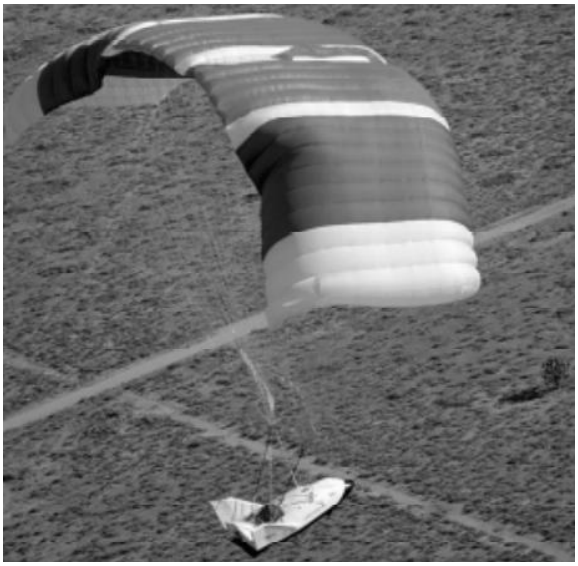
STS-88, Endeavour 92nd Shuttle, 13th OV-105, July 9,12:44 p.m. EDT (under review) Pad 39B, KSC, 1st International Space Station (ISS) assembly flight

"Designed by the crew members, this patch commemorates the first assembly flight to carry United States-built hardware for constructing the International Space Station (ISS). This flight's primary task is to assemble the cornerstone of the Space Station: the Node with the Functional Cargo Block (fgb). The rising sun symbolizes the dawning of a new era of international cooperation in space and the beginning of a new program: the

International Space Station. The Earth scene outlines the countries of the Station Partners: the United States, Russia, those of the European Space Agency (ESA), Japan, and Canada.

Along with the Pressurized Mating Adapters (PMA) and the Functional Cargo Block, the Node is shown in the final mated configuration while berthed to the Space Shuttle during the STS-88/2A mission. The Big Dipper Constellation points the way to the North Star, a guiding light for pioneers and explorers for generations. In the words of the crew, "These stars symbolize the efforts of everyone, including all the countries involved in the design and construction of the International Space Station, guiding us into the future."

On page 2, **“First X-38 free flight”.**



“FIRST free-flight of the X-38 subscale demonstrator was completed March 12 at Dryden Flight Research Center. Additional tests are planned.”

Also on page 2, **“AXAF assembly complete”.**

“ASSEMBLY of the Advanced X-ray Astrophysics Facility was completed in early March at the TRW assembly plant in California. A checkout of the fully assembled spacecraft is now Underway.”

The Advanced X-ray Astrophysics Facility would be become the Chandra X-ray Observatory.

On page 4, **“NASA marks 40 years in 1998”.** The article reads “NASA will celebrate its 40th year this October. To honor the milestone, the agency unveiled a logo which will appear on NASA publications and other materials in the coming months.”

From The April 10, 1998, Spaceport News

On page1 and 8, **“Columbia to lift off April 16”.** Part of the article reads “A complex mission focusing on the most complex system in the human body will highlight the final scheduled Spacelab flight aboard the Space Shuttle this month. Preparations continue toward the liftoff of the Shuttle Columbia at 2:16 p.m. EDT, April 16, from Launch Pad 39B… During the 16-day mission, a crew of seven will perform studies both on

themselves and a menagerie of animals including snails, two kinds of fish, rats and crickets…

Unlike previous Spacelab missions, the seven STS-90 members will work the same schedule and not divide into teams. Researchers want to preserve the crew's normal circadian rhythms to gather the most accurate data possible. The mission is set to conclude with a landing at KSC May 3 at 11:07 a.m. EDT."

"MARCH 31, 1998 — TCDT wraps up at Launch Pad 39B. From left are STS-90 crew members Payload Specialist Jay Buckey; Pilot Scott Altman; Mission Specialist Kay Hire; Commander Richard Searfoss; Payload Specialist James Pawelczyk; Mission Specialist Dafydd Williams of the Canadian Space Agency; and Payload Commander Richard Linnehan."

On page 2.

JFK Jr. attends HBO premiere

JOHN F. Kennedy Jr., seen here with KSC Director Roy Bridges Jr., was one of the many luminaries who attended the March 25 premiere showing of Home Box Office's space extravaganza, *From the Earth to the Moon,* at the Apollo Saturn V Center. Noteworthy trivia about the 12-part, $65-million production: More than 100 locations were used, including KSC and Edwards Air Force Base, Calif.; the moonscape set required 3,500 tons of Earth for the foundation and 2,000 tons of crushed granite to simulate the gray of the lunar surface; to simulate the moon's reduced gravity, actors were rigged to large 10-foot by 60-foot helium balloons, which has never been done before.

From The April 24, 1998, Spaceport News

On page 1, **"A beautiful day".**

"THE 16-day STS-90 mission to study the human nervous system begins with a 2:19 p.m. liftoff April 17 of the Space Shuttle Columbia from Pad 39B. On board are a crew of seven and a menagerie of animals that will be the subject of 26 research investigations. Landing currently is scheduled for May 3 at 12:09 p.m."

On pages 2 and 8, **"98 Debus Award goes to Morgan".** A portion of the article reads "JoAnn Morgan, KSC associate director for Advanced Development and Shuttle Upgrades, has been named this year's recipient of the prestigious Kurt H. Debus Award by the National Space Club… The Debus Award is one of the most prestigious honors bestowed by the Florida aerospace community upon those whose leadership and contributions have advanced America's space program…

Named after KSC's first director, the Debus Award also has been bestowed on former Center Director Forrest McCartney, former KSC Deputy Director George Page, and former contractor executive George Faenza of McDonnell Douglas. Morgan is the first woman to be honored… Morgan's tenure with the U.S. space program began in 1958… She participated in every U.S. human spaceflight endeavour, beginning with the Mercury Project and continuing today with the Space Shuttle…".

Morgan

From the May 8 1998, Spaceport News

On page 3, **“KSC Happenings”.**

“DYNAMAC Biologist Melissa Hensley (far left) shows Daughters Day attendees in the Operations and Checkout Building some of the equipment and apparel which would be used for field work, including the trap for catching Florida scrub jays so they can be banded and tracked. The show-and-tell demonstration by Hensley and co-worker Vickie Larson was just one of the many opportunities daughters of KSC employees had on April 23 to learn more about KSC and the types of work performed here.”

“THE KSC Child Development Center honored its 24 child-care givers on April 24, the first Child Care Professionals Day. This special day was established by an act of Congress to single out for praise those individuals who take care of our children when we are at work. “The KSC Child Care Development Center’s motto is *With love and knowledge we teach our children*,” said Center Administrator Denise Johnson, “and we believe that the child-care professionals who work here certainly live up to those words.” A luncheon was held and each care-giver presented with a plaque and a pin. From left, above, are: Johnson; Cindy Stepina, preschool lead teacher; Niki Davis, two-year-old lead teacher; Jennifer Duran, toddler I lead teacher; Lori Baker, infant lead teacher; Janet Bloom, transitional ones lead teacher; Miriam Fuentes, child development assistant administrator; and Ken Woodill, NASA Exchange general manager.”

From The May 22, 1998, Spaceport News

On pages 1 and 8, **"STS-91 — first Mir docking for Discovery closes door for Phase One of Space Station and opens window on antimatter research".** In part, the article reads "More than two years of continuous U.S. presence aboard the Russian Space Station Mir will draw to a close when NASA astronaut Andrew Thomas, Ph.D., transfers to the orbiter Discovery during docking operations on mission STS-91. When Dr. Thomas leaves Mir, Phase 1 of the joint U.S.- Russian International Space Station (ISS) program will conclude, and NASA astronauts will have lived and worked with their Russian crewmates continuously for more than 800 days on orbit… The ninth and final Mir docking is scheduled for Flight Day 3 of Discovery's mission set for launch June 2 at 6:10 p.m…".

"The STS-91 crew recently prepared for their mission during Terminal Countdown Demonstration Test activities at KSC. In the back, left to right, are Pilot Dominic Gorie, Mission Specialist Wendy Lawrence, Commander Charles Precourt, and in the front are Mission Specialists Franklin Chang-Diaz, Valery Ryumin, and Janet Kavandi."

On page 3, **"Renovations complete at historic Mercury launch blockhouse".** A portion of the article reads "The blockhouse for the Mercury-Atlas and unmanned Atlas-Agena Gemini target missions at Cape Canaveral Air Station's Space Launch Complex 14 has been renovated. The 45th Operations Support Squadron (OSS) led the effort to preserve the historic launch blockhouse that will be used as a conference center… Painting and cleaning of the blockhouse were accomplished by volunteers. Extensive repairs were made by Johnson Controls and Boeing, while Lockheed Martin and Brown and Root provided additional assistance…".

The caption for the photo on the following page "Cutting the ribbon at the blockhouse renovation ceremony are, left to right, KSC Deputy Director for Launch and Payload Processing Loren Shriver, Comedian Bill Dana (the "8th Mercury astronaut"), Mercury 7

astronauts L. Gordon Cooper and Scott Carpenter, Brigadier General Randy Starbuck, Betty Grisholm, and Major Rory Maynard."

On pages 4 and 5, **"KSC's All-American Picnic brought smiles for miles..."**. Part of the article reads "The KSC All-American Picnic held May 16 at KARS Park One drew an enthusiastic crowd — more than 5,000! — on a spectacularly beautiful day. Managed this year by a committee of NASA and contractor staff, the event offered a few changes from years past — including a fishing tournament for the kids, a chowder cookoff, and an exotic wildlife exhibit…".

On the left, "Jenna Tower, 3 years old, prefers snow cones to freeze-dried ice cream." On the right, "Center Director Roy Bridges has the eye of the tiger, which came with the rest of this number one land predator in the world, a 450-pound Siberian-Bengal tiger. Thunderhawk Directors flanking the feline with Benita and Roy Bridges are, left to right, Eddie Bealle, Lou Gunther, and Ray Thunderhawk. The tiger, incidentally, is the first in the world to have had successful cataract surgery."

On page 8, **“Mir Reflections”.**

“**STS-89 Mission Specialist David Wolf**, above left, returned to KSC on Apr. 30 to personally thank the many workers who assisted in his STS-86 liftoff to the Russian Space Station Mir as the sixth U.S. astronaut to stay there. Wolf completed 128 days on orbit and preceded Andy Thomas, who returns to Earth in June during STS-91.”

“**The first U.S. astronaut to stay on Mir was Norman Thagard**, …visited KSC recently to participate in a Pioneer Productions broadcast on space. It will air as a two-hour documentary on British television’s Discovery channel in the near future.”

Also on page 8, “**STS-91 tanking test goes well**”. In part, the article states “Engineers at KSC conducted a pre-launch cryogenic test of the Shuttle’s first super lightweight external tank (SLWT) on May 18. The tank, mated to the orbiter Discovery at Pad 39A, is scheduled for launch on mission STS-91…

Developed to increase the Shuttle payload capacity on International Space Station flights, the first SLWT is more than 7,000 pounds lighter than conventional metal alloy external tanks. Major changes to the lighter tank include the use of new materials and a revised internal design. The weight reduction is due to the use of aluminum lithium in the construction of the tank’s internal liquid hydrogen and liquid oxygen tanks…”.

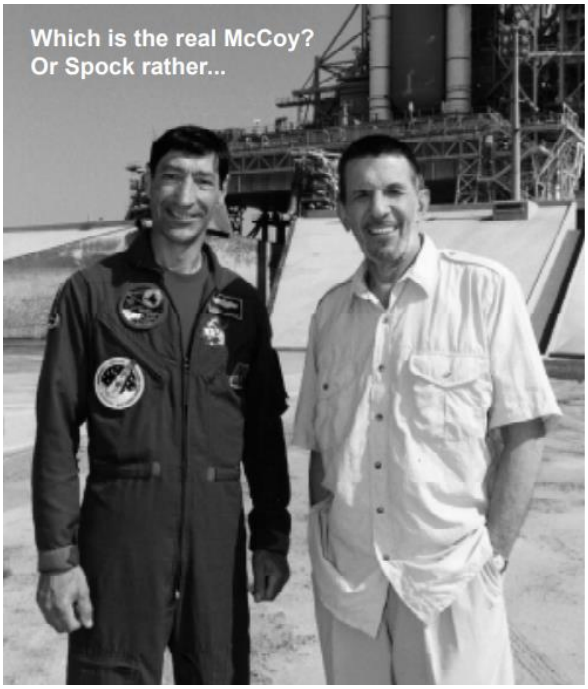
From The June 5, 1998, Spaceport News

On page 8, **"Super Safety Day at America's spaceport".** A portion of the article reads "In keeping with our guiding principle of safety and health first, all of KSC will observe Super Safety Day on Thursday, July 16. This day is being set aside for all KSC employees (civil service and contractor) at the center to focus on important safety and health issues. All normal work activities, with the exception of mandatory services, such as fire and security, will be suspended to allow all staff to attend KSC's Super Safety Day activities…

The KSC safety culture mandates that safety is everyone's responsibility, and the line organizations are assuming responsibilities previously considered exclusively Safety Office functions… Super Safety Day is a unique opportunity for everyone to focus on safety and health concerns both on and off the job…".

This is the first time KSC had dedicated a day for this activity. More to follow.

Also on page 8.



"Leonard Nimoy (right) recently trekked to America's spaceport as part of a project for an upcoming ABC Television documentary about asteroids. The informational program, scheduled to air in July, will include interviews with top NASA scientists from the Jet Propulsion Laboratory and Ames Research Center. Nimoy's visit to KSC included a tour by Astronaut Mario Runco, seen here standing with Nimoy (who played the Vulcan Mr. Spock on Star Trek) in front of the Space Shuttle Discovery at Launch Pad 39A."

The June 19, 1998, Spaceport News

On page 1, **"STS-91 — a flight of firsts and farewells".** The article reads "Three years after the orbiter Atlantis accomplished the first docking to the Russian Space Station Mir, the STS-91 crew aboard Discovery concluded the ninth and final Shuttle-Mir mission. Joining the STS-91 crew for the trip home was NASA astronaut Andy Thomas, the seventh and final U.S. astronaut to serve as a Mir crew member, returning after four and a half months in space. Thomas' return marks the end of 977 total days in space for all U.S. astronauts who were Mir crew members (exceeding the time spent in space by our Space Shuttle fleet in its 17 years of experience) and 812 consecutive days in space."

On the left, "Discovery lifts off from Launch Pad 39A with the first new super lightweight external tank at 6:06 p.m. EDT June 2. Discovery spent four days docked to the Russian Space Station Mir for the final Mir docking mission. Discovery's crew included Commander Charles Precourt; Pilot Dominic Gorie; and Mission Specialists Wendy Lawrence, Franklin Chang-Diaz, Janet Kavandi and Valery Ryumin." On the right, "The orbiter Discovery is seen here making a perfect landing on June 12 on Runway 15 at KSC's Shuttle Landing Facility, bringing Thomas home after 141 days in space. The 91st Shuttle mission was the 44th KSC landing in the history of the Space Shuttle program and the 15th consecutive landing at KSC. Main gear touchdown was at 2:00:18 p.m. EDT."

On page 8, **“A Hire Form of Expression”.**

“Mission Specialist Kay Hire, signing autographs at left, recently returned to KSC with the crew of the STS-90 mission to personally thank KSC workers. Also signing autographs are Mission Specialist Daffyd “Dave” Williams, far right, and Pilot Scott Altman. Hire is the first KSC employee to join the astronaut corps. She began working here in 1989 and was later certified as a Space Shuttle test project engineer (TPE). From the TPE computer console position in the Launch Control Center, she integrated all technical aspects of Shuttle turnaround maintenance from landing to launch. During STS-90, the seven-person crew served as both experiment subjects and operators for 26 individual life science experiments focusing on the effects of microgravity on the brain and nervous system. Hire has now logged more than 381 hours in space.”

From The July 3, 1998, Spaceport News

On page 1, “**No more burning issue than safety**”. The article reads:

“In these days of firefighters risking life and limb to protect us, our loved ones and the homes we’ve built and cherish here in Florida, no one issue speaks more loudly to us than safety. If we didn’t take the time and make the effort to safeguard the things we value, yet perhaps take for granted, day to day — our health, the ability to work, the opportunity to provide value, time we spend with loved ones — all of these treasures

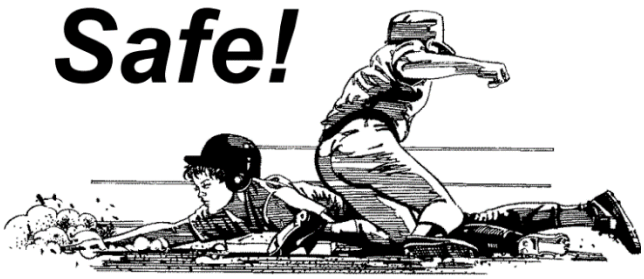
could literally go up in smoke. Your active participation in Super Safety Day is an investment not just in the future, but right here and right now. I urge you to give your undivided attention to and internalize the messages you hear on July 16 and to practice our guiding principle “Safety and Health First.”

— Roy Bridges Jr. Director”

1998 was the year of some wildfires in Florida, some burning across I-95. Wikipedia has a read on same. This site includes a history of wildfires in Florida. And there were wildfires in Florda earlier this year.

““A NASA helicopter and KSC security staff recently came to the aid of the state at the request of the Florida Division of Forestry. Thanks to forward-looking infrared radar on the chopper, “hot spots” were identified in Volusia and Flagler counties, assisting state firefighters in prioritizing areas in greatest need. Identifying ground structures in the path of destruction, KSC staff were also able to help the state in ongoing evacuation efforts and in fighting the deadly flames that have plagued the state since mid-June.”

Also on page 1.



On July 16, Kennedy Space Center will for the first time dedicate an entire day to safety. All normal work activities, with the exception of mandatory services — such as fire, security, cafeterias and buses — will be suspended to allow all possible personnel to attend Super Safety Day activities. The theme of the day, “Safety on the Line,” calls to our attention that safety is truly everyone’s responsibility: line organizations are both responsible and accountable for areas previously considered to be exclusively Safety Office functions…

Events on July 16 will open at 8 a.m. with introductory remarks by KSC Director Roy Bridges, who will introduce keynote speaker Gordon Fullerton, former astronaut and current research pilot at NASA's Dryden Flight Research Center in California…".

Super Safety Day has evolved into the current KSC Safety and Heatlh Days, usually conducted over a week in the spring timeframe.

On page 7, **"Armageddon Galactic premiere at KSC".** The article reads "Touchstone Pictures' summer blockbuster movie, "Armageddon," partially filmed at KSC, debuted at a world premiere screening at the Apollo/Saturn V facility on June 2."

"Viewing the film with KSC guests were, left to right, Director Michael Bay, Stars Ben Affleck, Liv Tyler, Ken Campbell, Billy Bob Thornton, Bruce Willis, Steve Buscemi, Producer Jerry Bruckheimer, and Actress Jessica Steen."

"Actress Gwenyth Paltrow joins Ben Affleck and Bruce Willis entering the theater for the worldwide premiere of "Armageddon."

On page 8.

"Freedom Star, one of NASA's two solid rocket booster recovery ships, towed a barge

containing the third Space Shuttle super lightweight external tank into Port Canaveral on June 16. This tank is scheduled to launch the orbiter Discovery on mission STS-95 in October. This first-time towing arrangement, part of a cost savings plan by NASA to prudently manage existing resources, began June 12 from the Michoud Assembly Facility in New Orleans, where the Shuttle's external tanks are manufactured.

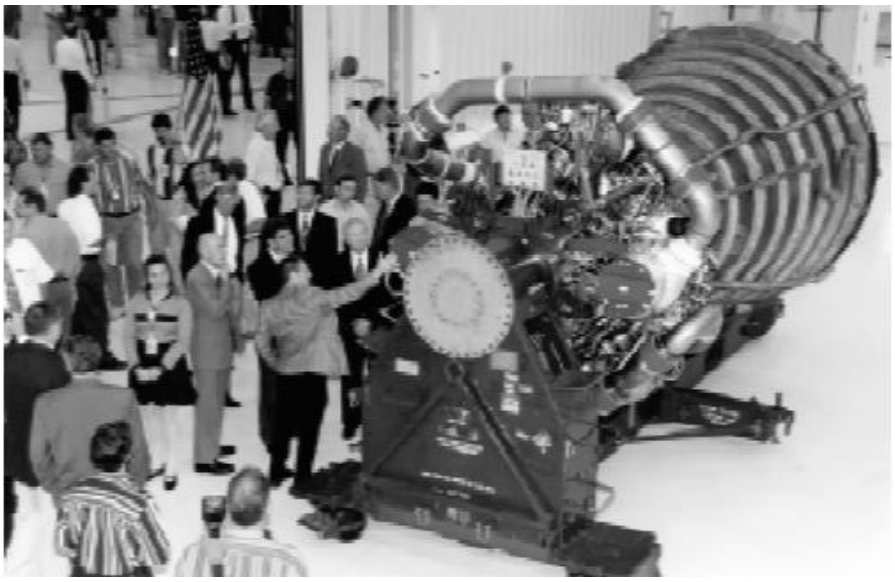
The barge then was transported up the Banana River to the Launch Complex 39 area turn basin using a conventional tugboat. Previously, NASA relied on an outside contractor to provide external tank towing services at a cost of about $120,000 per trip. The new plan allows NASA's Space Flight Operations contractor, United Space Alliance, to provide the same service directly to NASA using the recovery ships during their downtime between Shuttle launches. Studies show a potential savings of about $50,000 per trip. The cost of the necessary ship modifications should be paid back by the fourteenth tank delivery."

From The July 1, 1998, Spaceport News

On page 1.

"Since its inception Oct. 1, 1958, the National Aeronautics and Space Administration has accomplished many great scientific and technological feats, filling volumes of books in libraries and schools worldwide. The agency has won the prestigious Collier Trophy for great achievements in aeronautics and space 14 times, and NASA technology has been adapted for many uses by the private sector in areas unrelated to aerospace… In honor of the anniversary, Spaceport News will include information pertinent to NASA history in the issues leading up to the October celebration….".

On page 2, **"Space Shuttle Main Engine Processing Facility opens".** A portion of the article reads "KSC's brand new 34,600 square foot Space Shuttle Main Engine Processing Facility (SSMEPF) is now officially open for business. A major addition to the existing Orbiter Processing Facility Bay 3, the new facility replaces the Shuttle Main Engine Shop located in the Vehicle Assembly Building (VAB)… The first three main engines to be processed in the new facility are scheduled to fly on the Space Shuttle Endeavour during the STS-88 mission in December this year."



“James Tibble (pointing at engine), an Engine System/GSE Team manager for Rocketdyne, discusses the operation of a Space Shuttle Main Engine with Bob Sieck, director of Shuttle Processing, U.S. Congressman Dave Weldon and KSC Director Roy Bridges Jr. Following a ribbon-cutting ceremony on July 6 for the Space Shuttle Main Engine Processing Facility, KSC employees and media explored the facility.”

The SSMEPF is now part of the Commercial Crew and Cargo Processing Facility (C3PF), for Boeing’s Commercial Crew Program. The below is a photo from the web, of the front of C3PF. The light blue curving lines in the foreground of the photo are what remains of Orbiter tow lines.

I would say the C3PF is the most colorful building on Center, frontage wise!

From the July 31, 1998, Spaceport News

On page 1.

Part of the article reads “Sputnik I, the world’s first artificial satellite that the Soviet Union launched on Oct. 4, 1957, provided the impetus for the founding of the National Aeronautics and Space Administration. Just over 40 years later, we are building an International Space Station with the Russians as partners. Although Cold War rivalries prompted many early initiatives, the legislation that enabled NASA’s creation called for the peaceful exploration of space for the benefit of all…:.

On pages 1 and 3, **“Alan Shepard’s candle continues to burn”.** In part, the article reads “Alan Shepard Jr., America’s first man in space and the fifth to walk on the moon, died at age 74 on July 21… “Alan Shepard will be remembered, always, for his accomplishments of the past: being one of the original seven Mercury astronauts, for being the first American to fly in space and for being one of only 12 Americans ever to step on the moon,” said NASA Administrator Daniel Goldin. “He should also be remembered as someone who, even in his final days, never lost sight of the future.”…

When he was selected to be one of America’s first seven Mercury astronauts he was regarded “as a top-notch Navy aviator, tough, quick-witted, and a leader,” wrote Tom Wolfe in The Right Stuff…

He was the fifth man to walk on the moon and the oldest at the age of 47. Shepard retired from NASA in 1974 and started Seven Fourteen Enterprises (for Freedom 7 and Apollo 14), which served as an umbrella company for several enterprises. He also served for many years as the chairman of the Mercury 7 Foundation — now the Astronaut Scholarship Foundation…”.

“Alan Shepard in his space suit inside the Mercury capsule. Waiting in the rocket as delays postponed his flight, Shepard instructed the launch team to just “light this candle.”

On page 2, **“KSC stands for safety”.** Part of the article reads “On July 16, Kennedy Space Center employees took a stand for safety — standing down from work for the entire day to focus exclusively on safety. For the first time ever, about 14,000 KSC employees, both NASA civil service and contractors, departed from normal activities, rescheduling Shuttle and space station work, to participate in a panel discussion that was broadcast centerwide and to train throughout the day on safety related issues. The afternoon events included vendor displays across the center as well as organization seminars and training…”.

Panel moderator Loren Shriver, at podium, assisted in directing live questions to the panel that included, left to right, Roy Bridges, Randall Starbuck, Kenneth Cockrell, Tommy Holloway, Richard Blomberg and JoAnn Morgan.”

On page 3, **“Training for STS-95 ... that was Glenn; this is now”.**

“STS-95 crew members recently reviewed procedures in the SPACEHAB Payload Processing Facility in Cape Canaveral. From left are Payload Specialists Chiaki Mukai and John Glenn Jr. and Mission Specialists Scott Parazynski and Pedro Duque with the European Space Agency.”

Also on page 3.

From Wikipedia, about the mission patch, “The STS-95 patch, designed by the crew, is intended to reflect the scientific, engineering, and historic elements of the mission. The Space Shuttle Discovery is shown rising over the sunlit Earth limb, representing the global benefits of the mission science and the solar science objectives of the Spartan Satellite. The bold number '7' signifies the seven members of Discovery's crew and also represents a historical link to the original seven Mercury astronauts. The STS-95 crew member John Glenn's first orbital flight is represnted by the Friendship 7 capsule. The rocket plumes symbolize the three major fields of science represented by the mission payloads: microgravity material science, medical research for humans on Earth and in space, and astronomy.”

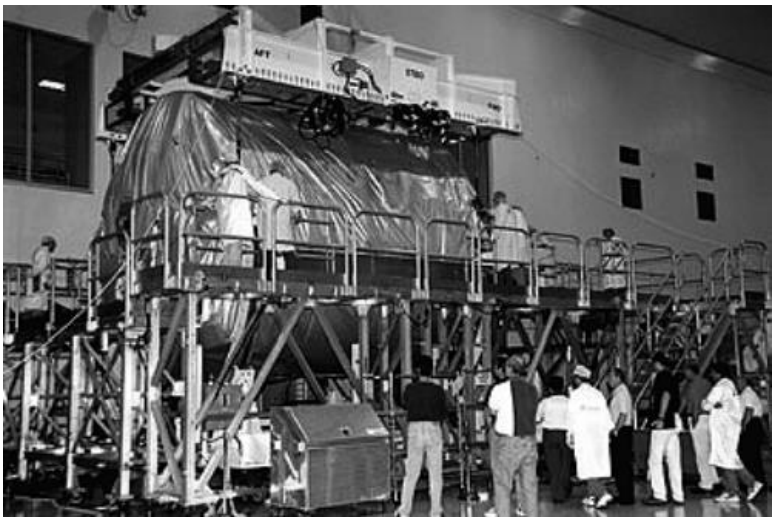
Of interest, Scott Parazynski flew on five shuttle mission and sumitted Mount Everest in May 2009. Scott talks about his Mount Everest summit in this video and this video takes a broader perspective of his life.

From The August 14, 1998, Spaceport News

On pages 1 and 3, **“Leonardo arrives at KSC**.” In part, the article reads “The Italian Space Agency’s “Leonardo” Multi-Purpose Logistics Module (MPLM) destined to become part of the International Space Station has arrived at KSC for prelaunch processing, testing and integration. The “Leonardo” MPLM arrived at Kennedy Space Center on Friday, July 31, by a special “Beluga” air cargo plane from the factory of Alenia Aerospazio in Turin, Italy…

This module, one of Italy’s major contributions to the International Space Station program, is a reusable logistics carrier — the primary delivery system used to resupply and return station cargo requiring a pressurized environment. The cylindrical module is approximately 21 feet long and 15 feet in diameter, weighing almost 4.5 tons excluding up to 20,000 pounds of contents… Once on orbit, it will be removed from the payload bay and docked to the space station using the remote manipulator arm of either the Shuttle or the station…

Leonardo is the first of three MPLMs to be furnished to the International Space Station program by the Italian Space Agency. Raffaello is scheduled to arrive at KSC next year and Donatello in 2001. Leonardo will be launched aboard Space Shuttle Endeavour on mission STS-100 currently planned for December 1999."



"Boeing and Alenia Aerospazio technicians, above, and KSC personnel below watch as the first MPLM is secured on its workstand in the Space Station Processing Facility. The module is one of three from Alenia Aerospazio and will provide storage and additional work space for up to two astronauts when it is docked to the ISS."

Wikipedia has a read on MPLMs. Per Wikipedia, "…The Leonardo module was modified in 2010 to turn it into the Permanent Multipurpose Module (PMM) and was permanently attached to the ISS during the STS-133 mission in March 2011…".

From The August 28, 1998, Spaceport News

On page 8, **"Putting on a new coat for fall".**

"Think painting your house is daunting? Try painting a flag that spans an area 209 feet by 110

feet, or about 23, 437 square feet. Seen here suspended on platforms from the top of the 525-foot-high Vehicle Assembly Building (VAB) at KSC, painters are busy giving the American flag a facelift and replacing the bicentennial emblem with the NASA logo. Each stripe of the flag is 9 feet wide and each star is 6 feet in diameter. The NASA logo, also known as the “meatball,” will measure 110 feet by 132 feet, or about 12,300 square feet.’’

The work, honoring NASA’s 40th anniversary, is expected to be complete in mid-September. The work is being performed with rollers and brushes and will require about 700 gallons of paint, which was donated by Devoe Coatings, a member of the ICI Paints World Group. The entire fleet of orbiters also is receiving the addition of the NASA logo on their wings and sidewalls. Discovery will be the first to reveal her new look during roll-over to the VAB, currently scheduled for Sept. 14, from Orbiter Processing Facility Bay 2. Discovery is scheduled to launch on Oct. 29 at 2 p.m.”

From The September 26, 1998, Spaceport News

On page 1.

“After a gap of six years, NASA returned to human spaceflight in 1981 with the advent of the Space Shuttle. The Shuttle’s first mission took place April 12-14, 1981, with John Young and Robert Crippen ushering in the new era of reusable launch vehicles. On STS-6, Story Musgrave and Donald Peterson conducted the first spacewalk to test new spacesuits and work in the orbiter’s cargo bay. Sally Ride became the first American woman to fly in space during STS-7 in 1983. The Shuttle was originally intended to fly up to 50 missions per year, but it was soon realized that the Shuttle systems were much too complex technologically to achieve such an ambitious flight schedule.”

Also on page 1, **“On the road to America’s spaceport”.**

“Headed to KSC? Now you can simply jump on Kennedy Space Center Highway. State Road

528 (also known as the Bee Line) was officially renamed by the state legislature earlier this year, and a new sign was unveiled Aug. 27 at a roadside ceremony attended by the KSC Space Man, U.S. Rep. Dave Weldon and KSC Director Roy Bridges, left to right. The sign was erected by Department of Transportation workers on the north shoulder of State Road 528 between State Road 3 and U.S. 1."

Now known as the Beachline, a complete story about the Expressway is available on Wikipedia.

On page 4, **"Counting down to STS-95".**

"Payload Specialist John Glenn Jr. signs his autograph for Mathew and Alexandria Taraboletti at the picnic that traditionally follows CEIT. Standing behind are parents Mark Taraboletti, an engineer with United Space Alliance (USA), and Eva Taraboletti, an orbiter integrity clerk with USA… The launch of the STS-95 mission, aboard the Space Shuttle Discovery, is scheduled for Oct. 29 from Launch Pad 39B."

On page 6, **"Up close and professional".**

"The KSC worker on the lower left applies red paint to the wing while the worker on the right fills in the blue field to the NASA insignia they are painting on the Vehicle Assembly Building (VAB). The logo, affectionately known as the "meatball," will measure 110 feet by 132 feet. The meatball was created by James Modarelli, now retired from NASA's Lewis Research Center in

Ohio. “I chose the main elements from the seal — the sphere, representing a planet; stars, representing space; the wing, representing aeronautics; and an orbiting spacecraft,” said Modarelli. Workers, suspended on platforms from the top of the 525-foot-high VAB, are using rollers and brushes to do the painting. In addition to the logo, the American flag is being repainted on the other side of the VAB. The painting honors NASA’s 40th anniversary on Oct. 1 and is expected to be complete in mid-September.”

From The September 25, 1998, Spaceport News

On page 1, **“The fleet reveals a new look”.**

On the left, “…morning shadows frame the orbiter Discovery on her rollover from the Orbiter Processing Facility (OPF) Bay 2 to the Vehicle Assembly Building on Sept. 14. After spending three months in the OPF undergoing prelaunch preparations for STS-95, the orbiter proudly displays the recently painted NASA “meatball” on the left wing and both sides of the fuselage. Discovery is the first orbiter in the fleet slated to launch with the official NASA insignia. The insignia on the wing measures 6 feet in diameter and the insignias on the left- and right-side mid-fuselage are 28 inches in diameter.”

On the right, “A worker paints the NASA logo on the port wing of the orbiter Endeavour, scheduled to launch in December for mission STS-88. The paint is a special pigment that takes 18 hours to dry; the whole process took approximately two weeks to complete. The NASA logo, termed “meatball," was originally designed in the late 1950s, and it symbolizes NASA’s role in aeronautics and space. The original design included a white border surrounding it, but the border was dropped for the Apollo 7 mission in October 1968 and replaced with royal blue to match the background of the emblem. All the orbiters in the fleet now bear the logo.”

From The October 9, 1998, Spaceport News

On pages 1, 5 and 8, **"Journey through Atlantis".** Part of the article reads "The orbiter Atlantis recently returned from the Palmdale, Calif., facility, where it spent 10 months undergoing one of the most extensive orbiter modification and maintenance periods in the Shuttle program's history. This time, the orbiter Atlantis underwent 443 structural inspections and at least 150 major modifications, including several upgrades enabling it to support International Space Station (ISS) missions. As one of the more significant modifications, Altantis became the first orbiter to obtain a fully digital cockpit…

Saving weight is one goal of orbiter modifications and maintenance. On Atlantis, a weight savings of more than 1,000 pounds was achieved by replacing older thermal protection tiles with a new, lighter-weight material over about 3,000 square feet of the orbiter's exterior. The weight savings allows the orbiter to haul heavier cargo like International Space Station components into space…".

"The first fully digital cockpit for Shuttles is now in Atlantis. Full-color displays replace buttons, knobs and dials. Photo credit: Tom Tschida, NASA Dryden Flight Research Center."

On the left, "The Shuttle Carrier Aircraft gently lands its piggyback cargo, the orbiter Atlantis, at KSC's Shuttle Landing Facility. Atlantis returned home on Sept. 27 after a 10-month stay in Palmdale, Calif., undergoing extensive modifications. The return flight included a fueling stop in

Ft. Hood, Texas, and a four-night stay at Ft. Campbell, Ky. Atlantis is scheduled to fly in June 1999 on the third International Space Station mission." On the right, "A crowd of more than 15,000 students lined up to view the orbiter Atlantis at Fort Campbell, Ky. on Sept. 24, where it stopped for four days en route from Palmdale, Calif., to KSC. An estimated 50,000 people viewed the vehicle at Fort Campbell's Open House two days later. The orbiter's arrival at KSC was delayed due to the threat of Hurricane Georges, permitting visitors from as far away as South Carolina to travel to Fort Campbell to view the orbiter as it rested atop the Boeing 747 carrier aircraft."

On pages 1 and 4, **"STS-95 preview: Glenn and now".** A portion of the article states "The eyes of the world will be focused on Space Shuttle Discovery on Oct. 29 as one of its seven crew members makes history once again. When John Glenn Jr. went aloft on Feb. 20, 1962, he was the first American to orbit the Earth. When he lifts off as STS-95 Payload Specialist Glenn, he will become the world's oldest astronaut at age 77. In fact, Glenn is not only flying as payload specialist; he himself is a payload for the crew. It is not the first time a crew member has been studied for medical purposes in space, but it will be a first for geriatric research in space…

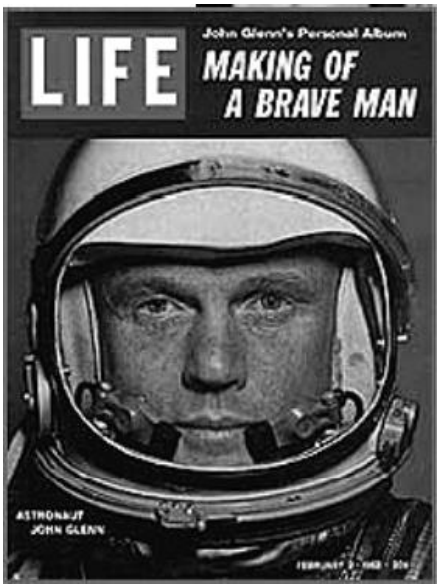
The STS-95 crew will be commanded by Curt Brown, who will be making his fifth Shuttle flight, and piloted by Steve Lindsey, making his second flight. There are three mission specialists: Scott Parazynski, M.D., making his third flight; Steve Robinson, making his second flight; and Pedro Duque, from the European Space Agency, on his first flight. Two payload specialists round out the crew: Chiaki Mukai, M.D., with the National Space Development Agency of Japan, who will be making her second flight, and John Glenn, who 36 years ago made history when he strapped himself into a nine-by-seven-foot capsule and became the first American to orbit the Earth…".

"The STS-95 crew take time out from SPACEHAB familiarization activities at the SPACEHAB Payload Processing Facility, Cape Canaveral, to pose for a group portrait. Clockwise from center front are Scott Parazynski, M.D.; Curtis Brown Jr.; Pedro Duque; Chiaki Mukai, M.D.; Steven Lindsey; Stephen Robinson; and John Glenn Jr."

From the October 23, 1998, Spaceport News

On pages 1, 4, and 5, "**STS-95: John Glenn rides again**". Part of the article reads "During his World War II service, he flew 59 combat missions. In July 1957, he set a transcontinental speed record from Los Angeles to New York, spanning the country in three hours and 23 minutes. This was the first transcontinental flight to average supersonic speed. And when he launches aboard the Shuttle Discovery on Oct. 29 at 2 p.m., John Glenn Jr. will be setting a new record yet again. During STS-95, at age 77, Glenn will become the oldest person to have flown in space…

In 1962, the only crew member he could rely on was himself; he was flying solo. This time, he won't be in charge. Instead, he'll be part of the team, and the focus of experiments on how people age… The STS-95 mission is scheduled to last approximately eight days and 22 hours. An on-time launch on Oct. 29 and nominal mission duration would have Discovery landing back at Kennedy Space Center at the end of a more than three million mile journey on Nov. 7 at noon EST. STS-95 will be the 25th flight of Discovery and the 92nd mission flown since the start of the Space Shuttle program in April 1981."



On the left, "Time and space and Life: John Glenn made the cover of Life magazine in February 1962 for his historic journey aboard Friendship 7, in which Glenn was the first American to orbit the Earth". On the right, "I was quite taken aback when I saw the Mercury spacecraft for the first time," recalls Bob Buckley, then an aerospace technologist for Project Mercury. "In my mind, I was thinking that this was a large vehicle, and it was only 9 feet tall and 6 feet wide at the base, and looking into the hatch where John Glenn was going to ride, it looked like a telephone booth with all of the equipment packed behind him."

The STS-95 crew pose on Launch Pad 39B during Terminal Countdown Demonstration Test activities. Standing before the Shuttle Discovery are, left to right, Mission Specialists Scott Parazynski and Stephen Robinson, Payload Specialists John Glenn Jr. and Chiaki Mukai, Mission Commander Curtis Brown, Pilot Steven Lindsey and Mission Specialist Pedro Duque.

On page 7, **"KSC Open House opens doors to about 33,600 people".** The article reads "Kennedy Space Center's annual Open House was held on Saturday, Oct. 10 and drew a crowd of more than 33,600 employees, families and friends to America's spaceport. Visitors were able to drive by the Space Shuttle Discovery poised for launch on pad 39B, view International Space Station hardware in the Space Station Processing Facility, meet astronauts, tour the Orbiter Processing Facility, discover the different laboratories around KSC and Cape Canaveral Air Station and much more."

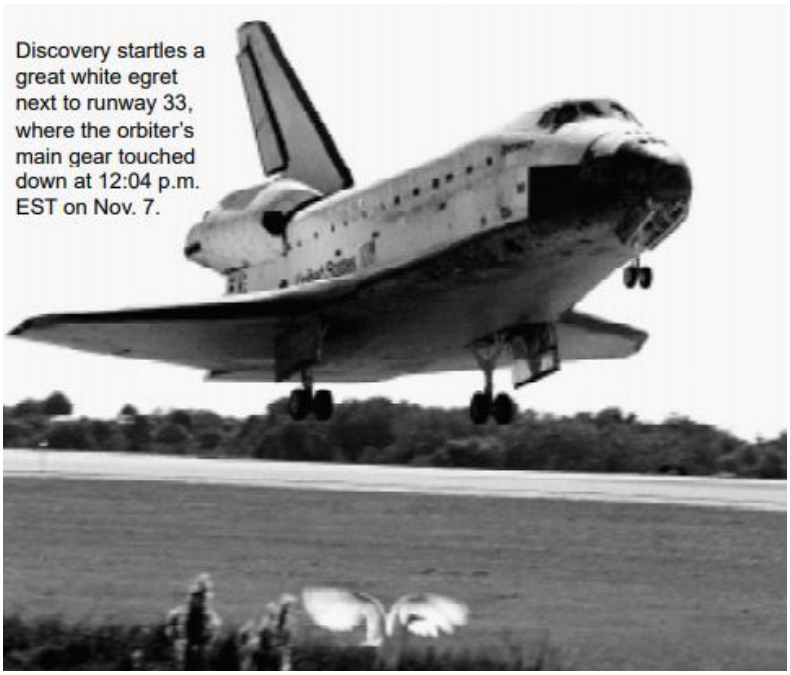
On the left, "Cars lined up to get a view of the Space Shuttle Discovery poised on Launch Pad 39B. Discovery is set to launch on Oct. 29 for STS-95." On the right, "Amanda Hankins… tries her hand at the hose in learning about how to extinguish fires." By way of explanation, from another photo caption, "The Dalmation Dog (a.k.a. KSC Fire Services Captain Steve Kelly) was a big hit with the little guests to this year's Open House."

From the November 20, 1998, Spaceport News

On pages 1, 2, and 3, **"The launch and landing of STS-95".** A small portion of the article reads "Behind the scenes, far from the madding crowds of media, celebrities, VIPs, special guests and tourists at the launch of STS-95 on Oct. 29, were many dedicated individuals who worked day and night at Kennedy Space Center to make it all happen… "With the president's visit, we had a significant increase in the communications requirements to support him and his staff… Center Director Roy Bridges also expressed his own personal thanks to the KSC team and relayed the gratitude from NASA Headquarters…

After each liftoff, the launch director recognizes a member of the KSC launch team whose organization far exceeded their duties in order to allow the launch to safely proceed. "We asked the KSC Public Affairs Office to hang the mission plaque in the firing room at the Launch Control Center," said STS-95 Launch Director Ralph Roe. "They did a great job deflecting all of the media and visitor activities during the countdown from the core members of the launch team."…

An increased number of visitors, especially VIPs, meant a heightened level of security. "If you look around the world at what was going on that day — we had the president here, we had more than 70 members of Congress, including state legislators and governors, plus numerous movie stars, so as far as being a target for anything to happen, this was the target on that day," Cal Burch, chief of KSC Protective Services pointed out."…

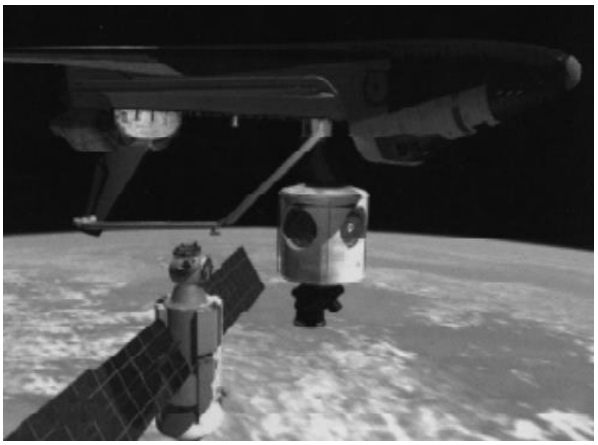


Discovery startles a great white egret next to runway 33, where the orbiter's main gear touched down at 12:04 p.m. EST on Nov. 7.

“The grassy slope below KSC’s Press Site was teeming with trailers brought in to house the media representatives at the center covering the launch of STS-95.To accommodate the nearly 3,000 media who covered the event, 40 trailers, 75 trucks and recreational vehicles, eight stages and eight risers were provided. Sparking the media frenzy was the return to space of John Glenn Jr., the first American to orbit the Earth 37 years ago.”

On pages 1, 4, and 5, **“STS-88: The first U.S. launch for the ISS”.** A small portion of the article states “Zarya meets Unity, and so begins construction of the largest international peacetime scientific program in history. The launch of STS-88 on Dec. 3 at 3:59 a.m. from KSC’s Launch Pad 39A will be the first U.S. launch for the International Space Station (ISS). The Space Shuttle Endeavour will carry in its payload bay the first major U.S.-built component of the ISS — the Unity connecting module… During the planned nearly 12- day mission, Unity will be mated with the already orbiting Zarya control module…

Pressurized Mating Adapter-1 (PMA-1) will connect Unity with Zarya, while PMA-2 provides an orbiter docking location… After the docking of Unity with Zarya, STS-88 Mission Specialists Jerry Ross and Jim Newman will perform three spacewalks to bolt together the first two pieces of the International Space Station…”.



“The first International Space Station assembly flight will be highlighted by the mating of the Russian-built Zarya, seen at the bottom left of this artist’s rendering, to the U.S.- built Unity connecting module, immediately below Endeavour’s payload bay.”

"In this bird's-eye view photograph, the STS-88 crew gather near the top of the Fixed Service Structure at Launch Pad 39A on Nov. 4. They are, left to right, Mission Commander Robert Cabana, Mission Specialist Nancy Currie, Pilot Frederick "Rick" Sturckow, Mission Specialists Jerry Ross, James Newman and Sergei Krikalev, a Russian cosmonaut. The crew were at KSC to participate in the Terminal Countdown Demonstration Test, a dress rehearsal for launch. STS-88, scheduled for launch Dec. 3, is the first U.S. flight for the assembly of the International Space Station and will carry the Unity connecting module."

From The December 18, 1998, Spaceport News

On pages 1, 4, and 5, **"The first U.S. launch for the International Space Station".** A small portion of the article reads "The launch of STS-88 on Dec. 4 at 3:35 a.m. marked the beginning of construction efforts for the greatest adventure in space to date: the assembly and habitation of the International Space Station, or ISS… This fifth and final Shuttle mission of the year marked the 13th flight of Endeavour and the 93rd flight overall in NASA's Space Shuttle Program…

The six-member STS-88 astronaut team served as a construction crew for this first International Space Station assembly mission. The primary objective of the mission was to mate the U.S.-made Unity connecting module to the Russian built Zarya control module… During the STS-88 mission, Unity came to life when it was activated for the first time. Activation followed the connection of electrical and data cables by Astronauts Jerry Ross and Jim Newman during a seven-hour, 21- minute space walk… At various

times, robot arm operator Nancy Currie moved Ross and Newman around the station modules on the end of the orbiter's manipulator system to conduct their work…

At press time, landing for STS-88 was scheduled for Dec. 15 at about 10:36 p.m. EST at KSC…".

"As Endeavour lifts off Dec. 4 at 3:35 a.m. from Launch Pad 39A on STS-88, several fish believed to be mullet (bottom left) "launch" themselves as well. The first launch attempt Dec. 3 was scrubbed when controllers assessed a suspect hydraulic system problem indicated by a master alarm in the crew cockpit. Although the problem was rapidly resolved, the launch window was missed by one to two seconds."

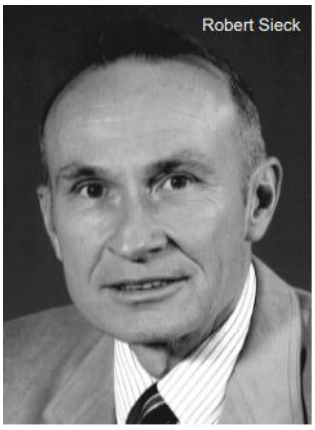
On pages 1 and 3, **"KSC Director of Shuttle Processing Bob Sieck retires; successors named".** In part, the article reads "Kennedy Space Center's Director of Shuttle Processing Robert Sieck has announced his retirement from NASA. Shuttle Processing Deputy Director David King will succeed Sieck as director. Additionally, Ralph Roe Jr., will continue in the position of KSC's launch director on a permanent basis.

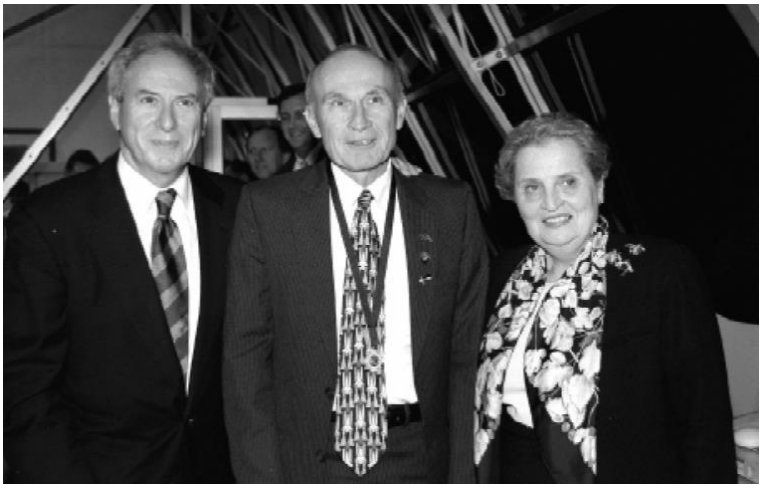
Sieck joined NASA at Kennedy Space Center in 1964 as a Gemini Spacecraft systems engineer. He later served as an Apollo Spacecraft Test Team project engineer and Shuttle Orbiter Test Team project engineer… he became the Chief Shuttle Project engineer for STS-1 through STS-7 and the first KSC Shuttle flow director in 1983. In February 1984, he was appointed director, Launch and Landing Operations, where he served as Shuttle launch director for 11 missions… Sieck served as deputy director of Shuttle Operations (renamed Shuttle Processing in 1996) from April 1992 until January 1995…

He also retained his position as Shuttle launch director, a responsibility he had held from February 1984 through August 1985 and then from December 1986 to January 1995. He was launch director for STS-26R and all subsequent Shuttle missions through STS-63, a total of 52 Space Shuttle launches. Sieck has served as director of Shuttle Processing since January 1995…

David King began his career with NASA in 1983 as a main propulsion engineer. He later served as flow director for the orbiter Discovery and as the acting deputy director of the Installation Operations Directorate. He served as the space center's launch director from December 1997 to July 1998, managing and directing three successful Shuttle missions. King has served as the deputy director of Shuttle Processing since September 1996…

Ralph Roe Jr., began his career at KSC in 1983 serving as a propulsion systems test engineer. He also has been chief of the Fluid Systems Division, Vehicle Engineering directorate… He was named director, Process Engineering, in October 1996…





"NASA Administrator Daniel Goldin (far left) called KSC Director of Shuttle Operations Robert Sieck "one of the finest people ever to work at NASA" moments after the launch of Space Shuttle Endeavour on mission STS-88 at 3:35 a.m. on Dec. 4. Goldin awarded Sieck the highest honor NASA confers upon a government employee, the Distinguished Service Medal, for

“sustained outstanding leadership and total dedication to the success of the Space Shuttle program.” In attendance was U.S. Secretary of State Madeleine Albright (right) who came to KSC to witness the first U.S. launch for the International Space Station. Calling the launch “truly fantastic,” Albright praised KSC workers. “I admire you and I will have a personal attachment to the whole program from now on.”

On page 8, **“Local parade for STS-95 crew gives everyone a lift!”**.

“The seven astronauts of STS-95 were treated to a parade through Cocoa Beach with a jubilant crowd of tens of thousands of onlookers on Dec. 11 shortly after the Mars Climate Orbiter lifted off from Cape Canaveral Air Station. The mayors of Cape Canaveral and Cocoa Beach presented keys to the city to the crew members, and a street and plaza were officially renamed in honor of John Glenn Jr., STS-95 payload specialist and the first American to orbit the Earth in 1962. Glenn, seen here in a silver 1998 Corvette, is America’s oldest astronaut. He was 77 when he flew with the crew of STS95 on one of the most publicized Shuttle missions in years…”.