



Schedule of events

The Space News Roundup provides a detailed listing of Safety and Total Health Day events. Story on Page 3.



Shuttle program to echo JSC safety emphasis

Science signing

JSC and the University of Houston sign an agreement to conduct research together. Photo on Page 4.

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JSC's Safety, Total Health Day set for Wednesday

Employees should remain safe during events

The last thing anyone involved in the planning of next week's Safety and Total Health Day wants to see happen is an accident, so organizers and employees are being urged to look for and nip any hazards in the bud.

Safety and Total Health Day is an all-day event Wednesday for civil servants and contractors both on-and off-site. A wide variety of office-specific activities have been planned by managers with optional activities available.

Larry Neu, chairman of the planning committee, said popular attractions could be overwhelmed by people who want to participate. If a booth is crowded, Neu suggests attending other events and stopping back later.

"Please don't create a safety hazard by overfilling Teague Auditorium or conference rooms," Neu said. Employees are asked not to sit in the aisles or on floors. Most of the seminars at Teague will be simulcast on the JSC Television Distribution System. Televisions are available in many building lobbies and at the cafeterias.

"JSC is striving to make safety and health more meaningful to employees," Neu said. "By allowing employees to tailor their day, we are hoping they will use the day to their best advantage."

Parking and pedestrian traffic could be more of a problem because off site employees may travel on site to attend events, and Neu urges all drivers to be especially careful in parking lots and crosswalks.

"This year we are doing things differently, hoping for increased participation and aware-Please see **VOLUNTEERS**, Page 4 In concert with JSC's Safety and Total Health Day, the agency's Space Shuttle Program Office will concentrate on safety and assuring mission success Wednesday.

Program Manager Tommy Holloway decided to echo JSC's focus with shuttle workers from all centers and contractors taking time out to discuss program and safety issues.

"Our emphasis on safety extends to all aspects of the program including office, laboratory, manufacturing, processing, operations and flight environments and to all government and contractor personnel," Holloway said. "We will conduct a programwide focus on safety Oct. 23, in which each person associated with the space shuttle program will focus on safety and mission assurance."

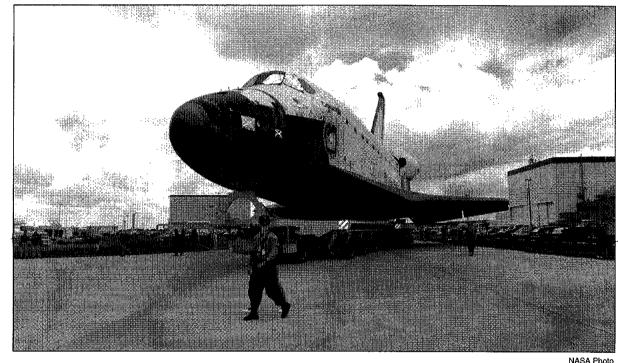
Holloway has instructed his managers to

reschedule any program or project meetings and spend the day with employees discussing the program status, reviewing safety issues, answering questions, and focusing on the hands-on job required to fly the shuttle.

"Work will continue as appropriate, but all elements of the workforce should be involved in this activity," Holloway said. "Activities will be structured toward each work element and situation. With the proper emphasis, I believe this time will be well spent in assuring the continued safe operations of the shuttle."

Holloway said safety remains a priority in the program and that in spite of significant delays, NASA has flown 11 flights successfully.

"We have done this with 30-40 percent less resources than in 1991, while maintaining Please see **HOLLOWAY**, Page 4



Columbia completes the short journey from Kennedy Space Center's Orbiter Processing Facility Bay 1 to the Vehicle Assembly Bldg. During its approximately one-week stay inside the VAB, *Columbia* was mated to its external tank and solid rocket boosters. Rollout to Launch Pad 39B was completed Wednesday, where the two primary payloads for STS-80—the Wake Shield Facility and Orbiting and Retrievable Far and Extreme Ultraviolet Spectrograph-Shuttle Pallet Satellite—were installed. Liftoff on the final shuttle flight of 1996 is targeted for no earlier than Nov 8.

Inspection to give industry 'up-close' look

For two days in November, JSC will open its doors to business leaders who want to get an "up-close" look at the center's technologies, facilities and programs.

The JSC Inspection, planned for Nov. 13-14, is designed to showcase technologies and expertise that may have commercial applications with more than 100 exhibits and protry and the public sector," said JSC Director George Abbey.

An overview of JSC's major programs and technology developments will be available in Bldg. 9 North. Business representatives will learn about a meteorite that may harbor evidence of primitive life on Mars, get a broad look at JSC's Technology Transfer and Commercialization activities and learn how to do business with NASA. There also will be mock-up tours and demonstrations of robotic and virtual reality equipment under development.

ing will be examined in Bldg. 5, with a tour of the shuttle and station training facilities and demonstrations of a robotics prototype trainer and virtual environment training techniques.

Advanced life support equipment will be the focus in Bldg. 7, where everything from air and water purification to the Electronic Cuff Checklist for space walkers to advances in plant growth and artificial soils development will be showcased.

Columbia rolls to launch pad; payloads await

By James Hartsfield

Preparations for the launch of STS-80 entered the home stretch this week as *Columbia* was moved to Kennedy Space Center's Launch Pad 39B and aimed at a liftoff perhaps as early as Nov. 8.

Columbia was rolled out of the Vehicle Assembly Bldg. early Wednesday and the STS-80 crew, Commander Ken Cockrell;

Pilot Kent Rominger; and Mission Specialists Tammy Jernigan, Tom Jones and Story Musgrave, will travel to KSC Tuesday for a dress rehearsal of the launch countdown. A liftoff targeted for 1:47 p.m. CST Nov. 8 would lead to a landing at 6:31 a.m. CST Nov. 24 at KSC.

Shuttle managers will

meet for a Flight Readiness Review on Oct. 25 to assess all launch preparations, after which an official launch date will be set. The vertical payloads for STS-80 were moved to Pad 39B late last week in preparation for the arrival of Columbia. Columbia will carry two free-flying satellites aloft on STS-80, the Wake Shield Facility for its third trip to orbit and the ORFEUS-SPAS astronomy satellite for a second trip to space. Two space walks will be performed by Jernigan and Jones during the mission as part of a continuing series designed to test space walking construction and maintenance techniques for the International Space Station.

Meanwhile, in KSC's Bay 3 processing facility, *Atlantis* is being readied for a mid-January launch on STS-81, the fifth shuttle-Mir docking mission. Work this week included installation of replacement auxiliary power units and functional testing of

the orbital maneuvering systems.

Monday, technicians will begin removing Atlantis main engines used on STS-79; new engines are to be installed starting Nov. 5. The STS-81 crew, Commander Mike Baker; Pilot Brent Jett; Mission Specialists John Grünsfeld, Marsha Ivins and Jeff Wisoff, and Mir researcher

Jerry Linenger, who will relieve astronaut John Blaha aboard the Russian station, will travel to KSC on Nov. 9 to check out crew equipment being installed aboard *Atlantis*.

Elsewhere, *Discovery* is being readied for the second Hubble Space Telescope servicing mission, STS-82 in January.

Manla and Diana Hala t



grams in 17 buildings.

"This event will be an excellent opportunity to see our technical advances, discuss activities with our engineers, scientists, and managers and meet with counterparts in indus-

Astronaut and flight control train-

Manufacturing technology such as rapid prototyping and manufacturing systems will be in Bldg. 9 South, Please see **EMPLOYEES**, Page 4 Work on *Discovery* this week included completing tests of the remote manipulator system robotic arm and installation of the main engines. The cargo bay doors were closed to allow work on thermal blankets to be performed next week.

Mir crew conducts survey of themselves, environment

Cosmonaut John Blaha is now into his fourth week on the Russian space station, extending a permanent American presence in space and continuing to collect data on a variety of experiments on his scientific agenda to learn more about how the human body responds to long periods in microgravity.

Blaha and his Mir 22 crewmates, Commander Valery Korzun and Flight Engineer Alexander "Sasha" Kaleri, all have been busy with a variety of on-board investigations, including a weekly survey of their personal interaction so that scientists on the ground can study changes in attitudes and leadership roles during a long spaceflight, along with the physical changes the body undergoes while in space. The questionnaires are part of the Crewmember and CrewGround Interactions investigation, and are also being filled out by the Russian and American ground crews.

Samples of the microbial environment inside Mir are being collected. Samples of air, water, spacecraft surfaces and the crew members' skin should help researchers understand the microbial ecology of Mir, including bacterial, fungi and some viruses. This week, the crew also participated in a NASA exercise program with the Metabolic Gas Analyzer System, measuring individuals' metabolic responses to exercise and how they change over time.

Blaha harvested more of the dwarf wheat plants this week as part of the Greenhouse

experiment that is studying the effects of space flight on plant development. The plants

were collected and preserved in formaldehyde for their eventual return to Earth. Plants may play a critical role in sustaining human life on future space flights.

Today marks Blaha's 33rd day in space since his launch last month on the space shuttle *Atlantis*, his 30th as a member of the Mir 22 crew. Combined with Astronaut Shannon Lucid's 179 days on the Mir, Americans have now been living and working on board the orbiting

Russian outpost for 209 continuous days.

Blaha is scheduled to remain on Mir until Atlantis returns during STS-81 in January, when he will be relieved by Astronaut Jerry Linenger, who is now in the final phases of his Mir training at the Gagarin Cosmonaut Training Center in Star City, Russia.

Linenger's successor on Mir, Astronaut Mike Foale, continued his training in Star City this week as well, and has now been fitted for his Russian space suits. Other successors, including Astronauts Wendy Lawrence, slated to go to Mir next September, and David Wolf, slated to go in January 1998, are now in the early stages of their studies on Mir systems and also are concentrating on their Russian language skills. Rounding out the Star City contingent is Astronaut Jim Voss, currently training as a back-up crew member to the other Americans in line to continue the joint U.S.-Russian mission on board Mir.



BLAHA

Space News Roundup

JSC **Ficket Window**

The following discount tickets are available for purchase in the Bldg. 11 Exchange Store from 10 a.m.-2 p.m. Monday-Thursday and 9 a.m.-3 p.m. Friday. For more information, call x35350 or x30990.

Halloween dinner/dance: Oct. 26. Tickets cost \$15.

Texas Renaissance Festival: Weekends through Nov. 17. Tickets cost \$11.50 for adults and \$5.25 for children 5-12.

EAA Belize Resort Trip: Available through Dec. 15, Cost is \$472 per person double occupancy. \$100 deposit required with final payment due 30 days before departure. EAA Caribbean Getaway Cruise to Puerto Rico: Jan. 3-13, \$1198 double occupancy with airfare, \$999 cruise only. Final payment due Nov. 4.

Sam Houston Race Park Track Pack: \$10 value pack for \$5.25, includes Club Level seating, program, tip sheet, admission, preferred parking and gift shop discount.

Astroworld: One day pass cost \$22.75, two day pass cost \$34.25. Fiesta Texas: One day pass cost \$22.75, two day pass cost \$34.25

Six Flags at Arlington: One day pass cost \$22.75, two day pass cost \$34.25.

Sea World: Adult tickets cost \$24.50, children (3-11) cost \$17.25.

Space Center Houston: Adult\$8.75; children (4-11) \$6.25, annual membership \$25.95, family membership (up to four) \$59.95.

EAA Halloween Dinner Dance: Begins at 7:30 p.m. Oct. 26 at yhr Gilruth. Tickets on sale through Oct. 23 at \$15 perperson.

Franklin Planner refills: now taking orders for 1997 calendars.

Sweetwater Pecans: \$5.65 per pound.

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Stamps: Book of 20, \$6.40. Entertainment '97 books: Cost is \$25.

Metro tickets: Passes, books and single tickets available.

JSC **Gilruth Center News**

Sign up policy: All classes and athletic activities are first come, first served. Sign up in person at the Gilruth Center and show a NASA badge or yellow EAA dependent badge. Classes tend to fill up two weeks in advance. Payment must be made in full, in exact change or by check, at the time of registration. No registration will be taken by telephone. For more information, call x30304.

EAA badges: Dependents and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday; and 8 a.m.-4 p.m. Saturdays. Cost is \$5. Dependents must be between 16 and 23 years old.

Nutrition intervention program: A six-week program to learn more about the role diet and nutrition plays in health, including lectures, private consultations with a dietitian and blood analysis. Program is open to all employees, contractors and spouses. For more information call Tammie Shaw at x32980.

Defensive driving: One-day course is offered once a month. Cost is \$25 Stamp club: Meets at 7 p.m. every second and fourth Monday in Rm. 216.

Weight safety: Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. Oct. 22. Pre-registration is required. Cost is \$5. Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays.

Aikido: Martial arts class meets from 6:15-7:15 p.m. Tuesday and Wednesday. Cost is \$35 per month. New classes begin the first of each month.

Aerobics: Classes meet every Monday, Tuesday, Thursday and Friday.

Ballroom dancing: Cost is \$60 per couple. For additional information call the Gilruth Center at x33345

Country and Western dancing: Beginner class meets 7-8:30 p.m. Monday. Advance class meets 8:30-10 p.m. Monday. Cost is \$20 per couple.

Fitness program: Health Related Fitness Program includes a medical examination screening and a 12-week individually prescribed exercise program. For more information call Larry Wier at x30301.

JSC

Property

Sale/Lease: Santa Fe, 3-2-2, .75 acre, 14 mi, JSC, fenced yard, \$70k or \$700 mo, 1st, last & deposit. Ed, x38309 or 409-925-8051.

Lease: Barringer Way condo, 2-1, W/D conn, pool, storage area, ex cond, no pets, \$495 mo. 486-2048.

Sale/Lease: University Trace condo, 2-2.5, DRM, 2 covered parking spaces, W/D, new refrigerator, \$675 mo/\$47.9k. 280-0991.

Sale: Friendswood Imperial Estates II, custom brick 2-story, 3250 sq ft, 4-3-3, formal LR/DR, family room w/FPL, game room, wooded .6 acre lot, \$185 neg. Owner, 482-1535.

Sale: '93 Prowler 5th wheel trailer, 27-5N, loaded, ex cond, w/Reese hitch, \$11.3k obo. 470-8306.

Cars & Trucks

'89 Pontiac Sunbird, 4dr, auto, very cold A/C, new tires, ex cond, \$2,595 obo. Ayub Kahn, x39199 or 910-6700.

'94 Honda Accord LX, exceptional cond, 27.5k mi, 4-cyl, white exter, tan cloth inter, auto, 4 dr, ABS, dual airbags, pwr, AM/FM/cass/CD, \$15.5k obo. Gus, x33425 or 286-3402.

'91 Nissan Sentra GXE, 4 dr, 5 spd, V6, A/C, P/W, P/L, cruise, pwr moonroof, AC/FM/cass, tint-721-8670.

'93 Crownline 19'6" bowrider, Merc V8, loaded, custom cover, Shorelander custom trailer, \$13.9k. Don. x38039 or 333-1751

Audio Visual & Computers

Pioneer KEH-M7500 car radio/cass deck, CD changer controls, \$150; Pioneer CDX-M30 CD 6 disc changer, w/FM modulator \$200; \$300 both w/o modulator. Lisa, x40213 or 992-7302.

Audiovox car phone, model SP85, mounts in car, \$25. 332-2039.

IBM Aptiva Pentium M50, 100MHz Pentium w/8Mb RAM, 1 Gig HD, 28.8k internal fax modem, 4x CD, keyboard, mouse, wave card, lots of S/W, Windows '95, \$950; Us Robotics, 28.8k external modem, \$99. Bobby, 488-4382. Power Mac 7550, 100MHz, 32Mb RAM, 1 Gb

HD, AV card, 64-bit graphics card, 3-PCI slots, keyboard, mouse, \$1.5k: 15' Multi-scan Apple AV monitor, \$400. Bobby, 488-4382.

Panasonic printer, daisy wheel, \$25. 482-1535. Pioneer Premier DEQ-7500 DSP audio processor. 9-band spectrum analyzer. 4-band parametric equalizer, 7-band graphic equalizer, 5-mode sound field control, optical digital input, subwoofer output, center channel output, wireless remote control, \$250. Brian, 996-8567.

925-7869

Healthy, tame, captive-bred green Iquanas w/large custom built lighted cage, \$250. 282-0669. Rhodesion Ridge Back pupples, 1 male/1female,

8 mos, \$185 ea. Carl, x49111 or 488-4222 Heeler puppies, blues & reds, wormed and 1st

shots, 283-6874 or 409-925-6078. Household

Contemporary entertainment center, whitewash finish, 2'Dx4'Hx6'W, accommodates, 30" TV, drawers/trays, smoked glass doors, ex cond, \$180 obo. Gus, x33425 or 286-3402.

Two sets of white cribs w/mattresses, ex cond, orig price over \$300 sell \$200 ea. 282-3229 or 286-4547

Office/room dividers, fabric covered, approx 10 mixed sizes, \$50 all; 2 double sinks and faucets on formica top cabinet, \$45 ea. x36696 or 332-9102

Wooden dinette table, chrome legs, \$65; 2 cream dinette chairs, chrome legs, \$40; blond simulated chest of drawers, \$120, 998-2293. Antique bathtub, 5', white, \$500. Ann, 554-

4248 Teak wood desk & chair, 51" x 23" x 28", \$100.

Maureen, x38799.

Dates & Data

Todav

Cafeteria menu: Special: baked meatloaf. Total Health: baked potato. Entrees: chicken fajitas, ham steak, pork and beef eggrolls, steamed fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: stewed tomatoes, seasoned spinach, cut corn, macaroni and cheese.

Monday

Cafeteria menu: Special: Italian cutlet. Total Health: roast beef au jus. Entrees: chicken a la king, enchiladas with chili, vegetable lasagna, steamed pollock, French dip sandwich. Soup: split pea and ham. Vegetables: Brussels sprouts, oriental vegetables, buttered carrots, lima beans.

Tuesday

Blood Drive: The St. Luke's Donor Coach will be at JSC from 8 a.m.-3:30 p.m. Oct. 22 in front of Bldg. 1 for employees who wish to donate blood by appointment only. For more information call Dan Mangieri at x33003.

Cafeteria menu: Special: stuffed cabbage rolls. Total Health: roasted turkey. Entrees: turkey and dressing, country style steak and hash browns, beef ravioli, baked chicken, fried cod fish. Soup: tomato Florentine. Vegetables: Italian blend, okra and tomatoes, corn cobbette, navy beans.

Wednesday

Blood Drive: JSC will host an onsite blood drive Oct. 23 in Teague Auditorium to coincide with Safety and Total Health Day.

Toastmasters meet: The Spaceland Toastmasters will meet at 7 a.m. Oct. 23 at the House of Prayer Lutheran Church. For more information call Jeannette Kirinich x45752.

Toastmasters meet: The Spaceteam Toastmasters will meet at 11:30 a.m. Oct. 23 at United Space Alliance in the Civic Room at 600 Gemini. For more information call Pat Blackwell at 282-4302 or Ben Black 282-4166.

Astronomy seminar: The JSC

Astronomy Seminar will meet at noon Oct. 23 in Bldg. 31, Rm. 129. An open discussion meeting is planned. For more information call Al Jackson at x35037

Cafeteria menu: Special: pepper steak. Total Health: stir fry pork with rice. Entrees: liver and onions, stir-fry pork with rice, steamed fish, western special, Reuben sandwich. Vegetables: steamed broccoli, yellow squash, macaroni and cheese, vegetable sticks.

Thursday

Blood Drive: St. Luke's will be at JSC from 8 a.m.-noon Oct. 24 in Teague Auditorium for employees who wish to donate blood by appointment only. For more information call Dan Mangieri at x33003.

Radio club meets: The JSC Amateur Radio Club will meet at 7 p.m. Oct. 24 at the Nassau Bay City Hall meeting room. For more information call Larry Dietrich at x39198.

CLANG meets: The Clear Lake Aera Network Group will meet at 6:30 p.m. Oct. 24 at the Lunar and Planetary Institute, 3600 Bay Area Blvd. The group will discuss Novell's next release, "Green River." For more information call Bebe Kelly-Serrato at ext. 39021.

Cafeteria menu: Special: chicken fried steak. Total Health: baked potato. Entrees: beef tacos, steamed pollock, baked chicken, catfish special. Soup: navy bean. Vegetables: spinach, cut corn, breaded okra, pinto beans.

Friday

CTAP workshop: The Career Transition Assistance Program will hold a "Starting a Business" workshop at 8:15 a.m. Oct. 25 in Bldg. 45 Rm. 304. For more information call Keisha Gilbert at x34300.

CTAP workshop: The Career Transition Assistance Program will hold a "Becoming a Consultant" workshop at 1 p.m. Oct. 25 in Bldg. 45 Rm. 304. For more information call Keisha Gilbert at x34300.

Reservations due: The Performance Management Association, Houston chapter, will host a luncheon workshop on the "Implementation of an Earned Value Management System" at 11:15 a.m. Oct. 31 at the Ramada Inn on NASA Road 1. The discussion will focus on "Data Analysis and Reporting as well as Surveillance and Compliance Reviews." Cost is \$13 and includes lunch. Reservations are due by Oct. 25. For more information call Susan Widmer at x34299.

Sigma Xi meets: The Sigma Xi Scientific Research Society, Clear Lake chapter, will meet from 5:30-7 p.m. Oct. 24 at the Enterprise Center, 2200 Space Park Drive, Suite 200, Nassau Bay. David McKay of JSC will discuss "Evidence for Ancient Life on Mars." Cost is \$9 for members, \$10 for non-members. Call Bonnie Cooper at 338-9338 by Oct. 20 to RSVP.

Radio club meets: The JSC Amateur Radio Club will meet at 7 p.m. Oct. 24 at Nassau Bay City Hall. For more information call Karl Silverman at x31047.

Papers due: Paper abstracts for the 34th Space Congress. "Our Space Future: Uniting for Success,' are due by Oct. 25. The 200 word abstracts should be sent to William Holden, technical papers chairman, mail code IM-SST, KSC, Florida 32899 or email William.Holden-1@kmail.ksc.nasa.gov , with the authors professional affiliation, return mailing address, email, fax and phone number attached.

Cafeteria menu: Special: tuna noodle casserole. Total Health: baked potato. Entrees: steamed salmon steak, baked chicken, fried cod fish, ham steak. Soup: seafood gumbo. Vegetables: French cut green beans, cauliflower with cheese, green peas, black-eyed peas.

<u>Swap Shop</u> Wanted Want to carpool with somebody from the Mis-

souri City/Sugarland area. 280-4026 or 499-9788. Want roommate, lg 4-2-2, Seabrook, separate loft/living area, phone, cable/fax, W/D, \$375. 474-4742

Want Marine sextant. Bill, x35420.

Want used LEGO sets for my children. Ed, 481-4889.

Want participants for the 1997 Expedition to the North Pole, Susan, x48883. Want double wide baby jogger for expanding

family. Pete, x40016. Want M14 or M1A rifffle for military drill and

cermony use only, wood stock preferable, need not be in firing cond. John, x39357 or 486-5203. elevator, assembled, \$150; combination soccer/ Want either a Ruger #1A, a light sporting model baseball, kick, catch & throw net, \$30, x31293.

rifle or a Ruger #1V, Varmint model. Charles, x37678 or 661-4789.

Want baby Lop-ear rabbit and cage in ex cond; want 4 drawer file cabinet in good cond. Linda, 488-8588.

Miscellaneous

Heavy duty wood playground equipment w/playhouse, you take down and hual, \$250 cash only. x36696 or 332-9102.

Quality childrens clothing, both boys and girls,

M1 Garand, \$320; Marlin model 336, 30/30, \$125; left hand holster, Bianchi #7001, \$10. Keith, 482-2741.

Ladies Ray-ban Wayfarer tortoise sunglasses, \$25; Nintendo system w/case & 4 games, \$35; roller blades, sz 5, \$15. 488-0813. Remington autoloading rifle model #7400, 30-

06 Springfield w/TASCO 3x-9x scope, ex cond,

never been fired, w/3 boxes of ammo, \$475. Jim,

Baby bedding, lampshade, mobile and wal

decor, \$75; playpen, bouncy chair, infant car

seat, Diaper Genie, baby bath tub, changing table

Huffy Sports Portable pole system w/Ratchet

Ruger #1B, .257 Roberts, 26" barrel, scope

Parabolic mirror, 8" f/6 of fine-annealed Pyrex

optical glass, hind-figured, quality aluminum

coating and 1/20 wave accuracy, \$170. Tim,

ring and mount, ex cond, \$450; baby crib w/mat-

tress, ex cond, \$50; car top luggage carrier, ex

991-0533.

pad, all ex cond. 281-9225.

cond. \$35. x37346.

992-5991

'85 Pontiac Fiero SE, V6, 4 spd, std, 118k mi, ex cond, \$2.6k. 479-2979.

'92 Toyota PU, SR5, pwr, A/C, AM/FM, weel matintained, 100k mi, \$8,150. x38501 or 980-7481.

'91 Infiniti G20, leather inter, CD, sunroof, 5 spd, ex cond, \$8.9k. x37633 or 660-6345.

'83 Olds Cutlass, 4 dr, V6, loaded, well maintained, looks nice, runs great, \$1.4k obo. x41065 or 326-2866.

'86 Mazda PU, 5 spd, long bed, A/C, AM/FM/ cass, black w/gray inter, dependable, \$1.8k. Tammy, x38853 or 488-5352.

'90 Ford Bronco II XLT, auto, new tires, \$5.5k. Steve, x45431 or 482-1831.

'89 GMC, ext cab, 350, auto, loaded, 95k mi, good cond, \$8.5k. Vince, 212-1456.

'92 GEO Storm, teal green, 5 spd, A/C, AM/FM/ cass. tented. great cond. 49k mi, \$6/5k obo. Leah, x46328 or 388-0511.

'86 Saab 900 Turbo, 3 dr, silver w/charcoal leather, sunroof, 5 spd, stereo w/cass, 96k mi, 1 owner ex cond \$4k x35229 or 486-9137

'89 Honda Accord LXi, hatchback, 5 spd, A/C, P/W, 62k mi, 1 owner, ex cond, \$6,850. Sheri, x48652.

'90 Toyota xtracab SR5, 4x4, 5 spd, ex cond, pwr, sunroof, loaded, \$10.9k. 333-6892 or 482-8224.

'92 Pontiac Bonneville SSE, white w/grey leather, loaded, \$14k. 333-7761 or 482-8224.

Boats & Planes

'94 Polaris 750SL waverunner, purple/red, great cond, \$4k. x31346 or 470-7099.

Audiocontrol 2XS 2-way 18dB/octave programmable electronic crossover w/subsonic filter, gray finish, \$50; audiocontrol EQL series II dual bandwidth equalizer, 13-bands, trunk mounted, gray finish, \$100; all in ex cond. Brian, 996-8567.

8086 PC w/2 disk drives, 1 HD, Panasonic printer, \$100. 244-8464 or 286-9632.

Windows software, Corel Draw 4.0 on CD-ROM w/750+TTF CD-ROM, \$75: Photofinish 3.0 on CD-ROM w/Clip Art/Pics CD-ROM, \$35; Image Folio, \$10; Programing: Visual Basic 1.0, \$20; all obo. Terry, x36351.

Citizen Dot Matrix printer, model GSX-190, w/manual, ex cond. \$75: Okimate 20 color screen printer w/asscess, handbooks, extra color ribbons, system disk, \$60. Becky, x36530 or 944-9634.

Lapis Pro Color server 24X color graphics card for Mac SE/30, \$200; Cordura carrying case for Mac SE/30, \$35, 480-3424

Cobra radar detector, \$35. Sherry, x38005.

Photography

Large format 4x5 camera, lenses, meters, enlarger, darkroom, access, \$1.5k all; Nikonos V underwater camera, 15mm and 35mm Nikonos lenses, Ikelite viewfinder, SB-103 strobe, Macro tubes, framers, \$2.5k; will consider trade for hi end digital video/ underwater video housing. Kevin, 333-3703, x121 or 538-3141.

Canon AE-1 program SLR camera w/35-80 zoom, Vivitar 8-200 zoom, tripod, flash, bag, \$375. Steve, x37152 or 992-7049.

Pets & Livestock

AKC yellow Lab puppies, 9/23, available 10/27. will have shots & wormed, \$300. x48123 or 409-

Four rattan chairs, w/casters, aood cond blue/gray cushions, \$50 all. M.L. Meider, x49862 or 334-4808.

Dresser/mirror/light, headboard, light, armoir, nightstand, \$900. Kelly, 282-9682.

Black and gold w/glass and brass octagon shaped dinette w/4 chairs, \$35; pink daybed w/trundle, no mattress, very good cond, \$75 both. Sharon Muro, x36534 or 486-7428.

Magnavox, PiP projection screen television, 69", ex cond, no maintance problems, \$2.2k. J. Jones, x32608.

Bunn 3-burner coffeemaker, \$150. Dave, x30521. King size comforter, dust ruffle & shams, Hunter green & white stripe \$40. x33029.

Round oak dining table, 4 chairs; dishwasher 486-1888.

Dresser w/mirror, \$50 obo; swivel rocking chair, \$50 obo. Lisa, x40213 or 992-7302.

Two resin chase-lounge chairs, \$25 ea; 0.6 cu ft Goldstar microwave, good cond, \$60; Magnavox VCR, \$50; Sanyo 19" TV, \$30; Sony receiver, cassette deck, floor stand Marantz speakers & cabinet w/glass doors, \$100. 488-0813.

Magic Chef, Ig cap W/D, \$100 ea or \$175 both; beige carpet 17'x15' and 19'x15' w/padding, \$100 ea; 12'x15', It blue carpet, \$75; marble coffee table, \$75. Rob. 286-2871.

Black synthetic leather/vinyl couch, ex cond, \$75; microwave, \$50. 212-1398.

Jenn-Air smooth black cook top w/down draft, \$225; Panasonic 700 watt 1.5 cu ft, microwave oven \$75 326-2805

Contemporay computer desk & hutch, ex cond. \$375. 244-8464 or 286-9632.

Soaker hoses for your garden, various lengths, approx 1k ft, obo; quality children clothes, Gymboree, Oshkosh, etc, boys' sizes 12 mos - 2T; girls sizes infant - 12 mos; also toys. Bob, x32567 or 488-3314.

MARES wetsuit, men's med, 3mm, fullbody, zipner on back. \$90 obo: DACOR booties, men's sz 9, women's sz 6, \$15 ea obo; Neoprene wt belts men's/women's, \$20 ea obo. Jeri, 333-7552.

Body Tech home gym, ex cond, 4 station, dual stack, \$599. 482-9576.

Landscaping plants. 538-1399.

Entertainment center, 6'x5'x2', \$100; various electronic components; workbench, 2'x5' top, \$25; child seat, \$25; chiffarobe, \$100; brass chandelier, \$50; various toddler stuff, bed rail, potty, backpack, booster seat, mattress pad, \$5 ea. Linda, 488-8588.

Oak wall unit, riding lawnmower, dinette set, Pete, 479-0276.

Spa and gazebo, spa 8'x8' seats 8, redwood gazebo 13'x20', new \$10k sell \$3k obo. 471-7442. Wardrobe, 31" x 60", \$30; wardrobe, 48" x 72", \$60; exercise bike, \$75; medical equipment; hospital bed, \$75; patient lift, hydraulic, \$450; bath chair, \$20. x31197.

Ruger-77, 338 Mag, ex cond, 2 boxes of ammo, 3 x 9 scope, \$480, w/out scope, \$440; Remington 700, 30-06, outstanding stock w/25% figure in butt, \$450. Charles, x37678 or 661-4789.

Ping Pong table, good cond, \$50. Ginger, 326-6228.

Pick-up cover, full size, aluminum, sliding windows, \$375; weight bench, \$40. Bill, x32131 or 554-6242

Gymboree etc, boys sizes newborn - 12 mos; girls sizes newborn - 3T. Sharon, 486-6691.

Today's kids activity gym w/slide, \$20; Graco non-stop swingomatic battery operated swing w/changeable rocking cradle for newborns, \$20; Johnny Jumper, \$10; baby bouncer, \$10. Sharon, 486-6691.

Go-cart, 2 seater, Thunder cart, roll cage over the 5Hp Briggs & Stration engine, great cond, \$650. x31346 or 470-7099.

Coordinated kitchen set, "Strawberry" motif, cokie joar, coffee cups, placemats, towels, pasta strainer, etc, \$35; Sears Kenmore upright vacuum cleaner, attachments, extra bags, \$35; collectable "MAD" magazine game, \$15. Ed, 481-4889.

Two end tables, oak finish, \$50 ea; 1 3Hp edger, \$50. 482-1535.

Reminaton 870, 12 gauge shotgun, walnut stock, \$165. x33213.

Two mag wheels for late model Chevolet truck: old beaded wedding dress, \$75. 998-2293.

Dacor yellow scuba fins, small, \$65; Dacor scuba mask, \$15; Magnavox RGB monitor 80, needs chip, \$20. 998-2293.

Little Tykes kitchen, \$30; car seat, approx 40 lbs, \$10; Jenny Lind changing table, \$20; utility rack, over W/D, \$10; Eureka upright vacuum, needs new roller brush, \$20. Sandy, x39311 or 334-7542.

Dooney and Bourke purse, \$200; Brother Word Processor WP-3400, \$150; brass/mirror coffee table, \$50; queen size foam mattress, \$30; '87 Acura Integra service manual, \$8; '84 Datsun 200SX service manual, \$8. x35046.

ROYANDER TEST FACILITY

Industrial **Hygienist Sean** Keprta, right, of the Health, Safety and Environmental Compliance Office, displays personal protection equipment used around JSC to ensure employees are protected against hazardous conditions at last year's Safety Day.

JSC photo by Benny Benavide

JSC TV Distribution System

Several channels on the JSC Television Distribution System are being preempted Wednesday so that specific videos may be presented.

Total Health Channel

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On Site: Channel 21 Off Site: Channel 45		
Understanding MSDS	8 a.m.	noon
Understanding MSDS Chemical Hazards Refresher Course	8 a.m.	12:20 p.m.
Chemical Hygiene Standard	8:34 a.m.	12:34 p.m.
Incident at Building 13	8:46 a.m.	12:46 p.m.
Know your ABC's – Fire Extinguishers	9:12 a.m.	1:12 p.m.
Up in Smoke	9:19 a.m.	1:19 p.m.
On the Road (lifting)	9:23 a.m.	1:23 p.m.
Computer Ergonomics	9:45 a.m.	1:45 p.m.
Life Styles for Wellness	10:03 a.m.	2:03 p.m.
Giving Your Baby the Right Start	10:15 a.m.	2:15 p.m.
Early Childhood Safety	10:35 a.m.	2:35 p.m.
Eating Healthy for Kids	10:50 a.m.	2:51 p.m.
Eating Healthy for Kids	11:12 a.m.	3:13 p.m.
Eating Healthy for Heart Health	11:24 a.m.	3:24 p.m.
Safety Channel		
On site: Channel 20 Off site: Channel 44		
Actively Caring for Safety	0 a m	
		noon
Chem-Sate Series Office Safety – It's a Jungle Out There	9.10 a.m.	1:13 p.m.
Fire in the Workplace	10:07 a.m.	2:07 p.m.
A Case for Safety	10:33 a.m.	2:33 p.m.
NASA Safety Reporting System	- 10:59 a.m.	2:59 p.m.
JSC Emergency Response Plan	11:14 a.m.	3:14 p.m.
	11:20 a.m.	3:20 p.m.
Seminar Channel		
On site: Channel 5 Off site: Channel 43		
Dr. David Short/ Cardiac Health and Fitness	9:45 a.m.	
Trooper Steve Hargett/ Drug Use	10:25 a.m.	
Bomb Recognition and Avoidance	11 a.m.	
Alcohol-Related Incidents at Home	12:30 p.m.	
Managing Workplace Pressures	1 p.m.	
Trooper Steve Hargett/ Seat Belt Use	2:45 p.m.	

Safety Stand-down JSC employees to learn variety of safety, total health facts

II JSC employees will suspend normal activities Wednesday to learn more about safety and health issues that affect their jobs and home life.

While line managers have prepared a good portion of the day's activities to suit their employees, many will offer free time to explore a variety of booths, attend safety seminars, watch safety or health videos, tour the Emergency Operations Center, donate blood or participate in a fun run.

"We wanted to make this day engaging and informative for all employees," said Larry Neu, chairman of the Safety and Total Health Day planning committee. "By letting the line managers tailor their safety day and giving employees a multitude of free time activities from which to choose, everyone will benefit even more from this second annual stand-down day."

Employees may visit more than 50 booths around the center to learn about everything from coping with Alzheimer's to avoiding dangerous wildlife. Booths will be manned from 10 a.m.-3:30 p.m. to give employees time to see all the booths available. Experts from M.D. Anderson Cancer Center will be on hand to discuss cancer awareness. Employees will have the opportunity to have a free glaucoma, blood pressure and sugar screening and sign up to have their workstations analyzed to ensure good ergonomics. Sports medicine experts will be on hand, and several scuba diving booths will familiarize employees with safe diving practices. Local communities also will give employees information on their emergency plans and practices.

Lunch on Wednesday will feature a brown bag special in the Bldg. 3 JSC cafeteria that employees may take out and eat while listening to Max-Q perform near Bldg. 3.

The astronaut band will perform from 11:30 a.m.-1 p.m.

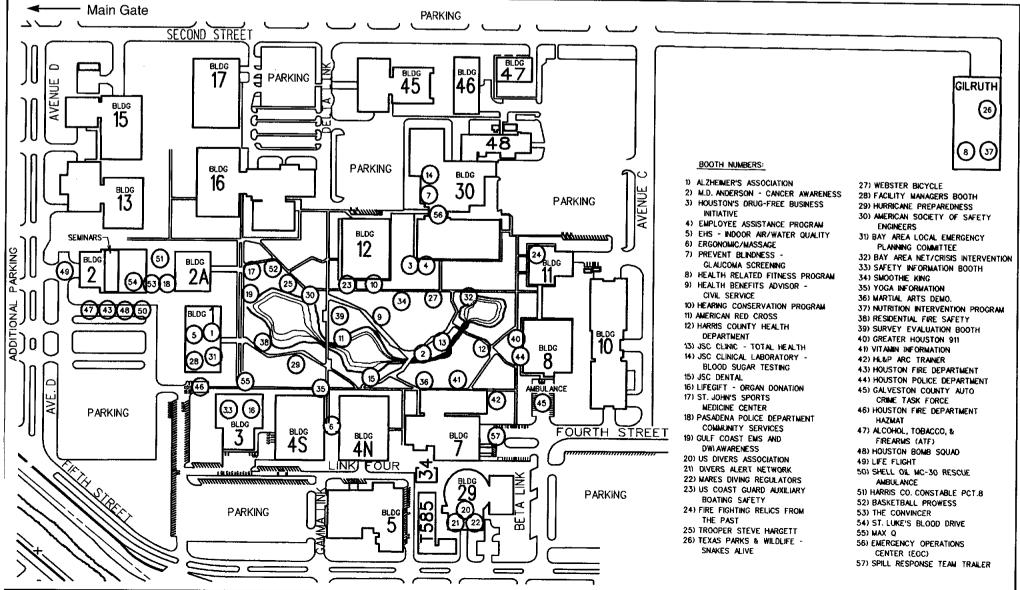
The cafeteria will feature five healthy lunches from which to choose. Employees are encouraged to call their orders in ahead at x34335 so their lunch is ready when they arrive at Bldg. 3.

During the day, employees will be able to give back to their community by donating blood from 7:30 a.m.-3:30 p.m. in Teague Auditorium.

Employees also will have the opportunity to visit the state-of-the-art Emergency Operations Center. Tours will be available from 9:30-11:30 a.m. and 1-2:30 p.m. Employees can view the new computeraided dispatch system patterned after the new Mission Control and meet members of JSC's Emergency Response Team. Community participants also will be on hand to give employees information about their local community and how JSC works with communities in emergency situations.

To end the day, employees may participate in a fun run/walk at 3:30 p.m. at the Gilruth Center. Two routes will be mapped out for runners and walkers and all participants will receive a free commemorative T-shirt and be eligible for door prizes to be given away after the run. Employees who participate in the fun run will not be able to donate blood on Wednesday, so St. Luke's will make two additional trips to JSC to accommodate these individuals or others who wish to donate platelets or plasma. St. Luke's will accept employees by appointment only Tuesday and Thursday Employees may call Dan Mangieri at x33003 to make an appointment.

"With so many things to do, each employee will find valuable information to enrich his or her life and make them safer, healthier and more productive," Neu said.



Ward to head Public Affairs

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Doug Ward will assume the duties of running JSC's Office of Public Affairs after being named acting director, filling the position being vacated by Jeff Carr.

Effective Oct 28, Ward will take over for Carr, who is leaving the center for a position with United Space Alliance.

Ward joined JSC in 1996 as a public information specialist, provid-JSC

ing support to the Gemini Program and Apollo missions. Prior to his current assignment as the chief of the External Affairs

Branch in PAO, Ward served as special assistant for Public Affairs in the Space Station Program Office and as deputy director of Public Affairs.

Propulsion team hangs STS-79 plaque

The Propulsion team hung the STS-79 plaque in recognition of its creative management of propellant during the 10-day mission.

McKay to talk with Sigma XI scientists

The Sigma Xi Scientific Research Society of Clear Lake will meet at 5:30 p.m. Thursday at the Enterprise Center, 2200 Space Park Drive, Suite 200 in Nassau Bay



of the Earth Science and Solar System Exploration Division will discuss "Evidence for Ancient Life on Mars." A buffet dinner will follow. Cost is \$9 for members and \$10

David McKay

МсКау

for non-members. Interested individuals may attend the Life on Mars briefing without having to pay for dinner.

Dinner reservations can be made by calling Bonnie Cooper at 338-9338 and are due Sunday. For more information call Cooper or Kumar Krishen at x30695. For membership information call Mike Duke, president of the Clear Lake chapter, at 244-2036.

Lucid to discuss record-setting stay on Mir

Astronaut Shannon Lucid, who recently set a U.S. single mission space flight endurance record on the Russian Mir Space Station, will discuss her journey during a news conference at 12:30 p.m. Thursday at JSC

The news conference will be broadcast on NASA Television. Lucid returned to Earth on Sept. 26 after traveling more than 75 million miles during her 188-day research flight. Her record eclipsed the pre-

The plaque was hung by Brian Lunney, the Orbit 1 Propulsion Officer, on behalf of the entire PROP team. Kevin McCluney, lead for the Orbit 1 Mechanical Systems Team, held the ladder in recognition of the support MAMCS gave by determining how to continue the mission despite the loss of the auxiliary power unit shortly after ascent.

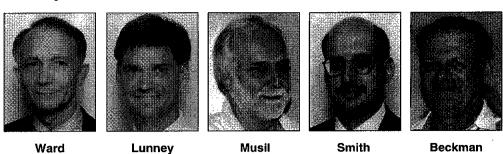
"The PROP team did an outstanding job of supporting all mission requirements, despite a pre-flight prediction that showed negative propel-

lant margins for the forward Reaction Control System," said Paul Dye, lead flight director for STS-79.

Boeing manager wins top honor

Boeing's International Space Station

Vehicle Integration Manager, Frank Musil, recently received the Technical Administrator of the Year award from the Clear Lake



Council of Technical Societies.

"Frank was recognized for his outstanding work, both technically and administratively, in implementing the team concept for the International Space Station," said Zafar Taqvi, CLCTS vice chairman.

JSC employee receives award

Scott Smith of the Medical Sciences Division recently was recognized for his professional excellence and community involvement with a Penn State Alumni Award for Emerging Professionals.

Smith was recognized for his involvement with research conducted on the shuttle and

Russian Mir Space Station to define the nutritional requirements for space flight.

JSC employee receives recognition from AHA

Charles Beckman of Kelsey-Seybold was recently recognized by the American Heart Association.

Beckman, who supports the Manned Test Support Section at JSC, received an award of recognition for training 1,000 plus individuals in Cardiopulmonary Resuscitation at JSC. Beckman has taught CPR for more than 15 years and is experienced in physiological training and water survival.

Symposium offers insight into mankind's future

The Marine Technology Society and the American Institute of Aeronautics and Astronautics will sponsor a "Sea-Space Symposium" which will address the vision of man's future in the two frontiers-sea and space.

The symposium will begin at 8:30 a.m. next Friday at the Nassau Bay Hilton. NASA Administrator Daniel S. Goldin will focus on the future of man's exploration of space, and Robert Ballard, discoverer of the Titanic, will discuss future scientific undersea exploration.

The afternoon program will be devoted to exploring technologies that are necessary to achieve the visions articulated by the morning speakers. In addition, Space Station Program Manager Randy Brinkley will provide an update on space station progress.

The symposium will run throughout the day and includes lunch and a reception to be held from 6-10 p.m. at Space Center Houston. The event costs \$15 for AIAA members and spouses, \$20 for non-members and \$10 for students, young and retired members.

For more information on the event and to make reservations, contact Charles Royce at 492-2800. Attendees are encouraged to make early reservations.

Christmas, New Year's dance tickets on sale soon

The Employee Activities Association will host Christmas and New Year dances at the Gilruth Center.

The Christmas dance will begin at 7:30 p.m. Dec. 14 at the Gilruth. The Aubrey Tucker Orchestra will perform. Tickets cost \$25 and include a prime rib dinner. Beer and wine will be available at \$1.75 and soft drinks for \$.50. Tickets will go on sale at 9 a.m. Nov. 1 at the Exchange Store. Sales will end at 2 p.m. Dec. 11.

The Aubrey Tucker Orchestra also will perform in the ballroom for the New Year's dinner dance set to begin at 7:30 p.m. Dec. 31. Tickets cost \$27.50 and include a prime rib dinner, party favors and a champagne toast at midnight . Beer and wine will be available at \$1.75 and soft drinks for \$.50. Tickets go on sale at 10 a.m. Nov. 21 at the Exchange Store. Sales will end at 3 p.m. Dec. 27. For details call Mavis Ilkenhans at 244-9644.

Volunteers available to help

(Continued from Page 1)

ness of important safety and health issues." Neu said. "The planning committee has developed an easy to fill out survey that collects feedback so we can improve next year. Let us know what went well and what didn't."

The survey is in the Safety and Total Health catalogue, on the Safety home page and will be available at the survey booth.

NASA

JSC Photo by Robert Markowitz

SCIENTIFIC COOPERATION-JSC Director George Abbey signs a memorandum of understanding with University of Houston's President Glenn Goerke and University of Houston Clear Lake President William Staples. UH will supply post-doctoral researchers to JSC for more than 15 projects of scientific interest to both JSC and the university. Seated from left are, Abbey, Goerke and Staples. Standing from left are David Criswell, director of the Institute of Space Systems Operations; Texas State Representatives Michael Jackson, R-LaPorte; Robert Talton, R-Pasadena; and Talmadge Heflin, R-Houston.

Fire Prevention Week smoke detector, children's coloring contest winners drawn

JSC wrapped up Fire Prevention Week with the announcement of contest winners.

The winners of a children's coloring contest are: Brandon Sanders, son of Renne Sanders of Plant Engineering; Katy Collins, daughter of Sean Collins, Hernandez Engineering; Jennie Wetherbee, daughter of JSC Deputy Director Jim Wetherbee; Brittany Milligan, daughter of Ginger Milligan of the Office of the Chief Information Officer; and Crystal Cortes, daugh-

Structures and Mechanics Division, Dennis Beckman of the Spaceflight Training Division, Julie Kliesing of the Automation, Robotics and Simulation Division, Mike Ewert of the Crew and Thermal Systems Division, Richard Campbell of Unisys, Juan Lozano of GB Tec, Ted Lapko of the EVA and Flight Crew Business Management Office, J.J. Priess of the Aircraft Operations Division and Loretta Garza of the Office of the Inspector General.

vious U.S. endurance mark of 115 days in space for a single mission set by former astronaut Norm Thagard.

ter of Manuel Cortes, of USA.

The winners of free smoke detectors are: Mary Thomas of the Institutional Business Management Office, Don Donohoe of the Communications Office at x45078.

For more information on home smoke detectors and related fire safety issues, contact the JSC fire station at x35324 or the Safety

On Wednesday, members of the planning committee and other volunteers will be wearing green shirts with the Safety and Total Health logo. If employees have questions, ask a volunteer.

Employees may refer associates for Inspection day

(Continued from Page 1) along with a manufacturing laboratory and fracture control analysis tools.

Structures and thermal technologies that use radiometers to measure heat distribution inside a furnace will be demonstrated in Bldg. 13. and visitors will have an opportunity to test systems designed to isolate experiments from vibration.

Communications and microwave technologies may be explored in Bldg. 14. Demonstrations will show how NASA measures particle flow velocities, identifies fluid flows, tests antennas and compresses video and data streams.

Additional engineering initiatives, such as computer-aided human factors analysis, automatic cable analyzers, energy systems testing and the NASA/DeBakey Heart Pump Project will be on display in Bldg. 15.

Aerospace flight simulation technology and techniques will be chronicled in Bldg. 16, where computational fluid dynamics analysis tools, trajectory and motion modeling tools, secure software development and Global Positioning System applications will be demonstrated.

Medical research and development will be in Bldg. 37, including demonstrations of an ear plug that measures heart rate, pulse pressure and respiration, a thermoelectric test tube chiller, a drug microencapsulation system and telemedicine equipment and techniques.

Mission operations and control systems will be explained in Bldg. 30. Visitors will learn about electronic documentation, intelligent flight activities planning and the Information Sharing Protocol that allows JSC to efficiently disseminate data.

Both the Weightless Environment Training Facility in Bldg. 29 and the Sonny Carter Training Facility's Neutral Buoyancy Laboratory will be open. Other space environment simulations, such as thermal-vacuum chambers and optical information storage will be shown in Bldg. 32. Space sciences advancements in the area of earth observations and orbital debris tracking and protection will be demonstrated in Bldg. 31. In Bldg. 49, JSC's use of vibration and acoustic testing will be explored.

JSC is asking employees to identify associates who can benefit from participation. Employees can call the logistics center at x47853.



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Electronic mail messages should be sent to the editor, khumphri@gp301. isc.nasa.gov or the associate editor. kschmidt@gp301.jsc.nasa.gov.

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Managing Editor .	Karen Schmidt
Associate Editor	Natasha Calder

Holloway lauds team performance

(Continued from Page 1) excellent performance," he added. "We have accomplished this while dealing with continuing budget reductions, organizational changes, management reviews and other distractions.'

Holloway said recent decisions to change out STS-79 boosters, expedite the auxiliary power unit assessments, replace STS-80 windows and perform STS-81 solid rocket booster aft segment inspection demonstrate NASA's emphasis on safety. Personnel are to be commended for their efforts, he added.

"The capability of the program remains strong and impressive," Holloway said. "This day will only bind the team closer to what I believe is the best in the world."