



April 6, 2001

SPACE CENTER

Roundup

VOL. 40, NO. 7 LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEXAS

JSC celebrates 20 years of the shuttle

STS-1 Anniversary Celebration

April 13, 2001

4:30 - 9 p.m.

Gilruth Center and Pavilion

4:30 - 6:30 p.m.

**Max Q/Rocket Scientist band playing at Pavilion
Social in Ballroom, Gym and Pavilion**

6:45 - 7:15 p.m.

Program Greeting

Mr. Roy S. Estess

Center Director

Remarks

Mr. Ron Dittmore

Shuttle Program Director

Remarks

Captain John Young

Bob Crippen

7:15 p.m.

Door prize announcement

Door Prizes—10 Posters

Signed by STS-1 Crew

7:15 - 9 p.m.

Social

You outta be in pictures!

See page 8 for details.



1981

STS-1
20th Anniversary
April 13, 2001 - Gilruth Center - 4:30 - 9:00

2001



College students fly high on KC-135.

Page 3



Expedition 1: Home sweet home.

Page 4 & 5



Happy 50th birthday Engineers Week.

Page 6

Safekeeping

JSC Team must work together to end injury trend



NASA JSC 2001e07838

Safety must be a part of everything we do - from sending people into space, to working at the office, driving a vehicle or relaxing at home. We can't take safety for granted because it affects all of us, all of the time.

Over the past seven years, our JSC Team injury rate decreased 45 percent. While this reduced rate is a great improvement, last fiscal year 52 people were injured on the job badly enough to miss a day of work. Also, last year—for the first time in seven years—the number of people injured increased compared to the previous year.

I am very concerned about these injuries and last year's unfavorable trend. Each injury represents pain and suffering for the individual involved, as well as their friends and family. Each injury represents valuable experience lost to the space program while the person recovers. Also, many of these mishaps could have been prevented if someone had thought or asked, "Is this safe?" or "Is there a safer way?"

I am dedicated to providing a safe and healthy workplace for all employees of JSC. To successfully reverse the increasing rate of injuries, you must take three actions:

- **Take personal responsibility for your own safety:** Management will provide you a safe place to work, but you must be conscientious in avoiding unsafe actions.
- **Take personal responsibility for the safety of others:** We are our "brother's keeper." Look out for each other; help others so they don't hurt themselves.
- **Correct or report any hazardous condition or unsafe work practice:** Mishaps can be reduced by removing or controlling hazards. Even more important is eliminating unsafe behavior or unsafe work practices, which typically account for over 80 percent of all injuries.

Safety is constant hard work day after day. There are no easy cures or magic "fixes." We never reach the point where we can say, "We've arrived." We must continually work at being safe, reducing hazards, changing unsafe behavior and increasing our sensitivity and awareness to safety. I am dedicated to reducing our JSC Team injuries—I ask you to join me in making JSC the world's safest workplace.

Roy S. Estess

STS-100

Extending our reach in space

*ISS Assembly Flight 6A
April 19, 2001*



Endeavour mission will introduce a new generation of Canadian robotics to the Space Station

Just *the* FACTS

- Kent Rominger will command *Endeavour*
- Jeff Ashby is the pilot
- Mission specialists include NASA astronauts Scott Parazynski and John Phillips
- International crewmembers, also mission specialists, include Canadian Space Agency astronaut Chris Hadfield, Russian Aviation and Space Agency cosmonaut Yuri Lonchakov and European Space Agency astronaut Umberto Guidoni
- During *Endeavour's* mission, Guidoni will become the first European Space Agency astronaut to enter the orbiting International Space Station
- Hadfield and Parazynski will perform at least two space walks, with the capability to add a third space walk if it is needed
- *Endeavour's* flight will be the ninth shuttle mission to the International Space Station
- *Endeavour* will carry the Canadarm2, a robotic arm for the station
- *Endeavour* also will carry the second Italian Space Agency supplied station logistics module, named Raffaello
- It will carry nine different scientific investigations to the station, more than any previous flight
- Once aboard the station, four out of five of the project's major partners will be represented, the most that have ever been aboard the complex together

At-a-GLANCE Canadarm2

The Canadarm2 is a space robotic arm of unprecedented capabilities.

The station arm will be able to move more than three times as much mass as the shuttle's robotic arm—a mass greater than even a 100-ton space shuttle.

The station arm also will have an amazing capability to move end-over-end about the station's exterior, in inchworm fashion, using either end to manipulate cargos.

It can provide electrical power and make computer connections with the things it moves and has greater flexibility than the shuttle arm. It measures 57.7 feet - more than seven feet longer than the shuttle arm - and it is designed to be disassembled and repaired in space if necessary.

For the first time, two space robotic arms, controlled by different astronauts on different spacecraft, will work together. Operations of the station's Canadarm2 are critical for the success of many future International Space Station assembly flights.

The installation of the station arm also includes the first exterior television cameras aboard the International Space Station. Four cameras are mounted to the arm, three of which can be used simultaneously.





KC-135 student program springs into action

Spring is in the air, as are many college students from around the country as part of JSC's Reduced-Gravity Program. More than 1,000 students have been able to experience the unique "weightless" environment of space flight in NASA's KC-135.

The Reduced Gravity Program enables 48 select academic teams to conduct science and engineering experiments aboard the aircraft to study the effects of zero g. This year, the fifth for the program, experiments ranged from investigating gas bubbles from a fuel flow in satellite fuel systems to the study of human information processing in zero g to plant pollination.

"We've had a tremendous response to the Reduced Gravity Program," said Lead Test Director, John Yaniec. "Each year, the experiments get more and more sophisticated. I've flown a lot of funded research, and some of these are as interesting as those that we've flown for established researchers."

Approximately six experiments are flown during each student mission. The students spend anywhere from six months to a year preparing their experiments for the zero g flight.

The reduced-gravity environment is obtained with a specially modified KC-135A turbojet transport. The effect of weightlessness is achieved by flying the aircraft in aggressive up and down maneuvers called parabolas. At approximately 30,000 feet over the Gulf of Mexico, the pilot pitches the plane up to a 45-degree climb attitude, leveling off "over the top" and then pitching down 45-degrees. These level offs at the crest of the parabolic arcs produce weightless periods of 20 to 25 seconds. The pilot repeats the maneuver more than 30 times enabling the students to run several repetitions of their experiment.

A typical student mission is two hours long and consists of 32 parabolas—(30 at zero g, one at lunar (1/6) gravity and one at Martian (1/3) gravity. These parabolas can be flown in succession or with short breaks between maneuvers to reconfigure test equipment. Approximately 100,000 parabolas have been flown in support of the Mercury, Gemini, Apollo, Skylab, Space Shuttle, and Space Station programs.

According to Donn Sickorez, University Affairs Officer, the Reduced Gravity Program pays back dividends to the space program, as well as to the students and schools involved.

"Students tell us that the chance to develop an idea, design and build it, fly it and then evaluate the results is simply the best way for them to learn engineering," said Sickorez. "The outreach requirement is also unique to this program. Students who have flown with us see faces light up when they visit lower division schools and recount their zero g experiences. They communicate the excitement of science, and it might just be what is needed to grow simple curiosity into a full-fledged scientist or engineer." ■



NASA JSC 2001e08790

College students from around the country as part of JSC's Reduced-Gravity Program. More than 1,000 students have been able to experience the unique 'weightless' environment of space flight in NASA's KC-135.



NASA JSC 2001e08786

WELCOME HOME



NASA JSC ISS01-S-005

All aboard (Oct. 31, 2000): The Expedition 1 crew members pose for final photos prior to their launch aboard a Soyuz vehicle from the Baikonur Cosmodrome in Kazakhstan. Expedition 1 commander William M. (Bill) Shepherd (center crewmember on steps) is flanked by Soyuz commander Yuri P. Gidzenko (bottom) and Sergei K. Krikalev, flight engineer.



ISS01-S-006

Liftoff! (Oct. 31, 2000): The Soyuz spacecraft lifts off from the Baikonur Cosmodrome at 10:53 a.m. Kazakhstan time.



NASA JSC ISS01e5009

First week on board (Nov. 2000): Cosmonaut Krikalev (foreground), flight engineer, works with cameras in the service module (Zvezda) on the International Space Station (ISS), while astronaut Shepherd, Expedition 1 commander, busily goes about chores in the background. The photograph was taken by cosmonaut Gidzenko, Soyuz commander, and was one of the first still pictures to be downlinked from the station since the Expedition 1 crew boarded it earlier in the week.



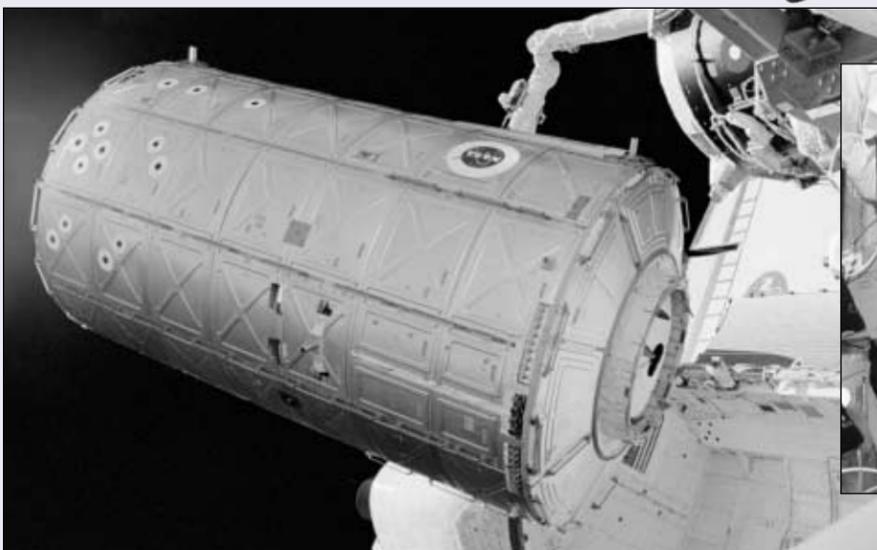
NASA JSC S97e5078

Arrival of first visitors on STS-97 (Dec. 2000): Astronauts Brent W. Jett, Jr. (left) and Shepherd participate in an old Navy tradition of ringing a bell to announce the arrival or departure of someone to a ship. Shepherd is a U.S. Navy captain; and Jett, STS-97 mission commander, is a U.S. Navy commander.



NASA JSC97e5032

Delivery of solar arrays on STS-97 (Dec. 2000): Astronaut Joseph R. Tanner, mission specialist, waves to crew members inside Endeavour's cabin during extravehicular activity (EVA) to perform work on the ISS. The elbow of the remote manipulator system (RMS) robotic arm and part of the newly-deployed solar array panel are in the background.



NASA JSC STS098-0017

Delivery of U.S. Destiny (Feb. 2001): In the grasp of the shuttle's RMS robot arm, the Destiny laboratory is moved from its stowage position in the cargo bay of the Space Shuttle Atlantis. The photo was taken by astronaut Thomas D. Jones, who was participating in one of three STS-98/5a space walks at the time.



NASA JSC STS098-322-0001

Activation and checkout (Feb. 2001): Three STS-98 astronauts move a rack into position aboard the newly attached Destiny laboratory. From the left to right are astronauts Robert L. Curbeam, mission specialist; Mark L. Polansky, pilot; and Kenneth D. Cockrell, mission commander.



EXPEDITION 1



NASA JSC S102e5094

Change of command during STS-102 (March 2001): Left to right, astronaut James D. Wetherbee, STS-102 commander; cosmonaut Yury V. Usachev, Expedition 2 commander; and astronaut Shepherd, Expedition 1 commander, converse in the Destiny laboratory shortly after hatches were open following docking of the Space Shuttle *Discovery* and the ISS.

The ride home on *Discovery*



NASA JSC S102e5369

(March 19, 2001): Five astronauts and a Russian cosmonaut share space on the flight deck of *Discovery* following the spacecraft's separation from the ISS. Cosmonaut Krikalev, far left, joins astronaut Shepherd (bottom center) on the return trip after several months aboard the ISS outpost. The other STS-102 crew members are (beginning second from left) astronauts James M. Kelly, pilot; Andrew S.W. Thomas, and Paul W. Richards, both mission specialists; along with Commander Wetherbee.



NASA JSC2001e08314

Crew return (March 22, 2001): Expedition 1 greets a crowd gathered for a crew return ceremony in Ellington Field's Hangar 990.

All who have worked on the International Space Station have gone through a lot. But we do have something to show for it. It's not often that you get to leave a hallmark that lights up the night sky.

- Bill Shepherd
Expedition 1 ISS Commander



NASA JSC S102-319-028

Great Job STS-102!



Future Expedition crews announced

Expedition 3 Commanded by American astronaut Frank L. Culbertson, a retired U.S. Navy captain. Russian cosmonauts Vladimir Dezhurov, (Lt. Col., Russian Air Force) and Mikhail Turin will complete the crew.

Expedition 4: Commanded by Russian cosmonaut Yuri Onufrienko (Col., Russian Air Force). He will be joined on this four-month mission by astronauts Carl E. Walz (Lt. Col., USAF) and Daniel Bursch (Cmdr., USN).

Expedition 5: This crew will consist of astronaut Peggy Whitson (Ph.D.) and two Russian cosmonauts, one of whom will be the mission commander.

Expedition 6: Kenneth Bowersox

(Capt. USN) will command. He trained as a backup crewmember to Bill Shepherd on the first expedition crew. Donald Thomas (Ph.D.) and a Russian cosmonaut will accompany him.

Expedition 7: American astronaut Ed Lu (Ph.D.) along with a Russian commander and flight engineer make up this crew.

Expedition 8: Astronaut Michael Foale (Ph.D.), serving as commander, will have William McArthur (Col., USA) and a Russian cosmonaut as flight engineers.

A list of all astronauts and cosmonauts in training at JSC, along with their biographical data, can be found on the Internet at: <http://www.jsc.nasa.gov/Bios/>

Ripped from the ROUNDUP

Ripped straight from the pages of old Space News Roundups, here's what happened at JSC on this date:

1 9 7 1

Volunteers from the Houston Fire Department walked on the edge of a pit of burning JP-4 jet fuel during a recent test of firefighter garments made of nonflammable space-age fabrics.

The Crew Systems Division makes the garments here from fire-resistant fabrics developed for use in manned spaceflight where 100 percent oxygen atmosphere increases the fire potential. The garments are multilayer sandwiches of Durette, Fypro fabric and Fypro batting.

"No structural firefighter's suit available today would allow such close exposure to an intense fire," said Capt. Jon King of the Houston Fire Department. "The Durette structural suit is out of this world, and is just what we've been looking for."

1 9 8 5

After a stopover at Ellington Field last week, the new Orbiter *Atlantis* is scheduled to begin pre-launch processing at the Kennedy Space Center for her maiden flight later this year.

Officially designated OV 104, *Atlantis* completes the currently authorized fleet of Space Shuttle orbiters. It is essentially a twin of *Discovery*, the third spaceship in the fleet. The ship is named after a two-masted ketch, which was operated for the Woods Hole Oceanographic Institute from 1930 to 1966.

Atlantis has been outfitted with special modifications needed to support the Galileo and Ulysses missions in 1986. These modifications include the payload bay plumbing and necessary umbilical connection for cryogenic services of the Centaur upper stage.

1 9 8 6

Flight controllers at NASA's Jet Propulsion Laboratory are working to return Galileo to normal operations after the spacecraft unexpectedly went into safing mode last week.

Although controllers do not know what caused the incident, it is not expected to have any permanent effect on the Jupiter-bound Galileo, which has been on a relatively quiet cruise en route to a flyby on the asteroid Gaspra next October.

Project engineers said they suspect the spacecraft's defensive status was caused by cosmic rays. Galileo, 36 million miles from Earth, went into the safing mode about 8:10 a.m. CST March 26.

Engineers Week turns 50



NASA JSC 2001e05579

"I think that E-week is a wonderful opportunity for young students to begin to understand how the math and science they are learning can be used in the real world. Specifically as NASA engineers, we also have the added bonus of being able to kindle students' imaginations and dreams by relating engineering to the advancement of the space program."

- **John Wilson**, Co-op in Biomedical Hardware, who volunteered at Ms. Leslie Gonsalves' 4th graders at T.H. Rogers



NASA JSC 2001e05517

"The kids are surprised to learn what an engineer does and can do—without us there would be no Nintendo! We need to make sure the space program is ready for them. With them, everything is still possible."

- **Karon Woods**, Station Safety Operational Risk, who went to Ms. Petri's kindergarten class at Pearland's Rustic Oaks Elementary



NASA JSC 2001e05580

"E-week was a lot of fun and a great opportunity to try and help point some amazing little minds towards math, science and engineering. Those kids were bright!"

- **Daniel Villa**, Co-op in Avionics Systems, who volunteered at Ms. Leslie Gonsalves' 4th graders at T.H. Rogers

Approximately 10,000 kids were reached by a total of 12 volunteers who gave 331 presentations. Way to go, JSC!



NASA JSC 2001e05515

"One of the assets of being a NASA engineer is the opportunity it allows me to interact with students during National Engineers Week. Together we embark on the journey to discovery and allow our minds to roam the frontiers of space. The enthusiasm these students show toward NASA is most rewarding."

- **Deborah Stephens-Cleary**, Safety & Mission Assurance, who went to Ms. Petri's kindergarten class at Pearland's Rustic Oaks Elementary



"I do Engineers Week to give kids a sense of purpose. The main reason I do this type of mentoring is because it was done for me. Mentors provided good role models for me and so I am trying to give back something that I received."

- **Bruce Powers**, United Space Alliance Engineering Staff, Guidance and Control Systems, who went to Ms. Pitts' 7th grade class at Harby Junior High in Alvin



GOOD NEWS**JSC EARNS TOP QUALITY MANAGEMENT RATING**

Johnson Space Center has another first to add to its accomplishments. JSC has been recommended for certification to the rigorous ISO 9001:2000 standard. This registration by the International Organization of Standards (ISO) recognizes the center's commitment to the highest quality in its management, as well as its technical endeavors.

"Our registration to the ISO 9001:2000 standard places JSC among the true leaders in quality management, not only within NASA, but throughout government and across the aerospace industry," said Lee Norbraten, the director of JSC's ISO 9000 office.

Registration of the center's Quality Management System (QMS) to the recently approved ISO 9001:2000 is the first for any federal installation. ISO 9001:2000 certification is highly prized by government and industry leaders because it is the internationally recognized standard for quality management systems.

This registration follows intensive preparation at JSC and a three-day, on-site inspection by independent auditors from National Quality Assurance, USA (NQA). The auditors visited the center March 19-21.

"This certification is important for JSC in its continuing effort to lead the way in management excellence, which will complement the technical excellence that is the trademark of the center," said Roy Estess, JCS acting director.

"This certification was accomplished through the dedicated efforts of everyone on

site. The QMS is an essential tool for continuous improvement and process efficiency, which will enable us to lead the development of human space flight technologies in the future."

Auditors from the NQA spent three days at JSC reviewing its implementation of the management principles contained in the ISO 9001:2000 standard. Following the review, the director for business development at NQA, Derek Coppinger, said, "Johnson Space Center is the pathfinder for many who will follow its efforts to achieve ISO 9000:2000 certification."

Johnson Space Center is the only federal site that is both ISO 9001:2000 certified and recognized as a Voluntary Protection Program "Star Site" by the Occupational Safety and Health Administration. OSHA granted the center VPP Star status in May 1999. JSC received its initial certification to ISO 9001 in April 1998, establishing itself as the first NASA field center to be so registered at the time.

"This success rests on a large team of managers and implementers from every JSC organization, who accomplished this milestone during a period of peak mission support activity," Norbraten said.

NASA was the first federal agency to require and achieve ISO 9001 registration for all of its facilities.

"We are now in firm possession of a management tool that, if used well, can improve even more the overall effectiveness of JSC," Norbraten said. ■

NASA PROCUREMENT ANALYST OF THE YEAR

George E. Huff was recently named NASA Procurement Analyst of the Year.

"Often, it is cliché to say that an individual is irreplaceable; however, sometimes you have those people that are simply essential to the success of an organization," said Randy Gish, JSC Director of Procurement. "For the JSC procurement organization, Mr. Huff is one of those individuals."

Since 1980, Huff has been a procurement analyst supporting the entire procurement organization at JSC. His extensive experience as a contract specialist and contracting officer prior to his tenure in the Procurement Policy and Business System office has enabled him to provide "soup-to-nuts" guidance and advice to literally hundreds of contractor professionals at all JSC levels.

Huff developed the JSC Greenbook, which is the document generation manual for creating solicitations and contracts at JSC. He is also responsible for generating and updating the multitude of other local procurement policy and guidance used at JSC.

For approximately 20 years, Huff has been the sole Terminating Contracting Officer at JSC. In that position he reviews and approves all JSC terminations, in conjunction with the JSC legal counsel.

When JSC awarded the closeout function to an 8(a) contractor, Huff assisted in the development of the statement of work. He was also the first closeout con-

tracting officer, responsible for approving all JSC contracts that were closed.

Huff has been instrumental in developing the self-assessment process at JSC. Utilizing the guide provided by NASA Headquarters, he designed a semi-annual assessment that is very effective and can be accomplished in an expedited fashion.

Every six months, Huff identifies the contracts and purchase orders to be assessed. Each procurement office is notified and provided with the portion of the self-assessment guide that is applicable. The results of the survey are compiled and forwarded to Headquarters.

Huff has been a key player in the agency in the development and implementation of the online Request for Quote System.

This electronic solicitation system reduces procurement time for commercial item buys by eliminating the need for paper copies of the solicitation and eliminating manually signed documents by contractors. Huff has also done an outstanding job as one of JSC's two members of NASA Acquisition Internet Service working group.

In addition, Huff has been the corporate memory of the JSC Procurement Organization for many years. An outstanding professional, Huff brings a great depth of expertise to the organization. He has distinguished himself through many years of service and is particularly deserving of this recognition.

"He is, for us, professionalism at its finest," Gish said. ■

Diagnosis: Excellent condition

Kelsey-Seybold Clinic Laboratory receives accreditation with distinction

The NASA/JSC Kelsey-Seybold Clinic Laboratory has been awarded an accreditation by the Commission on Laboratory Accreditation of the College of American Pathologists (CAP) based on the results of a recent on-site inspection.

The laboratory not only received the continuing accreditation but also was awarded the accreditation with distinction, said Reta Warren, a medical technologist with the laboratory.

Alfred Rossum, MD, the laboratory director and project manager, was advised of this national recognition and congratulated for the "excellence of the services being provided," according to a release from CAP.

The NASA/JSC Kelsey-Seybold Clinic Laboratory, located in Building 8, is one of the more than 6,000 CAP accredited laboratories nationwide. The CAP Laboratory Accreditation Program, begun in the early 1960s, is recognized by the federal government as being equal to or more stringent than the government's own inspection program.

Inspectors examine the records and quality control of the laboratory for the preceding two years, as well as the education and qualifications of the total staff, the adequacy of the facilities, the equipment,

laboratory safety and laboratory management to determine how well the laboratory is serving the patient.

The Johnson Space Center Laboratory serves all the Civil Service employees, Warren said, by performing laboratory work as part of the annual physical offered during or before their birthday month each year. Contractors with job-related physicals also must have laboratory work performed with their physical.

"The laboratory testing is an integral part of helping the employees maintain a healthy lifestyle and helps the physician with diagnosis and monitoring of any health problems," Warren said.

"Since any on-site employee has the availability of using the clinic for emergen-

cies or illnesses, the laboratory can perform certain tests immediately to aid the physicians and help get the employees back to work or to the appropriate medical facility as soon as possible."

Upon completion of the CAP inspection and approval for accreditation, Warren said the Department of Health and Human Services Health Care Financing Administration also issued a certificate of accreditation to the laboratory for a period of two years. ■

This (accreditation with honors) is only awarded to those laboratories showing exceptional performance in all areas.

— Reta Warren
Medical Technologist JSC/NASA
Kelsey-Seybold Clinic Laboratory

Just the FACTS**NANOSPACE 2001 Conference**

The International Conference on Integrated Nano/ Microtechnology for Space and Biomedical Applications was held March 13-16 at the Moody Gardens Hotel in Galveston.

More than 130 organizations from across the United States participated, along with The Institute for Advanced Interdisciplinary Research, the Houston Technology Center, Rice University and the National Space Biomedical Research Institute.

The event focused on today's Nanoscale Technologies as they apply to space, biomedicine and technology commercialization.

More than 300 scientists and researchers shared information and ideas in the field of Nano/Microtechnology—including how to manufacture and test the microscopic nanotubes and other structures and how they can be used.

People in the medical and scientific community, industry and commercial entities, government agencies and laboratories, and academia were in attendance.

Nobel Prize winner Dr. Richard Smalley of Rice University served as the keynote speaker. Dr. Smalley is noted for the discovery of the Bucky Ball during

the mid-1980s that led to a new class of carbon-based materials known as nanotubes.

Two new tracts were featured this year. In addition to space applications and biomedical uses of nanotechnology, the conference focused on analysis and risk assessment and technology commercialization. The commercialization discussion examined how this new technology can benefit not just the aerospace industry, but the technical community in general, from universities to private industries.

Here are some interesting facts :

- Advanced materials such as nanotube composites can replace current carbon fiber composites—and instead of being microns in diameter, they are only a nanometer!
- Nanotubes have 10-15 times more strength than carbon fibers used on the X-38. Eventually, space vehicles may be composed of materials beyond composites such as crystalline forms of nanotubes.
- More NASA centers are starting to work with nanotechnology, specifically with nanotube applications. JSC supports composite materials, energy storage, biomedical and life support applications of these technologies.
- More information can be found at the following Websites:

<https://www.nanospace.systems.org>
<http://mmpdpublic.jsc.nasa.gov/jscnano/>



William Holmes and Brad Files, of the materials branch, mix samples to make nanotube composites.

DATES & DATA

The JSC Employee Assistance Program is offering a Smoking Cessation Class to all on-site civil servants and contractors. For more information and to sign up, please call extension 36130.

APRIL 11

MAES meets: The Society of Mexican-American Engineers and Scientists meets at 11:30 a.m. in Bldg. 16, Rm. 111. For details contact Margaret C. Delgado at 713-643-6097 or mcdelgad@aol.com.

APRIL 12

Airplane club meets: The Radio Control Airplane Club meets at 7 p.m. at the Clear Lake Park building. For more information contact Bill Langdoc at x35970.

APRIL 13

Astronomers meet: The JSC Astronomical Society meets at 7:30 p.m. at the Center for Advanced Space Studies, 3600 Bay Area Blvd. For more information contact Chuck Shaw at x35416.

APRIL 18

SCUBA club meets: The Lunar fins meets at 7:30 p.m. For details contact Mike Manering at x32618. Website: <http://www4.jsc.nasa.gov/ah/ExcEAA/leisure/Lunarfins/default.htm>

APRIL 19

Directors meet: The Space Family Education board of directors meets at 11:30 a.m. in Bldg. 45, Rm. 712D. For more information contact Lynn Buquo at x34716.

APRIL 21

Houston Area International Administrative Professional (IAAP) Brunch, registration 9:00 at Gilruth Center. Mr. Richard Alderman, the People's Lawyer seen regularly on Channel 13, is the speaker. Alderman is the author of several books and a professor at the University of Houston. For registration contact Aglaee Nicolas at nicolasa@aristechchem.com or 281-884-4336 or Bernice Woolsey at 281-334-5474.

APRIL 26

Radio Club meets: The JSC Amateur Radio Club meets at 6:30 p.m. at Piccadilly, 2465 Bay Area Blvd. For more information contact Larry Dietrich at x39198. Website: <http://www.w5rr.org>

The 2001 Spring National Education Seminar entitled "The Contracting Professional as a Risk Manager" is scheduled for April 26, 2001 at the Nassau Bay Hilton. Registration/Continental Breakfast is from 7:30 am - 8:30 am and the Conference will be held from 8:30 am - 5 pm. This year's speaker will be Mr. Ron Smith, CPCCM, Director of the North America Contracts and Bids Compaq Computer Corporation. Mr. Smith is the former National Vice President of NCMA. The seminar will be co-presented by Mr. John L. Kreideweis, CPCCM, Principal, Ernst & Young, LLP. Mr. Kreideweis is the past NCMA National President.

For reservations, please contact the following:
 NASA Reservations: Renee Falls (preferably by email) afalls@ems.jsc.nasa.gov ph: 281-483-1862
 Contractor Reservations: Nancy Broyan broyann@hsd.utc.com ph: 281-333-8704 fax: 281-333-2537
 Tammy Smith tammy.k.smith1@jsc.nasa.gov ph: 281-333-9225
 Registration Fees: Members - \$145 Non-members - \$195



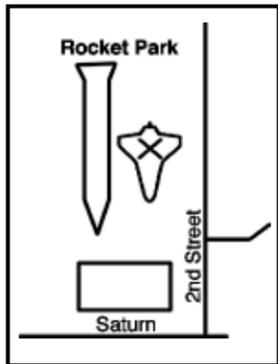
Lunarfins - a SCUBA Club supported by JSC - meets on the third Wednesday of every month at the Watergate Marina clubhouse. It is open to all JSC employees and contractors, their families and any interested members of the community. This photo of Judy Flanagan was taken on the group's annual trip to Cozumel, Mexico, last December. Anyone interested in the club should contact Mike Manering at (281) 483-2618 or Aurin Tesoro at (281) 282-2989. (*Does your group have a photo to share? Send it to the Roundup AP131*).

Your chance to be 'in' the space shuttle

The shuttle will be appearing at JSC, but only with your help. Join us Friday, April 13 at 11 a.m. to help create a human shuttle to commemorate the 20th anniversary of the STS-1. All JSC civil servants and contractors are encouraged to participate.

How do I participate?

Meet at Rocket Park (see map) promptly at 11 a.m., Friday, April 13. Organizers will be there to direct you to the designated area to form the shuttle shape. NASA photographers will capture the image, which will be reprinted in an upcoming *Roundup*.



In-Search-OF

Mother's Day is quickly approaching and we need your input! Do you know of any mothers who work, or have worked, with their children here at JSC? We'd like to spotlight these family ties. Please send your story idea information to Melissa Davis, Roundup Editor, at melissa.davis1@jsc.nasa.gov, or give her a call at (281) 483-9978.

NASA BRIEFS

OSCARS GO GLOBAL WITH INTRODUCTION FROM SPACE

Lights. Camera. Action!

It may not exactly be the big break they were looking for, but the Expedition Two crew onboard the International Space Station made its Hollywood debut during the Academy Awards ceremony, which was broadcast on Sunday, March 25. An international television audience of nearly 800 million viewers saw the Academy Awards.

The 73rd annual Oscars started with a weightless space station introduction of this year's host-actor, comedian and writer Steve Martin-albeit only a life-sized likeness.

American astronaut Susan Helms, flanked by her crewmates, Russian Commander Yury Usachev and fellow astronaut Jim Voss, gave the show's master of ceremonies a proper send-off.

"The Academy Awards is one of the few events that you know the entire world watches," NASA Administrator Daniel S. Goldin said. "When producers of the Oscars' ceremony approached us, we thought it was an excellent opportunity to expose a global audience to the important work being done by NASA and its international partners in orbit on the International Space Station."

Producers from the Academy of Motion Picture Arts and Sciences have a history of closely guarding details of the opening ceremony, and this year's program was no different. The introduction, shot in the near zero-gravity of space, was taped during the STS-102 mission that delivered the members of the Expedition Two crew to their new home.

NASA ADMINISTRATOR RECOGNIZED FOR OUTSTANDING LEADERSHIP IN MINORITY HIGHER EDUCATION

Recognized as one of the visionary leaders in involving Historically Black Colleges and Universities (HBCU) and other minority serving institutions in innovative science, technology and research, NASA Administrator Daniel S. Goldin was honored March 23, 2001, with the Federal Leadership Award by the National Association for Equal Opportunity in Higher Education (NAFEO).

The award is presented to leaders in the federal government who have demonstrated outstanding leadership in advancing HBCU and other minority serving institutions in their efforts to educate the nation's next generation of scientists and engineers. NAFEO is an advocate for 118 of the nation's historically and predominantly black colleges and universities.

"I am pleased to be honored by an organization that champions equal opportunity efforts in higher education," Goldin said. "I can assure you that the Agency's commitment and support for HBCU's and other minority serving institutions of higher learning will remain steadfast as we strive to further the Nation's agenda in science and technology."

During the last nine years, NASA has established significant partnerships with HBCU. These partnerships have resulted in the establishment of new doctorate programs at various HBCU in physics, mechanical engineering, atmospheric sciences and environmental science and engineering.