

Fire protection JSC Fire Protection covers a variety of tasks to make a safer workplace for employees. Story on Page 3.



RFP next step in restructuring effort

Double deploy

STS-69 astronauts bring back in flight photos to share with employees. Photos on Page 5.

Space News Roundup Vol. 34 September 29, 1995 No. 39



STS-73 crew members arrive at Kennedy Space Center for the Terminal Countdown Demonstration Test. From left are, Pilot Kent Rominger, Payload Specialist Fred Leslie, Payload Commander Kathy Thornton, Payload Specialist Albert Sacco, Commander Ken Bowersox and Mission Specialists Mike Lopez-Alegria and Cady Coleman.

STS-73 crew to work around-the-clock

By James Hartsfield

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Columbia and a crew of seven were planned to launch Thursday on a 16-day mission to study the effects and resources of weightlessness aboard the sec-

ond United States Microgravity Laboratory As of mid-week, Columbia's countdown was proceeding smoothly, and forecasters were calling for a 60 percent chance of

acceptable weather for a launch at 8:35 a.m. CDT Thursday on STS-73. The crew-Commander Ken Bowersox, Pilot Kent Rominger, Mission Specialists Cady Coleman, Mike Lopez-Alegria and Kathy Thornton, and Payload Specialists Fred Leslie and Al Sacco-flew to Florida early Monday morning in preparation for the launch. A front was

predicted to be stationary above central Florida on Thursday, and the only threat to liftoff was a chance of showers in the vicinity of Kennedy Space Center.

With an on-time launch, the crew is set to begin

operations in the USML-2 Spacelab module within a few hours after reaching orbit. Several of the experiments aboard the lab follow up on work begun aboard

USML-1 in 1992. The varied experiments study fluid physics, materials science, biotechnology, combustion science and commercial processing technologies in weightlessness. Many of the investigations are a cooperative effort between government, universities and industry.

The crew will be split into two teams to perform around-the-clock operations in the lab, with Bowersox, Rominger, Thornton and Sacco on the Red Team and Coleman, Lopez-Alegria and Leslie on the Blue Team. The Red Team's duty hours will approximate

a daytime shift in central time while the Blue Team will be at work during the overnight hours in Houston. Columbia is scheduled to remain in orbit for almost

Please see **DISCOVERY**, Page 6

Potential prime contractors eye shuttle program

More than 40 different companies have expressed an interest in serving as either the new prime contractor or a subcontractor in the agency's effort to restructure space shuttle program management.

The restructure of the shuttle program includes reducing program requirements, significantly reducing civil service involvement in day-to-day operations, modifying the government approach to safety and mission assurance and consolidating contracts, including shuttle and station operations, into a single prime contract.

NASA will still have overall management responsibility for the space shuttle system and will still be responsible for such things as safety, program schedule and space flight operations budget. NASA will have appropriate insight into operations so they are aware of any potential system issues and will actively participate in resolution of any "out of family" or anomalous performance of shuttle or payload hardware.

Of the packages received, there were four letters of interest and capability for consideration as the prime contractor for space flight operations. The companies submitting the packages include Bamsi, Titusville, Fla.; Boeing, Seattle; McDonnell Douglas Aerospace, St. Louis; United Space Alliance (a joint venture formed by Rockwell and Lockheed Martin, Houston).

The NASA source evaluation board will now evaluate the statements of interest from industry. NASA plans to have this evaluation completed in the next several weeks, and is working toward the release of a draft Request for Proposals by mid-November. This draft will be for the purpose of communicating with industry the approaches NASA would intend to use in the subsequent request for proposals and seeking industry comment on those approaches.

NASA will consider industry comments and recommendations for improvements which could be incorporated into the formal request for proposals. Following the review of comments, NASA will seek to release the formal RFP in early 1996. NASA hopes to select a prime contractor in the next 12 to 15 months.

Numerous firms expressed interest in subcontracting opportunities. A complete list of the firms considering subcontracting roles is available in the JSC newsroom.

Associate Administrator for the Office of Space Flight J. Wayne Littles and Shuttle Program Director Bryan O'Connor briefed aerospace industry representatives last month at JSC on the proposed restructuring of the shuttle program and asked for input to help develop the request for proposals.

Precourt new manager in Star City, Lawrence trains as backup

By Kyle Herring

Astronaut Charlie Precourt will replace Mike Baker as the NASA manager of operational activities at Star City, Russia, near Moscow. In addition, Wendy Lawrence will train in Star City as the backup to John Blaha who will fly aboard the Russian Mir Space Station on a future mission.

As Director of Operations, Russia, Precourt will support training and preparations of NASA astronauts at the Gagarin Cosmonaut Training Center. He also will be the primary link between NASA



Precourt

and the GCTC management, coordinating all training and other operations involving NASA or contractor personnel in Star City.

Precourt, the fifth astronaut to serve in this rotational assignment will continue to establish operational and personal relationships with Star City management and the cosmonauts. These relationships are pivotal to successful, long-term joint operations involving NASA, the Russian Space Agency and GCTC. He also will participate in personal training designed to

acquaint astronauts with the operational aspects of Russian vehicles and training facilities.

Precourt and Lawrence will leave for Russia in early October and join fellow astronauts Shannon Lucid, Jerry Linenger and Scott Parazynski, who also are training in Star City for future stays aboard Mir.

Precourt, 40, has flown aboard two shuttle missions-STS-55 on



dock with Mir. He received a master of science degree in engineering management from Golden Gate University in 1988 and a master of arts degree in national security affairs and strategic studies from the U.S. Naval War College in 1990.

Lawrence, 36, flew on STS-67 aboard Endeavour in March 1995. She received a master of science degree in ocean engineering from Massachusetts Institute of Technology and the Woods Hole Oceanographic Institute in 1988.



Columbia in April/May 1993 and STS-71 on Atlantis in June 1995. The most recent flight was the first shuttle mission to

Main structure for U.S. lab module complete

The main structure of the U.S. laboratory module-centerpiece of the U.S. hardware for the International Space Station-has been successfully completed.

The aluminum module is 28 by 14 feet and weighs about 6,000 pounds The lab module is scheduled to be launched to the station in 1998.

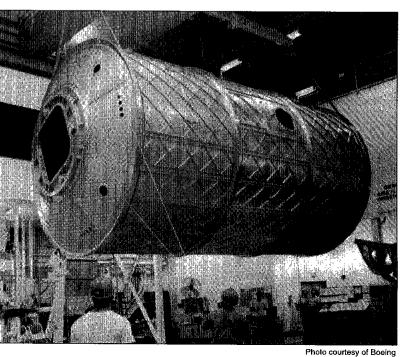
"This is a major accomplishment for the International Space Station program," said Wil Trafton, space station program director. "This laboratory module is central to the space station's mission. Within this lab, astronaut researchers will carry out scientific experimentation for the benefit of all of us here on Earth."

Technicians at Marshall Space Flight Center began welding the lab module in July. It comprises three

cylindrical sections, two bulkheads (or end cones) and contains hatch openings through which astronauts will enter and exit. The lab's exterior has a "waffle" pattern, that strengthens the hull against the harsh environment of space. A 20-inch diameter window is located on one side of the module's center cylinder.

"I congratulate all the members of the space station team on the completion of this piece of space hardware," said Randy Brinkley, space station program manager. "The manufacturing progressed without problems and all 3,100 inches of weld were of exceptional quality. This is another piece of space station hardware completed on time."

In early November, the lab will be Please see LAB, Page 6



The laboratory module is one of the major U.S. components of the International Space Station.

JSC employees should report to work Monday

Although the possibility of a forced government work stoppage has been lessening in recent weeks, JSC Human Resources Director Harvey Hartman this week encouraged employees to follow news media reports on the status of NASA's budget legislation.

Congressional leaders and the Clinton Administration this week worked on a continuing resolution that would fund government operations in the early part of fiscal year 1996. That measure was expected to be signed late this week.

Employees are expected to come to work Monday, Hartman said. If no continuing resolution has been signed by then and a furlough does become necessary, JSC will execute an orderly shutdown that Please see FURLOUGH, Page 6 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.

Texas Renaissance Festival: Sept. 30-Nov. 12. Tickets cost \$10.50 for adults and \$5.25 for children 5-12.

University of Houston vs. Baylor football: Oct. 14, Astrodome, \$8.

University of Houston vs. University of Texas football: Nov. 11, Astrodome, \$15.50.

Sea World: Tickets cost \$23.50 for adults and \$16.25 for children 3 -11. Splashtown: Tickets cost \$11.05.

Space Center Houston: Discount tickets, adult, \$8.75; child (3-11), \$7.10. Metro tickets: Passes, books and single tickets available.

Movie discounts: General Cinema, \$4.75; AMC Theater, \$4; Sony

Loew's Theater, \$4.75.

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JSC

Stamps: Book of 20, \$6.40. JSC history: Suddenly, Tomorrow Came: A History of the Johnson Space

Center. Cost is \$11. Upcoming events: Houston Aeros tickets. Wings Over Houston Air Show Oct. 21-22.

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 a.m.-9 p.m. Monday-Friday; and 8 a.m.-4 p.m. Saturdays. Dependents must be between 16 and 23 years old.

Fall Soccer: League play starts Sept. 30.

Women's self defense: Martial Arts training for women only from 5-6 p.m. Tuesdays and Wednesdays. Cost is \$25 a month.

Weight safety: Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. Oct. 10 and Oct. 26. Pre-registration is required. Cost is \$5.

Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays.

Aerobics: High/low impact class meets from 5:15-6:15 p.m. Tuesdays and Thursdays. Cost is \$32.

Aikido: Martial arts class meets from 5-7 p.m. Wednesday. Cost is \$25 per month. New classes begin the first of each month.

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

Dates & Data

Today

Cafeteria menu - Special: baked chicken. Total Health: roast beef au jus. Entrees: deviled crab, baked chicken, beef cannelloni, steamed pollock, Reuben sandwich. Soup: seafood gumbo. Vegetables: seasoned carrots, peas, breaded okra, steamed cauliflower.

Saturday

SHPE meets: The Society of Professional Engineers—Texas Bay Area Chapter will host a 5K Fun Run/Walk at Nassau Bay at 8 a.m. Sept. 30. There also will be a 1K kids' run. Entry fees are \$12 and \$9 respectively before Sept. 23 and \$15 and \$12 thereafter. Proceeds benefit the SHPE-TBAC Scholarship Fund. For information call 587-6824 or Rafael Munoz x38359.

Monday

Cafeteria menu --- Special: hamburger steak. Total Health: vegetable lasagna. Entrees: beef Burgundy over noodles, barbecue smoked link. vegetable lasagna, steamed fish, French dip sandwich. Soup: chicken and wild rice. Vegetables: buttered corn, steamed spinach, vegetable sticks, navy beans.

Tuesday

STS-69 presentation; The crew of STS-69 will share its experiences with employees from 2-4 p.m. Oct. 3 in Teague Auditorium. Commander Dave Walker, Pilot Ken Cockrell, and Mission Specialists Mike Gernhardt, Jim Newman and Jim Voss will discuss highlights from their mission, including the space walk and the deployment and retrieval of two scientific spacecraft Immediately prior to the briefing, the crew's accomplishments will be recognized by the presentation of the NASA space flight medals.

ABWA meet: The Clear Lake Area Chapter of the American Business Women's Association will meet at 5:30 p.m. Oct. 3 at Space Center Houston's Silver Moon Cafe. For more information call Nancy Hutchins at x34006.

Cafeteria menu - Special: turkey and dressing. Total Health: roast turkey. Entrees: barbecue spare ribs, liver and onions, baked chicken, steamed fish French dip sandwich. Soup: black bean and rice. Vegetables: steamed broccoli, California vegetables, breaded squash, savory dressing.

Wednesday

Infertility seminar: The JSC Clinic will present a Total Health Program infertility seminar from 7-9 p.m. Oct. 4 in Rm. 216 of the Gilruth Center. Vicki Schnell, M.D., a gynecologist, infertility specialist and endocrinologist, will discuss the causes, medical evaluation and treatment for infertility. Emotional issues also will be addressed. The seminar is free to JSC civil service and contractor employees. To sign up, call x37783.

Toastmasters meet: The Spaceland Toastmasters will meet at 7 a.m. Oct. 4 at House of Prayer Lutheran Church on Bay Area Blvd. For additional information, contact Elaine Trainor, x31034.

Astronomy seminar: The JSC Astronomy Seminar will meet at noon Oct. 4 in Bldg. 31, Rm. 129. An open discussion meeting is planned. For more information, call AI Jackson at 333-7679.

Cycle club: The Space City Cycle Club will meet for a 25-mile ride beginning at 6 p.m. Oct. 4 at the University of Houston Clear Lake soccer field. For more information on this ride and weekend rides call Mike Prendergast at x45164.

Cafeteria menu - Special: Mexican dinner. Total Health: ground turkey tacos. Entrees: beef cannelloni, turkey tacos, steamed fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: peas and carrots, ranch beans, mustard greens, Spanish rice.

Thursday

Cafeteria menu -Special: smothered steak. Total Health: steamed pollock. Entrees: chicken and dumplings, corned beef and cabbage, broccoli cheese quiche. steamed fish, French dip sandwich. Soup: navy bean soup. Vegetables: steamed cabbage, cauliflower au gratin, buttered carrots, lima beans.

Friday

Entries due: JSC is sponsoring a poster contest in recognition of Fire Prevention Week, October 8-14. The contest is open to children of civil service and contractor personnel. All posters must be turned in by close of business Oct. 6 in Bldg. 110. For more information, contact Rindy Carmichael at x45078.

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

Oct. 9

Columbus Day: Most JSC offices will be closed in observance of the Columbus Day holiday.

Oct. 10

Photo club meets: The Bay Area Photo Club will meet at 7:30 p.m. Oct. 10 at Faith Covenant Church. For more information call Kelly Prendergast at x37655.

Oct. 11

Toastmasters meet: The Spaceland Toastmasters will meet at 7 a.m. Oct. 11 at House of Prayer Lutheran Church on Bay Area Blvd. For additional information, contact Elaine Trainor, x31034.

MAES meets: The Society of Mexican American Engineers and Scientists will meet at 11:30 a.m. Oct. 11 in the executive dining room in the Bldg. 3 cafeteria. For more information call Michael Ruiz at x38169.

Swap Shop

Swap Shop ads are accepted from current and retired NASA civil service employees and on-sitecontractor employees. Each ad must be submitted on a separate full sized, revised JSC Form 1452. Deadline is 5 p.m. every Friday, two weeks before the desired date of publication. Ads may be run only once. Send ads to Roundup Swap Shop, Code AP2, or deliver them to the deposit box outside Rm. 181 in Bldg 2. No phone or fax ads accepted.

Property

Sale/Rent: Freeway Manor, 2-1.5-1, new central air w/gas heat, new carpet/dishwasher/roof/garage door, ceiling fans, fen backyard, \$550/mo + deposit or \$38k. Bill, 332-3649.

Sale: Livingston, Crystal Lake, 2-1 house, 1346 sq ft, FPL, fence, 1 acre, \$62k. 813-6979. Sale: Sagemont, 4-2-2, brick, 2 story, corner lot,

lg yard, sec alarm, both formals, family room. 481-0376 Sale: League City, Landing subdivision, 4-2-2,

new soft top, ex cond, \$7.5k. 334-7143. '66 Mustang, 289, 4 speed, dual exhaust, good

- cond. \$3.5k. 331-9255. '79 Buick LaSabre, good work car, \$800. 482-
- 5621 '89 VW Golf GL, 71k mi, 5 spd, \$.8k. Cliff, x40230
- or 534-4145. '87 Nissan 200-SX XE hatchback, red, ex cond. auto, pwr, cruise, sunroof, A/C, AM/FM/cass, spoil-
- er, 98k mi. orig owner, \$4.2k. 282-3229. '91 CRX, red, 5 speed, clean, pull-out radio, 5 star
- rims, \$6.5k. Kyle, 996-1264.

'76 Chevy Impala, 350, V8, auto, 4 dr, white w/blue interior, good cond, \$700. 482-2157. '80 Datsun 200SX, needs transmission, mag

wheels, you tow, \$100. 996-1862. '93 Toyota Previa DX, 38k mi, extended warranty,

gold, pwr. \$17k, 482-4186. '84 Ford F-150, PU, A/C, 4 speed, 6 cyl, new

parts, 108k mi, good cond, \$3.5k obo. Les, x30090 or 331-4589.

Mazda

obo. x37066 or 286-4255. AM/EM/case 5 en IX-6 maroon

'90 VIP Valiant, 19', '93 115Hp Merc O/B, ex cond, access, cover, and canopy, \$9.k. Jerry, x38058

'95 Sea Ray BR, I/O, 135 Hp, galvanized trailer, safety equip, skis, other fun stuff, \$12.k. x37739.

'70 Glastron, 16', depth finder, trolling motor, galvanized trailer, completely refurbished, '\$700: '79, 70 Hp Envinrude, \$1.8k. Larry, x49103 or 922-1696.

Audiovisual & Computers

Mac Se computer, 4 Mb memory, 20 Mb HD, \$395. 488-7771.

486/66 Laptop SL, 340 Mb HD, dual scan color, 4 Mb memory expand to 20 Mb, Windows 3.10, Dos 6.22 , other S/W, \$1.8k obo. 480-8279. Atari 520 ST w/monitor, disk drive, & dot matrix

printer, \$150 obo. Jeff, x30469 or 482-5393. NEC computer, 286 w/NEC EGA monitor, 40 Mb HD, 5.75 FD, internal modem, S/W & games, \$200

izen nrinter "CSX-140'

Household

G.E. electric, 27", coppertone built-in wall mount oven, works great, \$50. Linda, 484-0987. Refrigerator, 22 cu ft, almond, \$170. x33131 or

486-5217. Kenmore gas dryer, Ig capacity, almond, ex cond,

\$275. 554-4781 or 338-2043. Amana refrigerator, 25 cu ft, side-by-side, ice/

water dispenser, almond, \$475. 471-9432. Toshiba color TV, 19", cable ready w/remote, \$95.

Jeff, x31975 or 286-1935. Fur size bed, headboard, matt/box springs, \$150. Steven, x36314.

Coffee table, med oak color, tinted glass on ends, ex cond, \$85. Randy, x36365 or 481-2166.

Wooden rocking chair, ex cond, \$50. x47159. Antiques from grandmother's estate, sofa, chairs

tables, '40's TV w/cabinet, etc. Steve, x31106 or 482-4666.

Double Papasan w/blue cushion, \$80; blue & cream single Papasan w/foot stool, \$80. Teddi, (47131 or 480-75)

cond, \$6 ea; blue Graco baby stroller, \$35; Century infant carseat, \$20; gas BBQ grill, \$45. Bobby, 244-2444 or 488-4382.

Cathedral bridal rose china: Norman Rockwell plates; Toro push mower, \$45. x31883.

Tropical plants, 5' tall rubber plant, \$40; 5' tall vine, \$40; 15' tall Pony Tail Palm, \$500; misc other plants in permanent pots, \$5 up. Bob, x33149.

Hamilton solid oak drafting table w/72" x 42" top & 2 drawers, \$425. Charles, x37678 or 661-4789. Black bedliner for Toyota truck, \$100; maple

swivel rocker, \$50; Sy Quest 44 Mb SCSI drive, \$150; table, 24" round, \$15. 480-3424.

Ping Pong table, \$50; Kanga Rocka Roo, \$10; Fisher Price Nighttime bottle cooler/warmer, \$15; Super Nintendo World Cup Soccer, \$16; antique brass FPL set, \$16. Bruce Springsteen Live CD, \$5. x37130.

Trailer hitch for Jeep Wrangler, ball type, \$40. John, x31114 or 486-0898. Curio cabinet, 60' x 36' x 16', \$250; telephone

reduced, \$65.9k, 332-9231.

Rent: Egret Bay condo, 2-2-2, W/D, appliances, ceiling fans, boat ramp, pool, \$550. 488-9001.

Rent: SageGlen community, 4-2-2, 1 story, FPL, formal living/dining, ceiling fan, CCISD, no pets, \$850/mo. 282-3229 or 286-4547.

Sale: Clear Lake Forest, 4-2.5-2, glass walled den family room, FPL, w/hi ceiling, formals, new roof & paint/carpet/paper. 326-2307.

Sale: Holly House town house, near Texas Medical Center, 2-2.5-2, security, clean, immediate occupancy. Jack Cohen, 488-3171.

Lease: Webster condo, Ig clean upstairs, 2-1, W/D conn, appliances, FPL, ceiling fans, vaulted ceilings, balcony, \$520/mo. 486-0315

Sate/Trade: League City, Ellis Landing, 4-2-2, w/2 story Dutch barn, 12x16, will take your house or condo in trade, \$94.9k. x41929 or 332-3775.

Rent: Beach house, Crystal Beach, Galveston Co, lg deck, 4-2, sleeps 12, \$225/wknd/\$400 wkly. x32805 or 409-684-4419.

Rent: Galveston condo, furnished, sleeps 6, Seawall Blvd & 61st ST, cable TV, swimming pools, wknd/wkly/dly rates. Magdi Yassa, 333-4760 or 486-0788.

Lease: Beach-front condo, Cancun, Mexico, 1 room, full bath, kitchenette, dly maid service, any time of the year, \$300/wkly. Katie, x33185.

Sale: Vacation to FT Lauderdale, FI & Bahamas, 7 days/6 nights for 2, \$398 covers hotels & cruise. 486-8963.

Cars & Trucks

'88 Dodge Aries wagon, 2.2L, 5 speed, TBI, PS/PB, rear wiper & defrost, cruise, new clutch, A/C, evap, and waterpump, 7.9k mi, \$3k obo. Lane, 280-0437

'88 Jeep Wrangler, 83k mi, 6 cyl, 5 speed, A/C,

A/C, P/W, P/L, cruise, runs great, \$4.5k. Tori or Scott, x47396 or 916-9605.

'91 Geo Metro, 4 dr, 41k mi, new tires, ex cond, \$3.8k. Rich, x47257 or 996-7630.

'86 Chevy S10 truck, rebuilt engine, new tires & shocks, \$1.8k obo. 332-8444.

'88 Mustang GT 5.0, 5 speed, 62k mi, blue, must see to appreciate, \$6.8k. 474-4111 or 332-6754.

'66 VW Beetle, new interior, headliner, and upholstery & carpet, cherry red, rebuilt 1600 cc, 56k mi, \$2,449 obo. 538-2275.

'74 VW Beetle, good mechanical cond, new tires/shocks, \$1,349 obo, 538-2275.

'91 Chevy S10, std, 5 spd, 4 cyl, A/C, AM/FM/cass, 47k mi, \$6k. x37149 or 409-925-2291.

'88 Toyota PU, auto, A/C, AM/FM/cass, bedliner, runs great, \$5k obo. 997-7854.

'92 Eagle Talon, maroon, loaded, 5 speed, A/C, cruise, P/W, P/L, 70k mi, \$8k. Steve, 649-1396.

'86 Ford Bronco II, 4x4, V6, A/C, cruise, manual trans, \$3.8k. 282-8736 or 486-4369.

Cycles

'86 Honda Elite 80cc scooter, red/white, ex cond, electric starter, \$600 obo. 488-6521 or 488-7437. '87 Honda Magna 700cc, low mi, ex cond, \$3k. 488-6526

Boats & Planes

Sailboat, 21' racing sloop, stable/fast & maneuverable, access included. 488-0323.

'84 Four Winns Marquise, 17' walk-thru w/140 hp Merc I/O, galvanized trailer, stainless steel prop, top w/side curtains and bow cover, 2 batt, CB radio. skis, good cond, \$4.2k, D. Holt, x35822.

Wellcraft 15', 50 Hp Johnson, galvanized trailer, ex cond, \$2.4k obo, 488-3387

\$175. Magdi Yassa, 333-4760 or 486-0788.

Combination sound card & 14.4 fax modem for PC, \$100; Q modem for Windows, \$50 or \$30 if purchase w/card. 479-3297.

Mac SE 4/40 w/KB, mouse, 2400 baud modem, \$250; Sy Quest 44 Mb, removable drive, \$100; 4

cartridges. \$20 ea. Carl. x32563 or 527-8947. Leading Edge 40 Mb HD, monitor, kybd, internal modem, 8088 sys \$175 obo. x41853 or 477-2984. Compaq Deskpro 486 DX, 170 Mb HD, 4 Mb HD, 4 Mb RAM, sound card, super VGA color monitor 14", 3.5 FD, 1.44, \$800; Compaq Deskpro 486 SX, 170 Mb HD, 4 Mb RAM, 3.5 FD 1.44, super VGA color monitor, 14", \$800. Greg, 676-1122.

Musical Instruments

Alvarez guitar, case, steel-string, acoustic, ex cond, \$190 obo, Jill, x30839 or 335-4907. Spinet piano, perfect for beginner, \$400. 331-7448.

12-string acoustic guitar, Yamaha model FG-412SB, ex cond, case, \$250. Jim, x36932.

Photography

Minolta Maxima 35mm camera, 70-200mm zoom lens, auto focus, auto rewind, auto advance, flash, \$375. Pete, 479-0276. Nikon FE, 40mm/f1.8, 70-210/f4, 2 flash units, \$400 x37069

Pets & Livestock

Free Dalmation male, 2.5 yrs, neutered, 85 lbs. John. x31114 or 486-0898. Free Collie/Shepherd mix puppy, 9 wks, black

w/gold markings. Dan, x33668.

Golden Retriever mix puppy, 9 mos, all shots, neutered male. 280-0973 or 244-7294.

Coffee table, \$30; end table, \$20; sect sofa w/recliner & qn sleeper \$800 obo. Leonard, 333-5576

Wanted

Want personnel to join VPSI vanpool departing Meverland Park & Bide at 7:05 am for JSC. Van pool consist of on-site personnel working 8 am/4:30 pm shift. Don Pipkins, x35346.

Want personnel to join van pool departing Southwest Park & Ride lot at 6:50 am for JSC & offsite locations, 7:30 am - 4:30 pm shift, Susan Gaynor, 282-5447 or Ed Rangel, x36124.

Want roommate, female, Seabrook area, free rent in exchange for babysitting 2 nights/wk, mostly wkends, Sharon, 474-9155.

Want STS-69 payload & experiment cloth patches/decals, Wake Shield, Spartan-201, IEH-1, UVS-TAR, SEH, GLO, CAPL-2;STS-73/USML-2 payload & experi cloth patches/decal. Andrew, x34312 or 280-0647

Want MacIntosh computer must be in good working condition, \$400 or less. 326-2307.

Want empty glass baby food jars, sz #1 & #2 for crafts, don't need lids. Linda, x40077.

Want old wooden 9' wide garage door that you are going to replace. Jim, x35853 or 474-7747.

Want IDE disc drive for PC, needs to be between 200 - 540 MBy, Charles, x37678 r 661-4789. Want red leotard from Dance Tree, sz 4/6; want moving boxes. Sharon, x38506.

Miscellaneous

Refrigerator, micro-convection oven, dishwasher, couch, loveseat, chair & footstool, golf clubs, \$100 ea or less. 480-4432.

Country music CD's over 75 latest & best, ex

Little Kittens" & "Fragrant Glory", \$25 ea. Faye, 470-1455.

nswering machine, \$45; Franklin plates

Color TV, 19", \$25; gas trimmer, \$25; 4 Ford LTD wire wheel covers, \$30; 4 Ford 15" wheels, \$5 ea; wood slatom ski, \$10; child training water skis, \$15. x35092 or 944-2391.

Animal carrier/bed, med/lg sz, \$25 obo; adult walker, folds, removable wheels, adjustable, ex cond. \$50 obo: Technic stereo receiver & pioneer speakers, need work, obo; '73-'75 Mechanix Illustrated; '66-'74 Popular Science; '59-'60 Chevy shop manual, best offer. John, 488-4487.

Sears rowing machine, \$50; Spirit Stair climber, \$300.328-3840.

Dolls, porcelain & vinyl, Beriusa Newborn 20.5" girl in box, Ideal Tiny Tears, 13" in basket, 8" & 6" babies, all ex cond, \$25 - \$85. 488-6521.

Diamondback Ascent mountain bike, \$300. Doug. x38551

8 Lalique angle goblets, 1- '87 Waterford Xmas ornament, best offer. 480-1024.

Fur coat, \$100; double bed, w/frame, \$150; car stereo cassette, \$30; stun gun, \$75; microwave, \$35, 998-7006

Air conditioner, 110V 12k Btu room, good cond. \$85: used ceramic molds, over 100, \$2 up, 997-2280

Fish finder, Eagle Supra Pro-ID, \$75. Michael, x45053.

Free firewood, maple logs already cut but must solit. David. 488-3276.

Remington 30-06 Bolt action rifle w/scope Simmons 3x9x40mm, \$500. 480-8279.

Colt 9mm semi-automatic pistol, \$350; stair stepper, \$75. 282-3215 or 480-9448.

HK-91 immaculate, w/4 magazines, \$1.9k firm. Wayne, x37729 or 286-8726.

Director's Safety Page

A publication of the NASA Johnson Space Center For Employees Safety and Health

September 1995

Name that safety page Employees have the opportunity to participate in renaming the Safety Page. Story on page 4.



Placards being installed

It is now easier to locate information on each building's facility manager. Story on page 4.

Fire protection specialists are ready when needed

By Rindy Carmichael

"White Bird 2 to engine 72—we have heavy smoke on the second floor of Bldg. 1 in room 276."

This is the call JSC fire protection specialists dread hearing---the call indicating an intense fire within an occupied building on site. Although this call was fictions, the fire protection specialists at the fire station in Bldg. 25 have experienced this scenario and are wellequipped to handle emergencies.

Responding to more than 250 emergencies per year, the on-site fire protection specialists not only answer fire accidents, but also assist in rescue activities, first-aid and any other action necessary in limiting injury, death or property damage. They are the first to arrive in an emergency situation.

One situation may require CPR or the application of pressure points to stop the flow of blood in the case of injury. Another incident may call for fire fighting procedures and a call for backup from the Houston Fire Department. The fire protection specialists maintain a 24-hour liaison between the Houston Fire Department and JSC. The specialists are available at all times to respond immediately to the scene of an emergency.

Why should the general JSC population put so much faith in the fire protection specialists?

"Our six fire protection specialists have collectively over 150 years of experience in fire protection services," said John Dee, fire protection maintenance and operations lead. "Including myself, the number is raised to 175 years of service. With the specialist's experience in all types of emergencies, the Houston Fire Department really relies on them for their expertise."

Four of the specialists came to Please see **ON-SITE**. Page 4



JSC Photo by Mark Sowa

Houston Fire Department Captain Keith Carpenter and Fire Protection Specialist Clarence Sharp check fire protection equipment during a typical daily inspection. JSC's on-site Fire Protection Specialists are highly trained to assist in any emergency situation.

Warning: Office buildings can be dangerous, too

By Dan Clem

Many JSC employees feel they are safe from hazards because they work in an office environment. The truth is, just getting to the office may put an employee in danger of slips, trips and falls.

Using the close call reporting system, implemented the first of February, JSC civil service and contractor employees have reported slick floors and people almost slipping on round metal plates. Below are some of close call

Director's Corner

reports safety has received about some of these supposedly "safe" areas:

• A damaged projector stand almost fell on a presenter. As a result, the stand was repaired.

• A free standing cubicle wall was bumped with a chair and fell across a doorway. The panel was removed from the room and will not be reinstalled except by authorized facilities personnel

• Bookcases were stacked twohigh on a two-drawer filing cabinet. They fell and almost hit an employee. The bookcases were removed from the filing cabinet.

• A JSC employee was mildly shocked by a surge protector that had a broken glue joint. The power strip was replaced and safety is investigating to see if it is a generic problem.

These incidents have lessons for everyone. If something is broken, report it.

It appears the projector stand that fell on the presenter was

already broken, but not reported. Reluctance to speak up could allow someone to be hurt in the future.

Inspect any equipment to make sure it is in good, safe working order before using it.

Be careful when setting up an office. Employees need to be aware they could be creating hazards for themselves and others. Ensure that anything stacked on office furniture is stable. Don't put heavy objects on tall bookcases or filing cabinets. Place bookcases against walls or other furniture. Check electrical devices for broken insulators, exposed conductors and bad wiring. Ensure that all electrical devices are approved by Underwriter's Laboratories.

Individuals should not assume they are safe just because they do not work in a "hazardous" area. Check out the office space for unsafe conditions. There is a checklist in the employees' Safety Awareness Day packet that can aid in doing this.

Know procedures to follow during a fire emergency

By Rindy Carmichael

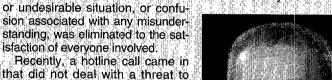
A JSC employee enters an on-site building and smells smoke. A quick investigation provides the source-an electrical cord has shorted out and started a fire. What steps should be taken to eliminate any mishap?

John Dee, fire protection maintenance and operations lead, suggests that the first thing an employee should do upon discovering a fire is to pull the handle on the fire alarm pull box which starts the evacuation of the given. The dispatcher will call the onsite fire protection specialists at the fire station, Bldg. 25, who maintain a 24-hour liaison with the Houston Fire Department."

Anytime a working fire is at JSC, a full response is sent by the Houston Fire Department. This response includes three engines, one ladder truck and one district chief. Mutual aid is also available from all of the volunteer fire departments surrounding JSC for assistance in fighting large fires or with transporting large numbers of injured personnel-Nassau Bay, Webster, Clear Lake, Brooks, League City, Pasadena and Ellington Field. The fire protection specialists are available at all times to respond immediately to the scene of an emergency.

If the employee who spotted the fire has been trained, that person may fight the incipient fire with a fire extinguisher remembering to keep the exit at his or her back for means of egress. However, if the employee has not had fire extinguisher training, he or she should evacuate the building with the other employees at least 75 feet away from the building.

It is important not to take the attitude that a fire will never occur on site. Although there have been few fires on site, the potential is there. Be sure to know what procedures should be followed and where the pull box and exits are located.



It has been over a year since the Center Director's Hotline was

established to receive calls from you-the employees of the Johnson

Space Center and all of its contractors-regarding safety and other

pertinent issues which you think require the specific attention of the

center director. Safety issues have been raised within that time, and,

each has been researched and worked without delay until the hazard

health or life. It pointed out, however, an area for improved communications.

An employee of a subcontractor involved in the International Space Station Program was concerned about the lack of flow-down information from the prime contractor regarding the Safety Awareness Day planned for NASA and JSC. He saw no indication that his company would be involved, and



thought it should be allowed to actively participate. Certainly, Safety Awareness Day was intended to have all of us take time out from our everyday tasks and focus on safety for the whole day.

The hotline complaint was checked out. The space station staff, in cooperation with SR&QA and Boeing Prime personnel, responded and reaffirmed their commitment to full participation in the Safety Awareness Day activities. They made sure all their contractors were notified relative to their expected participation.

Effective communications are essential to any endeavor—technical, safety or other. The space station program staff discovered an issue and addressed it early. But you must all ask yourselves: How effectively are you communicating in your daily operations? Are you certain you are making subordinates and associates aware of those issues relating to their well-being and safety? Take the time to find out. We cannot afford to relax our attention to any safety concern; safety issues require our studied attention, evidenced by a whole range of activities, including training, monitoring, verification, inspection, detection controls and effective communication. building by sounding a fire alarm.

"The next important step is for the employee to send someone to call the Emergency Operations Center at x33333 so that further information about the fire and its location can be

Smoke detectors to be given away

The National Fire Prevention Association has designated Oct. 8-14 as Fire Prevention Week. This year's theme is "Watch What You Heat! Prevent Home Fires." The 1995 Fire Prevention Week campaign is designed to fight home fires by focusing on three important fire-prevention reminders:

1. Watch what you heat: keep a constant eye on stovetop cooking and know how to recognize and remove fire hazards in the kitchen.

2. Watch what you heat: keep at least three feet between heating equipment and anything that can burn and never leave space heaters unattended.

3. Watch what you heat: matches and lighters are deadly when carelessly discarded or left within reach of children. In support of Fire Prevention Week, the Health, Safety and Environmental Compliance Office is sponsoring a drawing to give away 10 smoke detectors for JSC employees and contractors. To enter, fill out the coupon below and mail to "Smoke Detector Drawing -Mail Code NA3" by Friday, Oct. 13. SR&QA Director Charles Harlan will draw the winning names on Monday Oct. 16. Winners will be notified immediately following the drawing and announced in the next issue of the Director's Safety Page.

Smoke detector drawing coupon	
Name:	
Employer:	
Phone:	Mail Code:

Space News Roundup

Placards provide easier access

By Julia Watkins

Upon entering a JSC building, the facility manager and alternate facility manager will be immediately visible to employees... at least as a photographic image on a placard installed near each entry.

The placards provide information needed to make immediate contact with facility managers such as name, residing building location and room number, phone and 24hour pager number. In large buildings where there are multiple organizations, the placard also serves to introduce the facility manager to employees residing in that building and provides a contact for reporting unsafe conditions.

A year ago, facility managers were appointed to assure that every JSC building has a single, welltrained individual responsible for certain factors that could affect the safety of the building, its contents

and most importantly, its occupants. While most facility-related matters are coordinated with the facility manager prior to the craftsman or others arriving at the facility, the placards provide a ready reference and reminder to those who need to make contact.

The placard project idea was created by the recently formed Communications and Employee Ownership Subcommittee, chaired by Larry Neu of Flight Crew Operations. It was given a thumbs-up by the Coordination Subcommittee and finally by Acting JSC Director George Abbey and the Executive Safety Committee. The staffing and approval process for the idea took only two weeks.

The quick approval and implementation allowed installation prior to Safety Awareness Day, so everyone could be informed of their existence. This was made possible

by the cooperation and support of all who were involved, including Information Systems Director Jane Stearns, and the photo and graphics personnel; Center Operations Director Jim Hickmon and plant engineering personnel and their respective support contractors. Many other people dedicated their time and services to the successful implementation of the placards.

Facility managers ensure that each facility is professionally managed so that all functions which occur within that facility are conducted in a manner which assures the safety and good health of everyone who enters. Usually, these are additional duties they have gladly accepted.

Employees are encouraged to familiarize themselves with their respective facility manager and work together as a team to make their facility the best at the JSC.



JSC Photo by Mark Sowa

September 29, 1995

Facility Manager Coordinator Julia Watkins stands beside one of JSC's newly developed facility manager information placards. Each building will have the photograph placards placed at strategic locations and will include information that makes access to facility managers much easier.

Safety Learning Center offers fire safety courses

upcoming Fire Warden Certification, Facility Managers' Fire Certification, and Fire Hazards in Liquid Oxygen Systems classes scheduled throughout the end of the year.

Fire Warden Certification is designed to outline responsibilities and duties for all designated fire wardens and their alternates. The course provides guidelines by which fire wardens can more effectively address fire prevention and safety within their organizations. Classes are scheduled for Oct. 4, Nov. 16 and Dec. 6.

The Facility Managers' Fire Certification course combines Fire Warden Certification, Life Safety Code Seminar and Fire Detection and Suppression (three of the four mandatory courses for facility man-

The Safety Learning Center has agers), to effect a comprehensive overview of fire policies and regulations to designated facility managers and their alternates. The next class is scheduled for Dec. 5.

New to JSC is the Fire Hazards in Liquid Oxygen Systems class offered Nov. 7 and 8. This comprehensive course will cover the fundamentals of safe practice in design, materials selection and operation of oxygen systems. Students will identify and evaluate hazards in oxygen systems as well as visualize

Center the concepts by working out selected applications and exercises in class.

For more information or a copy of the Safety Net, a catalog listing class descriptions and schedules, contact the Safety Learning Center at x36369.

Safety Forum provides enhanced communication

By Glenda Rose

Communication and team effort are two factors in any successful safety program.

Because JSC is both large and diversified with numerous contractors, the Contractor Safety Forum was formed to enhance two-way communication and simultaneously establish an environment that would support and encourage an integrated team approach for the prosecution of an exceptional safety program. Chaired by Richard Holzapfel. assistant to the chief of the Health, Safety and Environmental Compliance Office, the Safety Forum has been meeting once a month since April 11. The meetings are open to all contractor safety representatives.

With a common focus on safety and health issues, members of the Contractor Safety Forum share their ideas, initiatives and intellectual resources. A good example was the Aug. 18 Safety Awareness Day panel discussion, where safety representatives of four different contractors were invited to share their schedule of activities for \$afety Awareness Day with the rest of the group. Without a doubt, these individuals were both organized and creative

in providing their employees with a program that was interesting as well as informative. An open discussion followed, which gave everyone the chance to participate and take home a few "lessons learned" for their own programs.

In addition, members of the Contractor Safety Forum are given the opportunity to discuss the safety and health challenges they must deal with in their own individual areas, in addition to the ones that have a more general, JSC-wide orientation. Very often, where one contractor has a difficult challenge, another contractor may have a similar perplexing situation, or has it within his power to provide a solution.

For example, the construction contractors discussed a challenging situation that occurred when all the ice machines behind Bldg. 416 were emptied to be cleaned. The construction workers were left without ice during the heat of the day. Although this might be considered to be a problem by some individuals, it turned out that the solution was simple. Johnson Controls, the contractor who handles cleaning of the ice machines, was approached, and agreed to schedule the cleaning of this particular ice machine during the second shift on Friday afternoon, so their work wouldn't interfere with the work of another contractor.

As the action items develop within the forum, the work to resolve them is set in motion. An added bonus has been sponsored guest speakers to discuss issues which concern all the contractors on site. The Hurricane Preparedness presentation given by Bob Gaffney gave tips that could be used at home as well as on site. Other speakers have been scheduled for future meetings to talk about some of the latest interesting safety and healthrelated topics that have arisen.

The Contractor Safety Forum has facilitated the dissemination of information to contractors across the site. New members are always welcome. Meetings are held on the third Tuesday of each month at the Gilruth Center. Membership is open to all contractor safety representatives as well as any other interested contractor personnel who work at JSC. The next meeting is scheduled for Oct. 17. For more information, contact Richard Holzapfel of the NASA Health Safety and the Environmental Compliance Office at x34290, or Glenda Rose in the Safety Office at x37142.

On-site fire protection specialists are diligent in efforts to prevent fires

(Continued from Page 3)

JSC with more than 20 years experience each in the Houston Fire Department and two specialists are from the old JSC Fire Department after tours in the Air Force Fire Department. They have seen and experienced almost every aspect of the job. "When I first joined the Houston Fire Department in 1963, the chief told me fire service was going to get in my blood and I wouldn't want to do anything else-he was right," said Clarence Sharp, senior fire protection specialist. "The only thing that might be better would be to win the lotto." The fire protection specialists are diligent in their efforts to prevent fires. Such measures include making cursory inspections of every building on a monthly basis and correcting any discrepancies they can during these inspections. They work closely with facility managers and fire wardens in the placement of all fire extinguishers, either in a new area or a modified one. They maintain all fire extinguishers on site so it is important they know where each one is located. Fire protection specialists respond to all automatic fire alarms-fire, water sprinklers, smoke detectors, gas sensing devices, and other emergencies such as gas leaks, chemical leaks and hazardous material spills. They also are responsible for

answering people-related concerns including the smell of smoke or mishap-caused alarms due to bumping a device with a mop or an alarm head being hit in a construction area and even performing elevator rescues. They respond to weather-relat-

pulling out the debris that was on fire until we had it under control and it could be put out." Sharp's diligence won him recognition from JSC for protecting an irreplaceable natural resource.

The specialists also call out the n-site ambulance v However, a situation can arise where Medic 72, the primary ambulance for JSC and Medic One (the clinic ambulance) could be on an emergency call and 911 has to be called. One such incident occurred at Space Center Houston last summer when an Indian female stepped off the tram onto her sari and fell, face first, to the ground. Suffering from an extensive facial wound and a concussion, the fire protection specialists were called in and administered direct pressure to stop the bleeding until the ambulance responding from the 911 call arrived. The fire protection specialists were on hand during the Aug. 26 JSC Open House where they answered six calls. While most were due to heat exhaustion, one man was treated for chest pains. "Our job motto is 'better safe than sorry,'" Sharp said. "Some people apologize for calling us out when no real threat is found, but that's our job-to understand we're all better off being safe than sorry. That's what we are paid to do."

Name that safety page

The Director's Safety Page is changing its name. Earlier this month, Acting JSC Director George Abbey announced a contest to rename the safety page with a title that better reflects the paper's true purpose.

"It is not really my safety page-it is your safety page. I will still have a "Director's Corner" that appears in each issue to relate my thoughts on the progress of safety initiatives and programs. The rest of the page is an employee newsletter-written by employees for employees.

Judges for the contest will include Brigadier General Charlie Bolden and State Trooper Steve Hargett, inspirational and thought-provoking speakers at the recent Safety Awareness Day. All entries must be returned to AC12 by 5 p.m., Oct. 13. To obtain a copy of the entry and contest rules, contact Rindy Carmichael at x45078.

Employees' children participate in Safety Awareness Day

By Larry Neu

Safety in the workplace and at



The Safety Awareness Day coloring page was a rousing success with more than 250 flyers submitted by children and grandchildren of JSC employees, organizers said.

And, just as important, the home safety checklist on the reverse side of the flyer also was well used. The colored flyers were displayed in each employee's building during the JSC Open House and Safety Awareness Day. Each entrant also received a green fluffy "Seemore Safety" toy.

The Communications and Employee Ownership Subcommittee of the Executive Safety Council developed the coloring page so that JSC employees and their families could increase their awareness of safety at home. The home safety checklist asks many probing questions on the steps each employee should take around the house to avoid injuries.

home go hand-in-hand. It doesn't matter where an employee gets injured-they are still injured and are an asset that is no longer available. Safety is asset conservation.

The youngest entrant was sevenmonth old Lindsey Bieri, daughter of Pam and Bret Bieri. Pam is an engineer at the Aircraft Operations Division at Ellington Field. This was Lindsay's first coloring adventure, and Pam and Bret made a family event of it. Also, Pam and Bret used the home safety checklist step-bystep and found several items that were not yet child-proof for their first baby, including an unused floorlevel gas valve that had not been capped.

Copies of the home safety checklist are available from Rindy Carmichael, x45078. John Starnes, ground safety officer at Aircraft Operations, developed the checklist.

The Director's Safety Page is a health and safety publication produced by the Health, Safety and Environmental Compliance Office at the Johnson Space Center. For information, feedback, or to submit articles to be considered for the next issue, contact Rindy Carmichael at 244-5078, mail code NA3.

ed alarms such as water surge and power outages.

"You wouldn't believe the havoc caused when a thunder storm comes through here," said Jeff Baker, fire protection specialist. "Lightning causes everything to trip and alarms go off everywhere.'

The specialists have worked together for a long time and have experienced several incidents at JSC. There was the infamous Bldg. 9 fire which is still talked about. " was on my seventh graveyard shift and looked at the clock at exactly 2:30 a.m.," said Sharp.

"I was going on my long break in two hours when, 10 minutes later, the building alarm came in.'

When the specialists entered the building, the high bay was filled with heavy smoke, the result of a raging fire.

We called engine 72 and said we needed a box alarm-calvary was on its way," Baker said.

Sharp was involved in a fire in 1991 that could have destroyed the JSC Film Repository. He was persistent in locating the source of smoke in a ballast-an open flame. "After checking it out, we began

September 29, 1995 Space News Roundup Double Deployment STS-69 mission returns to Earth with pair of satellites, cache of data for International Space Station

he STS-69 mission marked the first mission ever to deploy and retrieve two satellites. The crew stayed quite busy during the flight supporting a space walk and extensive operations with the two temporarily free-flying spacecraft. During it all the crew captured memorable moments to share. From left to right, top to bottom:

1) Hurricane Marilyn is captured on film as it moves over the Caribbean on Sept. 17. A motion picture lens on the handheld Hasselblad gives a "fish-eye" effect to the scene.

2) Endeavour's forward section reflects in the visor of Payload Commander Jim Voss, standing on a mobile foot restraint attached to the arm of the Remote Manipulator System. Voss and Mission Specialist Mike Gernhardt performed a number of tests involving space station-era tools and space suit improvements.

3) The traditional in-flight portrait shows the crew on the middeck of Endeavour.

Front row, from left, are Pilot Ken Cockrell and Commander Dave Walker. Back row, from left, are Voss, Gernhardt and Mission Specialist Jim Newman 4) Prior to recapture, the Spartan-201-3 satellite is back-

dropped against the darkness of space over a heavily cloud covered-Earth.

5) Cockrell looks over a log book on Endeavour's flight deck during rendezvous operations involving one of the two free-flying satellites.

6) Prior to being released by Endeavour's robot arm, the Wake Shield Facility is backdropped against the darkness of space over a blue and white Earth. The

picture was taken shortly after midnight JSC time Sept. 11.

7) Walker checks operations on the flight deck during rendezvous operations.

8) Upon the announcement of his new status as an Army colonel selectee, Voss, center, gets a preview of the new rank with the aid of fellow crewmembers Cockrell, left, and Walker, right.

9) Newman checks his Payload and General Support Computers on the middeck.

10) Gernhardt works with the Commercial Material Dispersion Apparatus Instrumentation Technology Associates Experiment.

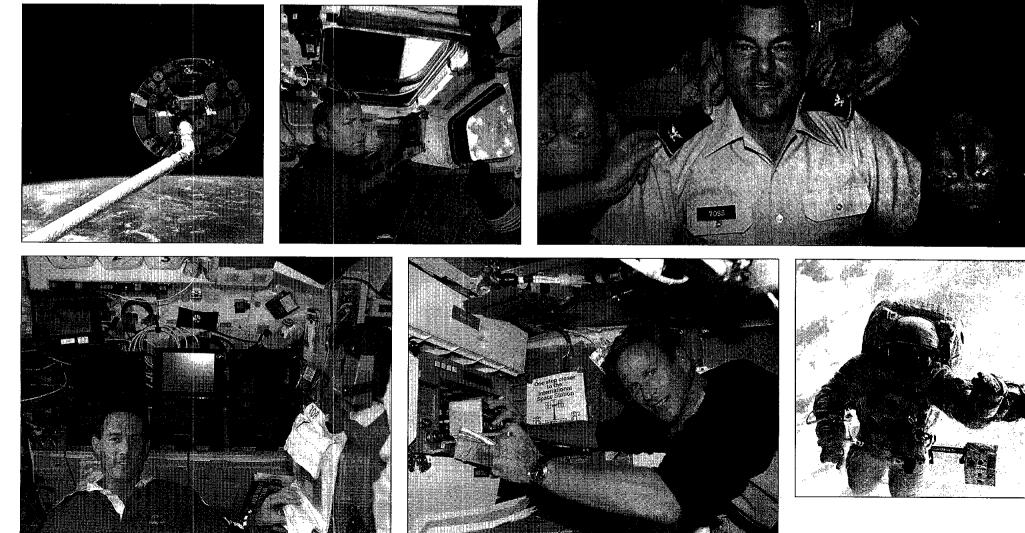
The experiment is in the stowage lockers on Endeavour's middeck.

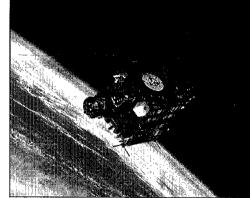
11) Gernhardt, standing on a mobile foot

restraint attached to the arm of the Remote Manipulator System, uses an electronic cuff checklist. The 6 hour, 46 minute space walk had Gernhardt and Voss each spending 45 minutes on the end of Endeavour's mechanical arm as Newman maneuvered them away from the radiated warmth of the payload bay. With the shuttle's payload bay pointed away from the Sun, the space walkers were exposed to temperatures as low as minus 120 degrees Fahrenheit during the "cold soak" evaluation. They continually provided subjective ratings on their comfort levels to flight controllers on the ground while temperature sensors mounted on the robot arm and in the payload bay provided quantitative data that will be correlated with their evaluations. Suit improvements included thermal socks, insulated boots, heaters in the glove fingers and an ability to shut off the flow of cooling water in frigid conditions.

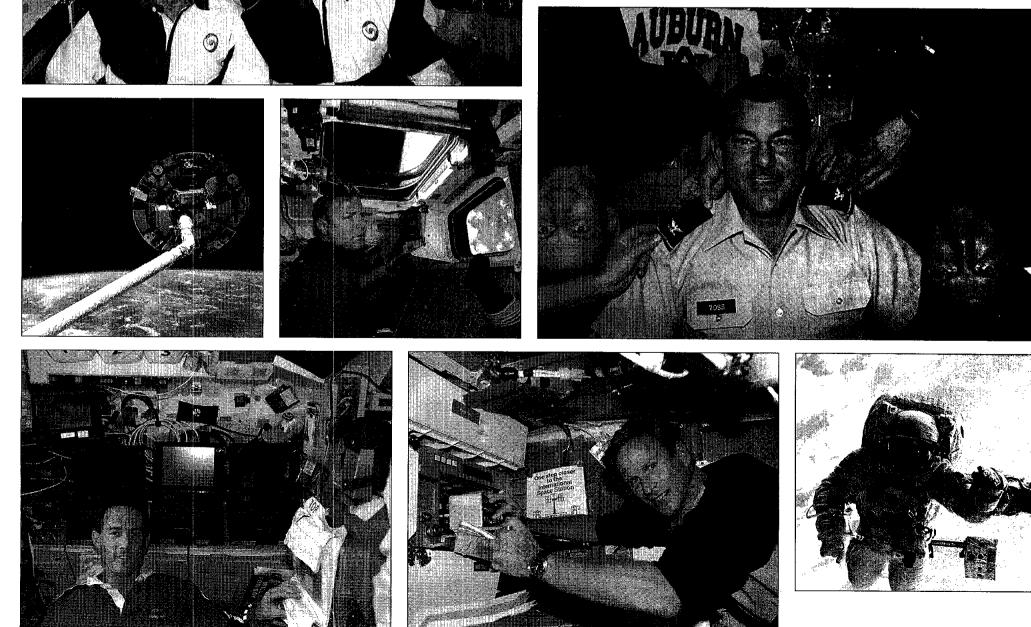


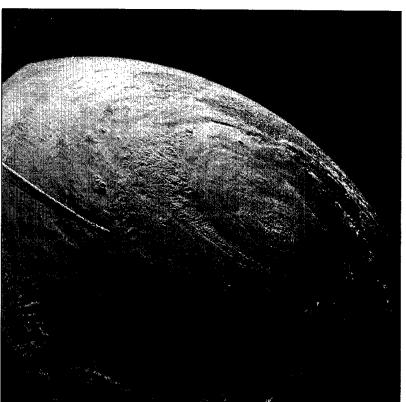














Page 6 Shannon named to top post

James Shannon was designated Acting Deputy Director of Mission Operations Directorate last week. Shannon's reassignment to the position of Deputy Director is currently pending Headquarters approval. Shannon received a Bachelor of Science in Mechanical Engineering from the University of Texas. He joined JSC in 1962 as an aerospace engineer and has held progressively responsible positions in MOD since then including assistant chief for Operations Planning; chief of the Procedures and Requirements Branch; chief of the Payload Support Systems and Operations Branch and chief of the Experiments and Payload Branch. Most recently, Shannon served as assistant director of MOD.

Payload team hangs plaque

The STS-69 plaque ceremony, held for the first time in the new Mission Control Center, was shared by two teams due to their outstanding contributions to the STS-69 mission.

The Payloads Team and the GNC

Asbestos signs to be posted

Signs notifying employees of asbestos in JSC buildings will be going up soon in a response to new Occupational Safety and Health Administration regulations, but center health officials report this should not be cause for alarm.

Revised OSHA Asbestos Standards applicable to JSC go into effect in October, said JSC Occupational Health Officer Gary Caylor, and one requirement is to inform workers of the presence and location of asbestos-containing materials, the health effects of exposure to asbestos and appropriate work practices which will prevent exposures.

To meet this standard, JSC will place signs where installed asbestos can be found. These signs should not be a cause for alarm as they do not indicate any new or significant dangers. The Health, Safety & Environmental Compliance Office and the Occupational Health and the Environmental Services Office will be working together to develop and provide additional training on the potential hazards of asbestos.

"Asbestos is not dangerous as long as it remains intact," Caylor said. "It becomes a hazard when it is disturbed and gets into the air."

The Occupational Health Office conducts environmental air monitoring to determine fiber levels in buildings. This monitoring along with an aggressive facility maintenance program maintains the asbestos in a condition which presents little to no hazard to building occupants.

The JSC Environmental Services Offices will continue to address the requirements of this new OSHA regulation. Questions may be directed to Occupational Health, x37896 or Environmental Services, x36726.

team shared the honors of hanging the first plaque in the new MCC. The plaque was raised by Jeff Hanley, lead payloads officer with Jeff Davis, lead guidance navigation and control systems officer, supporting the ladder.



The Payloads team was instrumental in the Wake Shield Facility operation, both pre-flight and realtime, and were a major factor in accomplishing the WSF objectives under numerous problems and difficulties. Pre-flight preparation and coordination was outstanding and entailed significantly greater effort and resources expenditure than most payload activities. The ability of this payload team to overcome adversity and maximize the mission objectives is a real demonstration of the

essence of mission operations.

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The Guidance, Navigation and Control Systems team developed a new concept regarding Gravity Gradient opera-Starting tions. with the STS-60 plan they devel-

and innovative oped a new approach to understanding and accounting for GG perturbations such that anytime deploy of the WSF could be accomplished. This included over six hours of GG free drift with various RMS movements.

Shannon

Secretaries earn top honors

Two secretaries were awarded the Marilyn J. Bockting Award for secretarial excellence.

Candy Hunt, secretary to the director of Human Resources was cited for her abilities that go far beyond those expected in most secretarial positions. Her outstanding administrative and organizational skills have earn the respect of her office associates and her exceptional mentoring skills served to train a new employee with no loss of quality within the office. Hunt's initiative, professionalism and competence has made her an essential member of the Human Resources office.

Office earned top honors for her highly motivated attitude and team work that produces an effective working environment. Cross has become the expert in Russian travel arrangements, setting up processes that have reduce preparation time. She also has earned the esteem of her colleagues by juggling mission support, scheduling of dignitaries during



Hanley

Oma Cross of the Flight Director launches and handling crisis in an efficient and level headed manner.

Stanford passes exam

John Stanford of the Health, Safety and Environmental Compliance Office recently passed the Registered Environmental Manager exam.

The REM is sponsored by the National Registry of Environmental Professionals and covers questions in operating philosophies, environmental management, air and water pollution control, hazardous waste management, toxic substance control, environmental and community safety and risk minimization. The REM is internationally recognized in the environmental community.

Clinic offers flu shots

The 1995 flu season is fast approaching and the JSC Clinic will offer vaccinations for all NASA-badges and on-site contractor personnel for a limited time

"Due to the astronaut candidates coming at the same time of flu season, we are alternating

immunization weeks with candidates selection," said Lynn Hogan, chief nurse at Kelsey-Seybold.

The clinic will offer influenza shots from 10 a.m.-noon and 1:30-3 p.m. beginning Oct. 2 and running

through Oct. 13. Other immutotal health nization weeks will be offered and printed in the Daily Cyber Space Roundup.

Shots are recommended for people at increased risk for contracting the disease, including people over 65 years of age or who have chronic cardiovascular or pulmonary system illness. Individuals who are pregnant, have a fever or are hypersensitive to eggs or any other component of the vaccine will not be given the shot.

Influenza viruses have continually demonstrated an ability to cause major epidemics of respiratory disease. Typical flu illness is characterized by abrupt onset of fever, sore throat and nonproductive cough. This condition, unlike many other common respiratory infections, can cause extreme malaise lasting several days. More severe disease can result from invasion of the lungs by the flu virus including several types of pneumonia.

For additional information on the shot schedules, call the clinic at x34111.

Houston Rockets at SCH

Members of the STS-71 crew will meet with members of the Houston Rockets championship basketball team Wednesday in the Plaza of Space Center Houston.

The astronauts will present the Rockets with the Rockets' T-shirt that was flown on the shuttle during the STS-71 mission.

Check the Daily Cyber Space Roundup for the specific time.

The Daily Cyber Space Roundup can be found on the Internet at the following address:

http://www.jsc.nasa.gov/pao/roundup/

Photo by Paul Maley FLY OVER-Endeavour streaks across the sky over Bldg. 30 just after 6 a.m. JSC time prior to landing at Kennedy Space Center. STS-69 Commander Dave Walker glided the orbiter to a flawless landing at 6:38 a.m. Sept. 18 after covering more than 4.5 million miles. Walker, along with fellow STS-69 astronauts will brief employees on the mission

Furlough info available on radio

(Continued from Page 1)

from 2-4 p.m. Tuesday in Teague Auditorium.

could take as long as half a day to complete. Employees would be paid for the work they perform that day.

Hartman added that if a furlough is declared, JSC must suspend all operations except for those related to the orderly shut down of NASA's operations and the safety and support of the STS-73 mission.

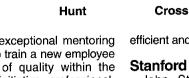
Employees whose services are required for these two categories of activities will be notified of their "excepted" status by memo. "Excepted" employees who are required to work during the furlough will be paid, but they will not receive paychecks until after the furlough has ended. All other employees will be placed in a non-pay, non-duty status. Employees are not permitted to volunteer their services during a furlough.

Employees can learn of any changes to this plan by listening to radio station KTRH 740 AM or by calling the Employee Information Service at 483-6765. In addition, before close of business Friday, all employees are asked to provide their supervisors with a telephone number or other means by which they can be reached.

It is unknown how long a furlough would last; but employees will be expected to return to duty the next workday following approval of either the fiscal 1996 NASA appropriations bill or a continuing resolution.



Stanford



ab module now moves to boring mill

(Continued from Page 1)

moved to a boring mill where its surfaces will be machined for various functions, including drilling small holes for hatch seals and berthing mechanisms. It later will be covered with a debris-shield blanket, made of a material similar to that used in bullet-proof vests. A thin aluminum debris shield then will be placed over the blanket for added protection.

With the laboratory welding complete, the pieces of the space station crew quarters, or habitat module, now will be welded together. The habitat module will serve as the 'home away from home' where astronauts will eat and sleep. Habitat module welding will begin in October and be completed in December.

Overall, the United States has produced 54,000 pounds of space station hardware; by the end of the year, the United States will have completed nearly 80,000 pounds. Currently, the project's international

partners have manufactured over 60,000 pounds of hardware.

The first piece of the International Space Station is scheduled to be launched in just over two years, in November 1997. The U.S. Node 1 will be launched one month later. A series of flights over five years will complete the space station in June 2002

The laboratory module is being built by Boeing, prime contractor to the space station.

Discovery prepares for next docking mission

(Continued from Page 1) 16 days, with landing planned on Oct 14

Meanwhile, other shuttles are on the move as well. Discovery traveled cross-country on Thursday atop NASA's Shuttle Carrier Aircraft from Florida to California for a ninemonth maintenance and modification period. At Rockwell's Palmdale, Calif., shuttle factory, Discovery will receive more than 100 modifica-

tions, including the installation of an external airlock to prepare the orbiter for docking missions with the International Space Station.

Discovery's ferry flight was planned for a refueling stop at the Fort Worth Naval Air Station Thursday afternoon and then an overnight stay Thursday night at Salt Lake City International Airport, Utah. Discovery was planned arrive in California on Friday.

Elsewhere, Endeavour is now in KSC's Orbiter Processing Facility where the STS-69 cargoes are being prepared for offloading. Endeavour's next flight will be STS-72 in January 1996.

Atlantis is in the processing facility being readied for an early November launch on STS-74, the second shuttle mission planned to dock with the Russian Mir Space Station.



JSC Photo by Mark Sowa

OFFERING CONGRATS—Acting JSC Director George Abbey meets with the newly elected executive board members of American Federation of Government Employees Local 2284 and offers his congratulations on the recent election results. From left are Acting Deputy Director James Wetherbee, Jimmy Thompson, Linda Salinas, Abbey, American Federation of Government Employees President Mary McLain, John Zieglschmid, JoAnn Birchett, Bridget Broussard-Guidry, and JSC Executive Assistant Susan Garman. Not present were Raul Mejia and Harvey Kelly.