

Space Center Roundup

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What an experience!



JSC ready to welcome the public to Open House 2001

By Eric Raub

On August 25, the gates of Johnson Space Center will once more be opened wide to the public during its sixth annual Open House event.

Last year's Open House 2000 drew more than 130,000 visitors, and this year's festivities will likely draw a similar crowd. Open House 2001 will feature new attractions—along with popular favorites—and plenty of activities for all ages.

"It appeals to just about everybody," said Vicki Cantrell, Open House 2001 co-chairperson. "Everyone is interested in the space program and what goes on at JSC. It appeals to all ages and it's fun."

The influence and attraction of Open House has developed into an event that attracts visitors from all over the country and world. For some visitors, Open House is not so much a weekend event but more like the culmination of a long pilgrimage.

"We anticipate very large attendance this year as the word has spread," said Hazel Fipps-Mann, IMPASS employee and publicity coordinator. "Last year we had people from Chicago, Denver, California and New York, as well as a family who flew in from Turkey especially for Open House. ... There was an entire school from Dallas."

JSC hosts the annual event free of charge, but not free of benefit for the Center and the space program. Open House 2001 will be a chance to inspire visitors from across the globe, as well as show why America needs JSC and the space program.

"It's really beneficial to the whole space program," Cantrell said. "Not only does the public get to see the Space Center but they get to see how the Space Center has helped them. It gives the public an overview of why we have a Space Center, Space Shuttle and Space Station."

One of the things that is sure to attract attention from people of all ages is a stunt never witnessed before at any Open House event. In

continued on page 6

Astronaut Michael Bloomfield (Lt. Col., USAF) signs an autograph for a young Open House visitor last year at Ellington Field. A NASA T-38 sits in the background.

2

JSC benefits from college students.



3

STS-104 makes a successful Quest.



5

Your guide to Open House 2001.



The best and the brightest

From the desk of Roundup writer Eric Raub

Over the past three months I have had the privilege of working in the Public Affairs Office and on the Space Center Roundup with Julie Burt and Melissa Davis. I have learned a great deal from the experience, although probably the most important thing I have learned is how important the people of JSC are to making the space program newsworthy.

As the staff writer for the Roundup my primary assignment has been to tell stories. These stories have come from people in various directorates and involved breakthrough technologies, stellar human achievements and sometimes people just having a lot of fun. No matter what the accomplishment or the event, all of the stories had an easily identifiable force behind them—people who love what they do.

I cannot leave without taking the opportunity to thank everyone who set aside time in their busy schedule to talk to me about their work and show me facilities and laboratories I had never seen before. I wish I had the time to learn about everyone's achievements at JSC, but I don't think I would get very far before the people at the beginning would be celebrating something new. That is one of the greatest aspects of working here I have seen during this summer. Plus, it made the task of finding something interesting to write about very easy.

Since my first work tour in 1996, JSC has safely seen the Space Shuttle launch more than two dozen times and firmly established the largest orbiting laboratory and human outpost ever seen in space. Little wonder then that JSC has remained on the front page of my imagination for years, and I know I am not alone.

If you need proof of this, your workplace is about to be inundated with more than 100,000 living, breathing pieces of evidence. In two weeks, on Aug. 25, JSC will host Open House 2001—one of the most important events of the year.

Almost all of the work I have done on the last Roundup issued before I leave has been on Open House. The timing has worked out perfectly, and I couldn't have asked for a better assignment before my work tour ends.

I know how important Open House is to JSC, the surrounding community and visitors from around the country and the globe. It is the time to make headlines in the minds of people young and old and from various cultures and backgrounds.

When the guests are standing in front of you listening and watching what you do, I know they will remember the stories you tell them as long as I'll remember the ones I've heard.

Co-ops complete summer work tours

By Nicholas Saadah

As the summer draws to a close, many JSC Cooperative Education Program students (Co-ops) are wrapping up their projects and preparing to return to school. Now almost four decades old, the Co-op Program continues to be JSC's primary link to the academic world.

"We hire the best of the best," said Bob Musgrove, Co-op Program Manager. "JSC recruits at top-ranked universities nationwide and easily attracts a diverse group of college students who've proven year after year to be our best source for entry-level permanent hires."

Valparaiso University senior Nicholas Skytland spends his time working as a flight lead at the Neutral Buoyancy Laboratory. In addition to coordinating astronaut-training classes, Skytland says the best part of his job is being able to observe training exercises while diving in the 6.2 million-gallon tank. He can hardly believe where he is working and what he is doing as a Co-op.

"Everyday I have to pinch myself to make sure that I am actually driving to work at the Johnson Space Center,"



NASA JSC 2001e22506

Nick Skytland (DX1) spent the summer working at the NBL.

Skytland said. "I had the chance to sit right behind the astronauts and watch them practice. I don't think a lot of people can say that."

Other Co-ops take to the skies with their projects. Jessica Badger, a University of Texas at Austin senior, spent the summer designing a leak-detection experiment that will fly on the KC-135 microgravity simulator in the coming weeks. Badger feels that the hands-on nature of her project in a professional engineering environment helped her gain knowledge in engineering



NASA JSC 2001e22508

Jessica Badger (EC3) stands beside the hardware she built that will fly on the KC-135.

that she cannot learn at school.

"I feel that learning to work as a team with other professional engineers is a huge advantage of participation in the Co-op Program," Badger said.

One of the most attractive aspects of the Co-op Program is the level of responsibility given to participating students. Lisa Zito, a Penn State University junior, spent the summer working in the Space Operations Procurement Office



NASA JSC 2001e22509

Lisa Zito (BN) supported contract negotiations this summer.

performing contract administration functions on a \$4.6 billion federal government contract.

Zito calls working at JSC the most rewarding experience of her life, and is amazed when she thinks that a part that she helped buy is essential to the functioning of the International Space Station (ISS).

Sabrina Singh, Georgia Institute of Technology junior, became certified as an instructor in a Part Task Trainer course taught to both astronauts and flight controllers. Singh enjoyed the dual nature of her job and believes the two functions work well together.



NASA JSC 2001e22540

Sabrina Singh (DT4) was certified on a PTT course this summer.

"The final product of instructing crewmembers and flight controllers will be the perfect mix of a technical job in a people oriented environment," Singh said.

While primarily composed of engineering and business majors, the Co-op Program involves students studying several unique fields. Thad Roberts, a University of Utah senior, is a geology major who spent the summer working as an experimental petrologist. His project



NASA JSC 2001e22507

Thad Roberts (SN2) worked as a petrologist this summer.

involved investigating the formation of rock samples to gain valuable information about Martian geology.

Roberts described his project as a very hands-on job, which encouraged out of the box thinking. He said working at NASA provided him with the science and the adventure that he had hoped for.

Some Co-ops enjoyed their undergraduate tours so much they decided to continue as Co-ops through graduate school. Two of these graduate Co-ops are Sarah Graybeal and Nicholas Saadah, both of whom will start graduate school at Stanford University this fall. They spent the summer working on



NASA JSC 2001e22510

Nicholas Saadah and Sarah Graybeal (DM4) worked in flight design this summer.

software, which will someday be certified for use in the Mission Control Center.

"It's not just the work or the glamour of being at NASA that brings me back—it's the people," Graybeal said. "Employees here are excited about their jobs, and that makes work a lot more fun."

Nationwide interest in the JSC Co-op Program continues to grow as more students realize the value of work experience.

"It's a two-way street," Musgrove said. "Students benefit from real-world work experience that complements their formal education, while the Center benefits from both the work the Co-ops do while they're here, and the opportunity to see a potential future employee in action before making a long-term commitment."

"It's a win-win situation when we convert a Co-op to a permanent JSC employee." ■

Photos by



David DeHoyos

Safety Tips

FOR OPEN HOUSE

Safety is a top priority here at JSC during every normal workday. Open House 2001 will be an extraordinary circumstance involving more than 100,000 visitors, and the attention paid to safety must keep pace with the influx of visitors—many of whom are very young or elderly. There are hazards that no one at JSC can do anything about, such as the heat and humidity, but there are many other potential hazards that can be safely avoided with the proper respect and attention paid to them.

Open House volunteers will attend a training session, which will include information on safety, but it is important for everyone to keep safety issues in mind for upcoming visitors.

James Taylor, of the Occupational Safety and Institutional Assurance Division reminds us of these tips for staying safe:

- Take extra care when driving and crossing streets on-site during Open House.
- Be aware that with the Ballunar Lifftoff Festival there will be a fleet of chase-cars who will be intensely focused on following their balloon worth thousands of dollars.
- Visitors may not be aware of our regulations, such as crossing streets at crosswalks or stopping cars for pedestrians at crosswalks.
- A nurse-staffed first aid station will be available in the Bldg. 8 clinic lobby during Open House. The clinic's ambulance also will be available in case of emergency.
- Remember the emergency number is x33333 and make sure that as many others as possible are aware of it. It will be on the back of volunteers' badges.
- Drink plenty of fluids and remind others to do so as well. Houston's climate and extended periods outdoors can make people prone to dehydration. JSC will have more free water stations located around the site near information booths this year, as will Ballunar Lifftoff Festival.
- Be prepared to help visitors evacuate during a fire alarm by directing them to stairs on upper floors and building exits.
- Check your tour area throughout the day for potential hazards—including tripping and slipping hazards, sharp objects or edges along the tour route and shock hazards like exposed wires.
- As you check for hazards, keep in mind a lot of children will be among our guests. They see the world from a different angle and may find things you might miss.
- Safety professionals will be walking around and available all day to help with any issues that may arise.

By Eric Raub

Some of the oldest flight techniques in the world will be presented side-by-side with the most advanced space technology when the Ballunar Lifftoff Festival meets JSC's Open House 2001.

The Ballunar Lifftoff Festival has grown into the largest balloon festival in Texas. More than 100 balloons are expected to participate in the event. It is a competition festival, which means the balloonists will face challenges designed to test their ballooning skill.

Beginning on Aug. 24 and continuing through the 26th, residents of the Clear Lake Area can expect to see large colorful balloons floating through the skies and descending on JSC. Many have beautiful quilted patterns and some have interesting shapes. All of the old favorites are expected to return along with other events to entertain the crowd.

"We do have the Eagle balloon returning," Claudette Alderman, Executive Director of the Festival, said. "People just love that balloon. Also the Shuttle balloon is coming back, and we do have balloon flights, balloon glows and skydiving."

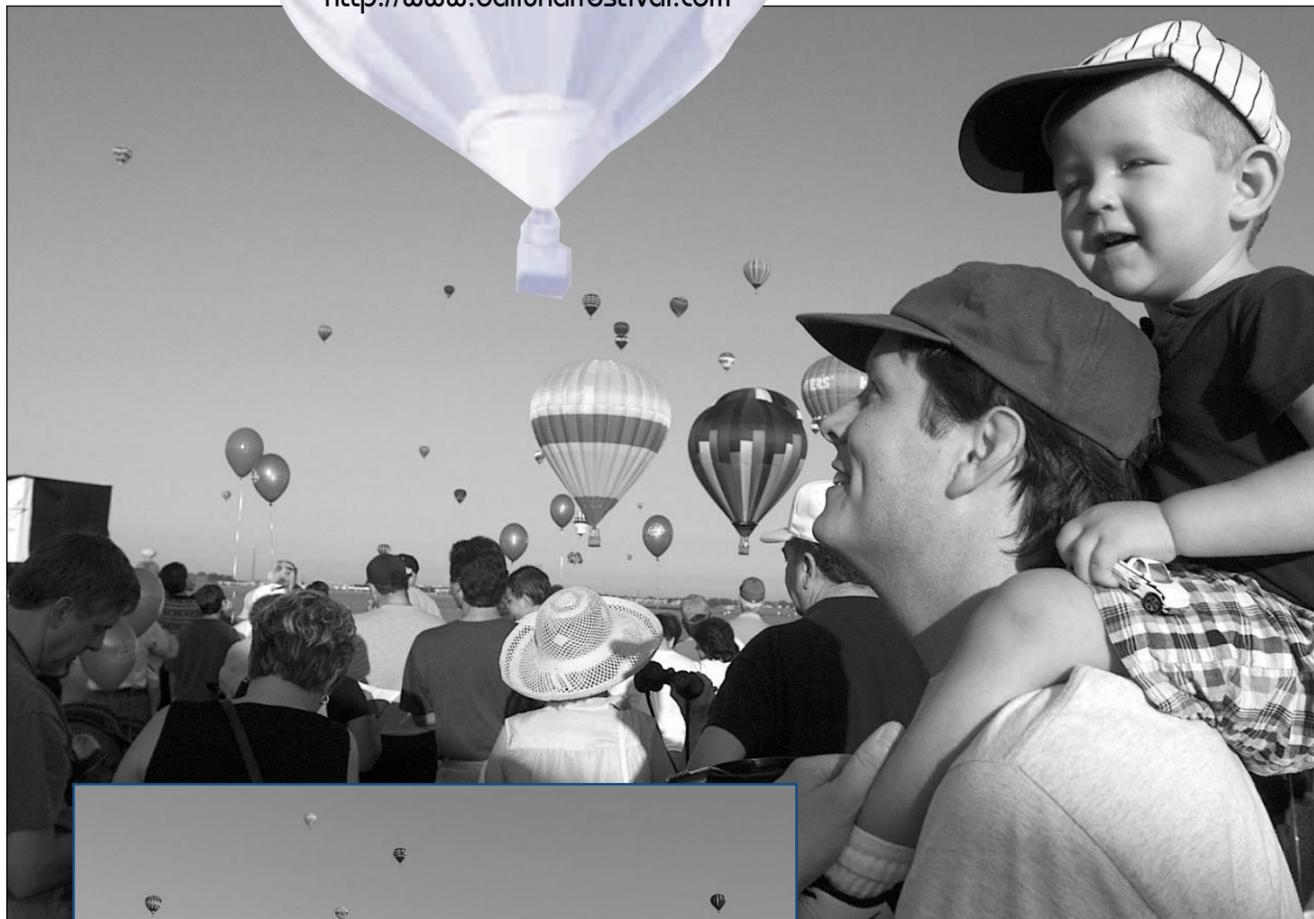
Balloon glows occur at night as pilots inflate the balloons and pulse their propane burners to musical cues. This sight is paired with other entertainment throughout the weekend, such as astronaut autograph signing and performances by the Lonestar Bluegrass Band, Classical Grass Band, Houston Highlanders, Clear Lake Symphony, Astronaut band Max Q and many others.

However, the Ballunar Festival is about more than colorful shapes and music. "Our subliminal message is to entice young people to be interested in flight," Alderman said. "The beauty of our festival is it combines the earliest form of flight, which is ballooning with the most recent which is International space travel."

Festival Schedule:
Friday, Aug. 24, 6-10 p.m.
Saturday, Aug. 25, 6:30 a.m.-10 p.m.
Sunday, Aug. 26, 6 a.m.-3 p.m.

For more information check out:
<http://www.ballunarfestival.com>

The festivities begin at 6 p.m. on Friday and conclude at 3 p.m. on Sunday. There will be an admission charge for the festival.



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

Despite a harder-than-expected splashdown in the Pacific, Apollo 15 crewmen Dave Scott, Al Worden and Jim Irwin emerged smiling from the command module *Endeavour* last Saturday after their million-plus mile, 12-day journey into space.

One of the three main parachutes failed during the spacecraft's descent, causing the moonship to hit the water slightly faster and harder than it would have with all three chutes operating normally.

After medical examinations, a meal and a night's rest onboard the recovery ship USS *Okinawa*, the astronauts helicoptered to board a C-141 aircraft for Ellington Air Force Base, where they arrived last Sunday night.

The first lunar landing crew not having to face a 21-day quarantine, the men were reunited with families and friends at Ellington.

1 9 7 6

NASA's most advanced communications satellite, ATS-6, is now employed in a three-month demonstration of how space and other advanced technologies can be used to benefit the people of developing countries.

As many as 30 countries in Asia, Africa and Latin America are expected to participate in the project, begun Aug. 1, which is being undertaken jointly by NASA and the Agency for International Development.

The experiment will demonstrate how the application of space communications, remote sensing from earth resources satellites and high-resolution aerial photography can help some of the world's poorest people boost food production, improve health and nutrition, expand family planning projects and raise income levels.

1 9 9 1

The gentle release of the Upper Atmosphere Research Satellite (UARS) will be an exciting and important spearhead to NASA's Mission to Planet Earth, according to the STS-48 crew.

The mission also will feature the first planned night landing on Kennedy Space Center's Shuttle Landing Facility runway

Continued from Page 1

JSC ready to welcome public to Open House 2001

Building 9, training personnel are going to perform a Crew Escape Systems Training demonstration. During the demonstration, which will be at 10 a.m., noon and 2 p.m., the employees are going to escape from the nose of the Full Fuselage Trainer and repel down the side of the mock-up safely to the ground below.

There will be viewing highlights in all of the approximately 20 buildings open to the public. The Sonny Carter Training Facility and Ellington Field will also be open so that guests can see the 6,200,000-gallon pool at the Neutral Buoyancy Laboratory (NBL) and the various NASA aircraft. Bus tours will be

available to take guests to both locations.

Free tram service and maps will be available so that guests will have information about the buildings they are seeing, as well as know which buildings hold the most interest for them.

Organizers are committed to addressing safety concerns. With tens of thousands of people milling around in the Houston heat, problem areas have a very good chance of developing. Volunteers have learned from past years, and are working ahead to make Open House 2001 one of the safest events yet.

"We paid a lot of attention to the safety concerns from last year, especially

in the most popular buildings where we had overcrowding," said Stephen Nesbitt, Open House Chairperson.

"There have been several changes this year that should reduce those problems. ... We have good medical response capability, should we need it, and the safety people are training for emergencies."

The volunteer recruitment effort is going well. However, organizers say there are almost limitless opportunities to contribute, adding volunteering is a rewarding way to give back to the community and can be as much of a benefit to the volunteer as to the guests.

"Many of the volunteers who work the event have told us how good it makes them feel to interact with people who are very excited about visiting NASA," Nesbitt said.

"We get a renewed enthusiasm for our jobs when we see how interested the public is about the space program."

Those who are interested in volunteering should contact C.C. de la Garza at x31033 or register to volunteer online at: <http://www4.jsc.nasa.gov/scripts/openhouse/signup.cfm>

For more information on Open House 2001 please visit: <http://openhouse.jsc.nasa.gov/>



Visitors of all ages enjoy the attractions, demonstrations and displays of the last year's Open House event.

For a full listing of building attractions, please see page 5.

See you at the ballgame!

If you have purchased your advanced tickets, don't forget that **Saturday, Aug. 18, is NASA Day at Enron Field. The baseball game begins at 12:15 p.m. when the Houston Astros take on the Pittsburgh Pirates, but come early to see a special JSC video presentation broadcast on the giant Diamond Vision screen. JSC volunteers will be at Enron with a number of exhibits and displays and a mission to get the word out about Open House 2001. The STS-104 crew will also be recognized, and one crewmember will throw out the first pitch. Astronaut Steve Hawley is scheduled to do a live radio interview with Astros broadcaster Milo Hamilton.**



Saturday Aug. 18

NASA Day



GOOD NEWS**2001 NASA HONOR AND PRESIDENTIAL RANK AWARDS CEREMONY**

The NASA Honor and Presidential Rank Awards Ceremony will be held in the Teague Auditorium on Wednesday, Aug. 15, 2001, at 3 p.m. At this year's ceremony, individuals and groups nominated by Center management and selected by the Incentive Awards Board at NASA Headquarters will receive NASA's highest honorary awards. Also recognized will be those selected to receive Senior Executive Service (SES) rank awards.

Each recipient of a NASA medal will also be presented with a framed certificate signed by NASA Administrator Daniel S. Goldin. Individuals selected to receive Group Achievement Awards on their teams' behalf will receive a framed certificate at the ceremony. Certificates for individual participants of teams will be forwarded to the nominating organizations at a later date.

Recipients are encouraged to invite family members, friends and coworkers to attend the ceremony with them. Following the ceremony, a reception will be held in the lobby of the auditorium for award recipients and their guests. Supervisors are encouraged to allow employees to attend as their workloads permit. For further information about the ceremony, contact Shelia Collins at x30936.

The following is a list of the honorees, some of whom may have received their awards at earlier ceremonies:

SES Distinguished Executive**SES Meritorious Executive**

Brock R. Stone
George W. S. Abbey
Robert J. Naughton
Michael G. Winchell, J.D.

NASA Distinguished Service Medal
(some were presented at NASA Headquarters on June 21)

Curtis L. Brown, Jr.
Kevin R. Kregel
Brian Duffy
Claude Nicollier
C. Michael Foale, Ph.D.
James S. Voss
James D. Halsell, Jr.
Janice E. Voss, Ph.D.
Susan J. Helms
Terrence W. Wilcutt
Tommy W. Holloway
Peter J. K. Wisoff, Ph.D.

NASA Outstanding Leadership Medal

Warren L. Brasher
Robert M. Kelso
William H. Gerstenmaier
Steven L. Smith
Gregory W. Hayes
Brock R. Stone
Brent W. Jett, Jr.
Dave R. Williams, M.D.

NASA Exceptional Engineering Achievement Medal

Bernard J. Rosenbaum

NASA Exceptional Bravery Medal

Marjorie M. Johnson,
Brown and Root Services Pioneer

NASA Exceptional Service Medal

Scott D. Altman
Scott J. Horowitz, Ph.D.
Connie B. Poole
Bryan P. Austin
Janet L. Kavandi, Ph.D.
Reagan S. Redman
Michael J. Bloomfield
Michael A. Kincaid
Lisa F. Roberts
Michael A. Brieden
Henry L. Littlejohn
Larry C. Shaw
Leroy Chiao, Ph.D.
Michael E. Lopez-Alegria
Robert O. Shelton, Ph.D.

Cliff L. Farmer
Ed T. Lu, Ph.D.
Joseph R. Tanner
Ven C. Feng
William S. McArthur, Jr.
Koichi Wakata
Jean-Francois Clervoy
Gordon A. McKay, Ph.D.
Mary Ellen Weber, Ph.D.
Scott D. Gahring
Herbert K. Mitchell
John F. Whiteley
Marc Garneau, Ph.D.
Mamoru Mohri
Jeffrey A. Williams
Virginia L. Gibson
Lisa A. Navy
Michael G. Winchell, J.D.
Dominic L. Gorie
Carlos I. Noriega
John W. Griffin
Frederick A. Ouellette
John M. Grunsfeld, Ph.D.
Duane L. Pierson, Ph.D.

NASA Exceptional Achievement Medal

Mark A. Chavez
Walter J. Lueke
Mindy J. Cohen
Huyen-Anh V. Ly
Horacio M. De La Fuente
James E. Ratliff
Vanessa S. Ellerbe
Kirk A. Shireman
George A. Flynt
Jenny M. Stein
Camille C. Goodwin
Kimberly K. Ulrich
Ginger Kerrick
Timothy J. Woeste

NASA Public Service Medal

David Carr, DDS, Texas
Aerospace Commission
Christos E. Dantos,
Hamilton Sunstrand Space Systems

International, Inc.

Andrew G. Eng, Lockheed Martin Corporation
Raymond W. Flumerfelt, Ph.D., University of Houston
Paul M. Frison, Houston Technology Center
Israel J. Galvan, GHG Corporation
Eckart D. Graf, European Space Agency
Michael H. Hillman, Hillman International Brands, Ltd.
James F. Horton, Jr., Ph.D., San Jacinto College District
Oleg Lvovsky, Ph.D., Muniz Engineering

NASA Group Achievement Award

Astronaut Ascent/Entry Trainer Team
EMU Oxygen Contamination Recovery Team
Genesis Contamination Control and Curation Team
Hypervelocity Impact Test and Analysis Team
Multifunction Electronic Display Subsystem Team
NASA Employee Benefits System Development Team
Process Control Focus Group
Service Module Team
Space Shuttle Program Year 2000 Integrated End-to-End Test Team
Space-to-Space Communications System Project Team
X-38 Parachute Team

NASA Public Service Group Achievement Award

Universal Trunnion Attachment System Design Team

Congratulations!

White Sands Space Harbor celebrates 25 years

On the fringe of White Sands National Monument is one of the primary training areas for Space Shuttle pilots—White Sands Space Harbor (WSSH). WSSH, a Shuttle runway set in a dry sea of gypsum, is a portion of NASA's White Sands Test Facility (WSTF), part of Johnson Space Center.

WSSH is on the Army's White Sands Missile Range (WSMR) in an area known as the Alkalai Flats. Northrop Aviation Corporation originally built the runway in the late 1940s as a landing area for target drones.

It became known as "Northrup Strip" after an early press release error resulted in the widespread incorrect spelling of the name. WSMR acquired the strip in 1952.

NASA selected the site as a Shuttle pilot training area in early 1975. The first Shuttle training flight at the runway was on August 13, 1976. Shortly afterwards

WSSH became an alternate Shuttle landing site with the addition of a second runway and the lengthening of both runways to 35,000 feet.

WSSH is used everyday, often at night, by Shuttle pilots flying practice landings in the Shuttle Training Aircraft (STA). The STA is a Gulfstream II aircraft that has been modified to mimic the flight characteristics and instrumentation of the Shuttle. The STA provides a realistic simulation of the Shuttle's landing from an altitude of about 35,000 feet through touchdown.

The WSSH was chosen as a backup landing site in case

of rain at the primary landing site during the first few flights of the Shuttle. The orbiter Columbia landed at WSSH on March 30, 1982.

After that landing, Senator and former Apollo astronaut Jack Schmitt introduced legislation to change the name to "White Sands Space Harbor."

During the lapse in Shuttle flights following the Challenger accident, the WSSH runways were laser-leveled, widened from 300 feet to 900 feet, and had a new concrete mating area and tow way added to move future opera-

tions out of areas that previously had problems with blowing gypsum. A full set of convoy equipment specially designed to "safe" the Shuttle after landing is kept at WSSH.

Crash and rescue emergency personnel from nearby Holloman Air Force Base are at WSSH for STA practice sessions and for any landings. The runways include all landing aids necessary for a Shuttle landing.

Runway equipment includes Precision Approach Path Indicator lights, distance-to-go lights, strobe lights, reflectors and xenon spotlights that total more than 11 billion candlepower.

In 1989, a third practice runway was constructed to allow pilots to simulate landings on the narrow and shorter runways at transatlantic abort landing sites. The runway duplicates the site at Ben Guerir, Morocco. ■



DATES & DATA

American Society for Quality

First Tuesday of the month 6 p.m., Franco's.
Contact: Ann Dorris at x38620.

Bay Area Aero Club

Second Tuesday of the month 7 p.m., Houston Gulf Airport clubhouse, 2750 FM 1266, League City
Contact: Larry Hendrickson at x32050
Web site www.bayareaaeroclub.org

Clear Lake Communicators, Toastmasters International Club

Thursdays 11:30, Wyle Laboratories, 1100 Hercules, Suite 305. Contact: Allen Prescott at (281) 282-3281 or Richard Lehman at (281) 280-6557.

JSC Amateur Radio Club

Last Thursday of the month 6:30 p.m., Piccadilly, 2465 Bay Area Blvd. Contact: Larry Dietrich at x39198.

JSC Astronomical Society

Second Friday of month 7:30 p.m., Center for Advanced Space Studies, 3600 Bay Area Blvd Contact: Chuck Shaw at x35416 Web site www.ghg.net/cbr/jscas/

JSC National Management Association

Visit: www.jsc.nasa.gov/nma/

Lunarfins

Third Wednesday of the month 7:30 p.m.
Contact: Mike Manering at x32618
www4.jsc.nasa.gov/ah/Exc&AF/leisure/Lunarfins/default.htm

Radio Control Airplane Club

Second Thursday of the month 7 p.m., Clear Lake Park building Contact: Bill Langdoc at x35970.

Clear Lake Area chapter of the National Space Society

First Monday of every month Parker Williams Branch of the Harris County Library at 10851 Scarsdale Blvd.
Contact: Murray Clark at (281) 367-2227.

National Society of Black Engineers

First Monday of the month 6:30 p.m., Texas Southern

University, School of Technology, 1st floor. Contact: Kimberly Topps at (281) 280-2917.

Society of Mexican-American Engineers and Scientists (MAES)

Second Wednesday of month 11:30 a.m., Bldg. 16, Rm. 111. Contact: Margaret C. Delgado at (713) 643-6097 or mcdelgad@aol.com.

Space City Chess Club

Friday evenings 5:30 p.m. until 9 p.m., Clear Lake United Methodist Church, 16335 El Camino Real, room 423
All skill levels are welcome. Contact: James Mulberry at x39287 or James Termini at x32639.

Spaceland Toastmasters

Wednesday mornings at 7 a.m. House of Prayer Lutheran Church 1515 Bay Area Blvd at Reseda.
Contact: Ava Sloan at (713) 768-6336 or asloan@hal-pc.org.

Spaceteam Toastmasters

Wednesday mornings at 11:30 a.m. United Space Alliance, 600 Gemini. Contact: Patricia Blackwell at (281) 280-6863.

AUGUST 14

The International Association of Administrative Professionals (IAAP) Clear Lake NASA Area Chapter presents "The Value of Good Interpersonal Skills to Businesses" by Harrison Banks on Tuesday, Aug. 14th beginning at 5:30 p.m. at the Grace Community Church Colonial Room. Cost of the program and dinner is \$12, payable at the door. Please contact Jackie Almanza at (281) 244-7274 for information and reservations.

Correction

The July 13 issue of the Roundup incorrectly indicated the room number of the Information Services Center (ISC). The ISC is actually located in Building 2N room 174.

Have something to sell? In the mood to buy?

Check out the JSC Swap Shop for some great deals:
<http://isd.jsc.nasa.gov/swapshop/>

Have an interesting and unique JSC story idea?

Contact Editor Melissa Davis at X39978.

TICKET WINDOW

	JSC Price	Gate Price (includes tax)
AMC Theaters	\$5.00	\$7.50
Astroworld One Day Admission	\$20.50	\$38.96
Astroworld 2 Day Admission	\$31.00	\$43.29
Fiesta Texas Adult	\$21.50	\$38.82
Fiesta Texas Child (under 48")	\$18.75	\$19.42
Moody Gardens (2 events)	\$10.75.**	\$ 27.01 all day
** ticket does not include Aquarium Pyramid		
Moody Gardens - Aquarium only		\$ 9.25
Sea World adult.....	\$30.00	\$36.75
Sea World child (ages 3-11).....	\$20.50	\$25.93
Space Center Houston.....	\$9.25	\$16.18

JSC civil service employees free.

Check out our new Web site on the JSC People page at: <http://hro.jsc.nasa.gov/giftshop/>

Exchange Store hours

Monday-Friday
Bldg. 3 7 a.m.-4 p.m.
Bldg. 11 9 a.m.-3 p.m.

- ▶ All tickets are nonrefundable.
- ▶ Metro tokens and value cards are available.
- ▶ Sweetwater Pecans \$6.25 per lb.
- ▶ Chocolate-covered Pecans ... \$8.00 per lb.

For additional information, please call x35350.

Please bring your driver's license to pay by personal check.

NASA BRIEFS

NASA ADMINISTRATOR ANNOUNCES DISTINGUISHED TEAM TO REVIEW INTERNATIONAL SPACE STATION PROGRAM

A diverse team of world-renowned experts, including two Nobel laureates and the world's most famous heart surgeon, make up an independent task force created by NASA Administrator Daniel S. Goldin to take a focused look at the budget and management challenges facing the International Space Station program.

The ISS Management and Cost Evaluation Task Force (IMCE) will help NASA address the recent cost growth on the program by assessing the quality of the ISS cost estimates as well as program assumptions and requirements, and identifying high-risk budget areas and potential risk mitigation strategies.

Two Nobel Prize winners are among the members of the IMCE Task Force. Dr. Richard Roberts shared the 1993 Nobel Prize in Physiology of Medicine for the discovery of "split genes." He is currently the head of the Department of Bioinformatics and Research at New England Biolabs, Beverly, Mass.

Another panel member, Dr. Robert Richardson, is Vice-Provost for Research at Cornell University, Ithaca, N.Y., and shared the 1996 Nobel Prize for the discovery of superfluidity in the isotope helium-3 (3He).

Another prominent task force member is world-renowned medical pioneer, Dr. Michael DeBakey, Chancellor Emeritus of Baylor College of Medicine in Texas and an active staff member at The Methodist Hospital of Houston. Dr. DeBakey is internationally recognized for his innovations in open-heart surgery and his recent pioneering work in the field of telemedicine.

STAR WITH MIDRIFF BULGE EYED BY ASTRONOMERS

For the first time ever, a star spinning so fast its mid-section is stretched out has been directly measured by an ultra-high-resolution NASA telescope system on Palomar Mountain near San Diego.

"Measuring the shape of this star, Altair, was as difficult as standing in Los Angeles, looking at a hen's egg in New York, and trying to prove that it's oval-shaped and not circular," said Dr. Charles Beichman, chief scientist for astronomy and physics at NASA's Jet Propulsion Laboratory (JPL), Pasadena, Calif.

Altair is a well-known member of the Summer Triangle, clearly visible in the summer night sky across the United States. Scientists using the Palomar Testbed Interferometer, which links multiple telescopes, measured the star's radius at different angles on the sky. They noticed the size of the star varied with changing angles, which was the first tip-off that Altair is not perfectly round.

SPACE CENTER **Roundup**

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