



Employees share Apollo 11 memories during 25th Anniversary lunar landing celebrations. Photos on Page 3.



Fifteen high school students earn and learn at JSC this summer. Photo on Page 4.

# Space News Roundup

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No. 31

## NASA reviews human radiation experiments

JSC's Robbins named to lead agency in response activities

By Eileen Hawley

Don Robbins, acting director of Space & Life Sciences will lead a team investigating any possible NASA involvement in radiation testing or research on humans.

"This effort is in response to President Clinton's directive to investigate the federal government's involvement in human radiation experimentation," Robbins said. "We are not talking about routine clinical or diagnostic exposure to radiation but rather research that

intentionally exposed people to radiation to test the results of that exposure."

President Clinton has tasked a Human Radiation Interagency Working Group with reviewing, identifying and reporting all experiments that exposed people to ionizing radiation between 1944 and May 1974. A sample of experiments conducted after May 30, 1974 will be taken to see if further inquiry is required.

In January, President Clinton also signed an executive order establish-

ing a 15-member committee to make recommendations to the working group regarding the ethical and scientific standards applied to human radiation experiments carried out or sponsored by the federal government.

That working group includes NASA, the Departments of Energy, Defense, Veterans Affairs, Health and Human Services, Justice, the Central Intelligence Agency and the Office of Management and Budget. The team is developing procedures

for locating, retrieving and reviewing records of human radiation experiments conducted by NASA or through contractors or grants.

"We are committed to conducting a fair and thorough review of all NASA records to determine the extent of NASA involvement in human radiation experiments, if any," Robbins said. "We also are asking employees to take an active part in this review by telling us if they know of any radiation testing conducted on people by NASA or

on a NASA grant or contract."

As part of those efforts, all NASA employees will receive a letter from Harry Holloway, associate administrator for Life and Microgravity Sciences and Applications encouraging them to contact Robbins if they have any knowledge of human radiation testing. Employees with information on possible NASA involvement in human radiation experiments should contact Robbins at x30393 or at mail code SA.

## NASA research goes on line

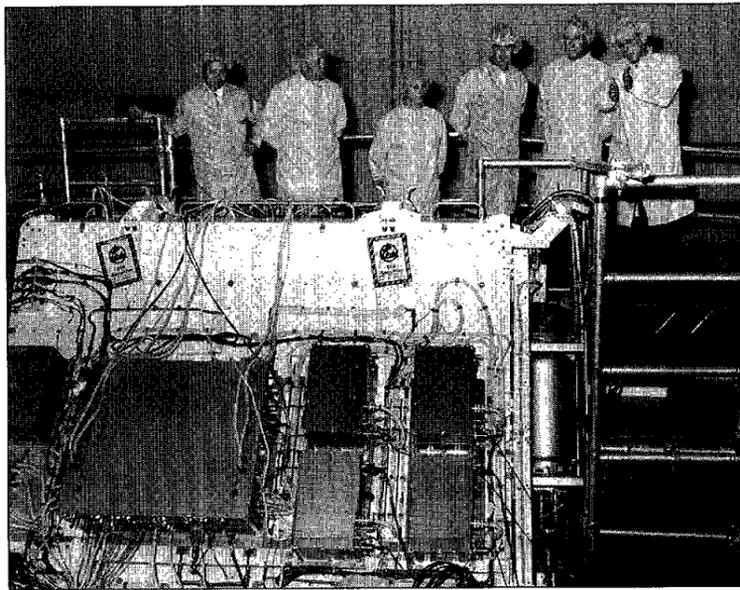
Public access to NASA's Earth and space science data will take a step forward with the selection of BDM Federal, Inc. to form a Remote Sensing Public Access Center for demonstrating, testing and transferring that technology over Internet.

The intent of the new center is to stimulate broad public use, via the Internet, of the very large remote sensing databases — maintained by NASA and other agencies — to stimulate U.S. economic growth, improve the quality of life and contribute to the implementation of a National Information Infrastructure.

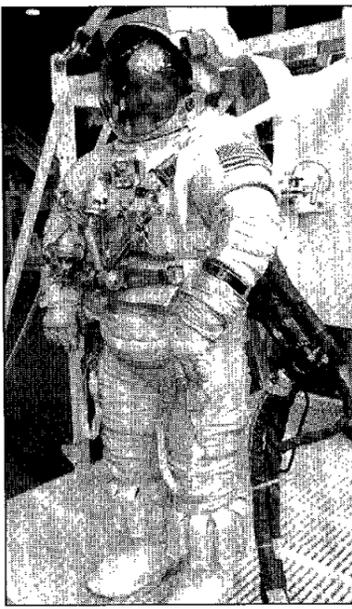
"We are looking forward to working with BDM to assist the public in accessing and using NASA data," said Lee Holcomb, NASA's director for High Performance Computing and Communications. "We envision that this center will play a key role in developing universal access to the products of NASA's Earth and space science research."

BDM will receive \$12.8 million under a cooperative agreement to establish the RSPAC, which will demonstrate, test and facilitate remote sensing database applications and new digital library technologies. BDM will be supported by West Virginia University Research Corp., and Jardon and Howard Technologies.

The center will extend access to remote sensing data beyond the usual scientific community. By providing Internet access and user help, remote sensing data now will be available to the educational community.



**Above: Members of the STS-68 crew are briefed on the Space Radar Laboratory-2 payload as the pallet housing the electronics boxes for the SRL antenna is lowered into place. Right: Mission Specialist Steve Smith trains for a contingency extravehicular activity in the WETF. Smith and Mission Specialist Jeff Wisoff both trained for possible unplanned spacewalks during the mission. Endeavour is set to fly Thursday with SRL-2 on an 11-day mission to observe seasonal changes in the Earth's environment. An international team of 49 science investigators and three associates representing 13 nations will conduct experiments using the SRL-2 complement.**



## Countdown clock to begin ticking for STS-68 launch

By James Hartsfield

Launch preparations of *Endeavour* continued without a hitch this week, and the countdown clock is wound up and ready to begin ticking down Monday to a planned 5:54 a.m. CDT Thursday liftoff of STS-68.

The STS-68 crew — Commander Mike Baker, Pilot Terry Wilcutt, Payload Commander Tom Jones and Mission Specialists Steve Smith, Dan Bursch and Jeff Wisoff — is set to travel to Kennedy Space Center early Monday to await launch. The countdown is set to begin at 10 a.m. CDT Monday. STS-68 will carry the Space Radar Lab aloft for the second time in four months to document Earth's environment, with

shift in Houston.

An on-time launch on *Endeavour* Thursday would have STS-68 conclude with a landing in Florida at 10:34 a.m. CDT Aug. 28.

Work at Launch Pad 39A this week included installing spacesuits in *Endeavour's* airlock for use in the event an unplanned spacewalk is required; closing out the engine compartment; installing ordnances; and pressurizing the hypergolic propellants used by the orbital propulsion systems.

Elsewhere, *Discovery* is on track for a launch early next month on STS-64 carrying the Lidar in Space Technology Experiment. *Discovery* was scheduled to be moved from the shuttle processing hangar by mid-week to KSC's Vehicle Assembly Bldg. to be mated to the solid rockets and fuel tank for STS-64. Monday, *Discovery* is scheduled to be moved to Launch Pad 39B and into the home stretch of mission preparations.

Work this week on *Discovery* included checks of the orbiter's hydraulic system for contamination due to debris from a small quick disconnect seal; close-outs of the aft compartment; weighing of the spacecraft; and determining *Discovery's* center of gravity.



## Probes continue cosmic trek

NASA's deep space probes continue their voyages through the cosmos returning information and images about the galaxy.

The Galileo spacecraft, located about 150 million miles away from Jupiter, is providing science teams with the first direct information on the collision of Comet Shoemaker-Levy 9 onto Jupiter's surface. The probe had a view of the night side of the planet where the collisions occurred. Data from Galileo's instruments were stored on the spacecraft's onboard tape recorder and selected portions will be transmitted to Earth this month.

Galileo's imaging system observed fragments D, E, K, N, V and W and the ultraviolet spectrometer and plasma wave instruments observed the C, F, G and R impacts. Transmission of the tape recorded infrared information will be transmitted to Earth through January 1995.

Galileo is about 400 million miles from Earth. It should reach Jupiter

Dec. 7, 1995 to begin two years observing and measuring the planet, its moons and magnetosphere.

The Magellan spacecraft's mission is coming to an end with the probe set to fall on to the surface of Venus in mid-October.

As the mission reaches its conclusion, ground controllers are developing a final mission strategy for the probe. Magellan will continue tracking activities through early October to complete a high-resolution gravity map of Venus. Shortly after that, the spacecraft will begin a windmill experiment that applies a torquing action to the spacecraft in the upper atmosphere to gather aerodynamic data as the probe spins slowly on its axis.

During the termination phase of the mission, controllers will lower Magellan's orbit at three separate points in the atmosphere to gain additional aerodynamic and atmospheric data to aid future mission design efforts. Magellan is expected

to crash to the planet's surface by Oct. 14.

The *Ulysses* spacecraft continues its voyage over the sun's southern poles examining the complex forces at work in these regions of space.

The probe has climbed to 75.5 degrees south of the sun's equator and was in a position to observe the comet collisions on Jupiter in mid-July. *Ulysses* was about 490 million miles from Jupiter and in a direct line of sight with the planet.

Data from the fragment A collision on July 16 the fragment Q collision on July 20 show no clear evidence of change in radio frequency. The *Ulysses* radio science team will continue to watch for subtle or long-term effects, but do not anticipate much new information will be generated.

Currently, *Ulysses* is traveling at a velocity of 46,000 miles per hour with respect to the sun and continues to operate normally with the exception of a slight wobble caused by heating

Please see **CRAFT**, Page 4



**Chris Bieber, a quality assurance specialist with Raytheon, operates a tensile tester machine to verify the "pull strength" of Russian-provided crimped pins and sockets. The crimped connectors use Russian wire crimped into NASA-provided connectors and are similar to the ones that will be used during the second shuttle-Mir docking mission to guide shuttle crews during approach and docking with the Mir space station. Initial results indicate satisfactory performance of the test specimens.**

JSC Photo by Robert Markowitz

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# Ticket 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.

**EAA luau:** 7:30-midnight Aug. 27, Gilruth Center, includes social period, baked ham dinner, entertainment dancing. Cost is \$17.50 per person. Tickets are on sale through Aug. 24.

**Seaworld of Texas:** Discount tickets: adult \$20.95; child (3-11), \$14.25.

**Fiesta Texas:** Discount tickets: adult \$18.95; child (4-11) and seniors (55+), \$14.25.

**Splash Town:** Discount tickets, \$11.05.

**Waterworld:** Discount tickets, \$10.50.

**Astroworld:** Discount tickets: adult \$13.75.

**Moody Gardens:** Discount tickets for two of three different attractions: \$9.50

**Space Center Houston:** Discount tickets: adult, \$8.75; child (3-11), \$7.10; commemorative, \$9.55.

**Metro tickets:** Passes, books and single tickets available.

**Movie discounts:** General Cinema, \$4.75; AMC Theater, \$4; Loew's Theater, \$4.75.

**Stamps:** Book of 20, \$5.80

**JSC history:** *Suddenly, Tomorrow Came: A History of the Johnson Space Center*, \$11.

**Apollo anniversary:** Apollo 11 anniversary souvenirs are being restocked in the Bldg. 11 Exchange Store.

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# Gilruth Center News

**EAA badges:** Dependents and spouses may apply for photo identification badges from a.m.-9 p.m. Monday-Friday; and 8 a.m.-4 p.m. Saturdays. Dependents must be between 16 and 23 years old.

**Weight safety:** Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. Aug. 25. Pre-registration is required. Cost is \$5.

**Defensive driving:** Course is offered from 8:15 a.m.-3 p.m. Saturday. Next class is Sept. 10. Cost is \$19.

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

**Exercise:** Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is \$24 for eight weeks.

**Aikido:** Martial arts class meets from 5-7:30 p.m. Tuesdays and 6:15-8:15 p.m. Wednesdays. Black Belt class from 6-8 p.m. Fridays, requires instructor permission. Cost is \$25 per month. New classes begin the first of each month.

**Country Dancing:** Classes meet Mondays. Beginners class meets from 7-9 p.m.; advanced class meets from 8:30-10 p.m. Partners are required. For additional information, contact the Gilruth Center at x33345.

**Golf Lessons:** Lessons for all levels. Cost is \$90 for six weeks. For additional information, contact x33345.

**Volleyball registration:** Registration for Mixed "C" volleyball is Aug. 16. Registration for mixed "B" women's and men volleyball is Aug. 17. For additional information, call x33345.

**Basketball registration:** Registration for men's basketball is Aug. 18. For additional information, call x33345.

**Softball tournament:** The Summer Sizzler softball tournament will be held Aug. 20 and 21. Registration is \$100. For additional information, contact x33345.

**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.

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# Swap Shop

## Property

Lease: CLC, 3-2-2, fenced, no pets, \$700/mo + \$300 deposit. 326-6782.

Lease: Sagemont TH, lg 2-2.5, sunroom w/skylights, ceiling fans, all appliances, FPL, no pets. avail Sept, \$675/mo. x30981 or 481-1239.

Sale: Pasadena, 4-2-2, both formals, 2100 sq ft, new roof and vinyl floors, \$78.5k. Cindy Cole, 479-6489 or Tamela, x36155.

Rent: Breckenridge, CO, 4-3-loft, sleeps 12, panoramic views, \$150/night in summer. (303) 482-9124.

Sale: Brook Forest CLC, 5-2.5-2+, 3100 sq ft, pool, dbl deck, updated appl, new roof, heat, paint, 8 huge trees, \$179k. 488-3354.

Sale: Bayridge, LC, 3-2-2, cul-de-sac, lg yard, assumable, \$58k. 286-1934.

Rent/Sale: Univ Trace condo, 1 BR, 832 sq ft, upstairs/downstairs unit, FPL, W/D, new paint and carpet, \$450/mo or \$35k. 286-1934.

Sale: Rosewood Memorial Cemetery lots, \$395 ea. x40250 or 941-3262.

Sale: Seabrook, 4-2-2, brick, near schools, park and pool. 474-2071.

Sale: Clear Lake Shores, 3-2-1, 80x100 ft lot, open concept, galley kitchen, \$99.5k. 334-2495.

Sale: Seabrook A-frame, 3-2, lg car port, spiral staircase, vinyl siding, 15x15 deck, close to water, \$59.9k. 474-9569.

Lease: Friendswood, 3-2-1, approx 1400 sq ft, avail 5-9-94, \$525/mo + \$450 deposit. x38294 or 482-6816.

Sale: Two four-plexes, 2 BR 2 pts ea, FPL, \$118k ea. Dan Bennett, 388-1095.

Sale: '83 Redman Mobile Home, 14x70, 2-2, CA/H, vinyl siding, skirting, 2 sets concrete steps, mini blinds, curtains, ex cond, to be moved. Linda, 283-0311 or (409) 925-4862.

Lease: Galveston Seawall condo, 1 BR, fully furn, \$415/mo, 6 mo lease. x30737.

Lease: San Jacinto College area, 3-1-1, \$450/mo. Minh, x37492 or 484-2456.

Sale: LC, mobile home on lot. Mike, x39491 or (409) 925-2330.

Sale: Wooded lot, .75 acre, fronts clear running stream near Tomball, deed restricted, paved streets, water and elec. \$12k. 333-4609.

Lease: Baywind II, 1 BR, appliances, FPL, no pets, \$385/mo. 488-5019.

Sale: Meadowbend, LC, 2 story, 3-2.5-2, 2200 sq ft, FPL, fenced back yard, lg deck, shed in backyard, lg shade trees, new flooring, new A/C and heater, ceiling fans, new ext paint. \$85.9k. x31891.

Sale/Lease: Univ Trace condo, 2-2, redecorated, FPL, W/D, refrigerator, cov parking, 2 pools, gym, saunas, \$565/mo. 488-5092.

Lease: Pearland, 4-2, 2000 sq ft, island kitchen, FPL, Jacuzzi, sec alarm, fans, landscaping, avail 10-1, \$1k. Gunter, 485-8398.

Rent: Heritage Park, 3-2-2, 1700 sq ft, new carpet, floor and A/C, new paint and roof. Sonny, x38533 or 474-4198.

Rent: Galveston condo, Seawall & 61st St, furn, sleeps 6, wknd/wkly/dly rates. Magdi Yassa, 333-4760 or 486-0788.

Rent: Colorado home, furn, sleeps 6, close to fishing/other summer activities, no smoking/pets, day/wk/mo or longer. Bob, x30325 or 998-7372.

## Cars & Trucks

'74 Corvette Stingray, competition orange w/saddle int, ext and int ex cond. 474-2071.

'84 Dodge Ram Sport-50 PU, 2.6L, 4 cyl, A/C, auto, AM/FM/cass, \$1.2k. x39120.

'91 Geo Metro, 4 dr, 5 spd, red, 23k mi, A/C, AM/FM, ex cond, \$4.8k. Bob, 282-4510 or 482-5984.

'86 Toyota PU longbed, rough but runs good, \$1.5k. 427-7983.

'83 Buick Regal Ltd, V6, 3.8L, A/C, AM/FM, pwr windows, \$2k OBO. x32442 or 280-8484.

'88 Toyota 4 Runner, 2 dr, red, 4WD, V6, A/C, auto, pwr, cassette, 84k mi, ex cond, \$11.5k. Jeff, x38424 or 331-7166.

'72 Classic Karman Ghia, bright orange, new battery and starter, new headliner and visors, ex cond, 90k mi. 992-3662 or pager 938-1323.

'68 Pontiac Firebird convertible, 400 turbo auto trans, A/C, JVC pullout AM/FM/cass. \$6.5k. (409) 945-6803.

'89 Mustang LX, immaculate interior and exterior, blue, \$3.9k. Darius Davis, 996-9933.

'88 Ford Mustang, white w/blue int, 2.3L, 4 cyl, 2 new tires, new timing belt, \$2.9k OBO. x31423.

'78 Pontiac Trans Am, 400, blue, T-tops, restored, ex cond, garaged, 331-7435.

'68 Chevy 327 parts, heads, ex & in manifolds, A/C compressor, flywheel, carb, air filter housing. Boykin, x37341 or 326-1267.

'82 VW Jetta, 4 dr, 5 spd, A/C, AM/FM/cass, 1.6L diesel, 50 mpg. Boykin, x37341 or 326-1267.

'89 Cutlass Supreme Int'l, 2 dr, red/grey, ex cond, loaded, 60k mi, \$8.5k. x40215.

'79 Ford PU, 6 cyl, stepside, rebuilt motor, auto trans, A/C, new tires, needs paint, \$1.5k OBO. 445-6240.

'84 Nissan 300ZX, ex cond, \$2990 OBO. x30737.

'90 Honda Prelude, red, 5 spd, tape, A/C, sun roof. x31384 or 487-2383.

'83 Toyota Cressida, loaded, ex cond, \$3.1k. 488-5019.

'91 Camaro RS, V8, auto, 46k mi, CD, alarm, loaded, new tires, \$8.9k. x38785 or (409) 945-8787.

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## Today

**Cafeteria menu** — Special: baked meatloaf. Total Health: light macaroni and cheese. Entrees: baked scrod with Hollandaise, broiled chicken, pork and beef egg rolls, steamed fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: stewed tomatoes, seasoned spinach, cut corn, macaroni and cheese.

## Monday

**NMA Class** — The Texas Gulf Coast Council of the National Management Association will host a 10-hour "Successful Money Management Seminar" from 6-9 p.m. Aug. 15 and 22. Cost to attend is \$50 per couple for members, \$75 for non-members. For additional information, contact Richard Hergert, 280-0444.

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

## Tuesday

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

## Wednesday

**Cafeteria menu** — Special: pepper steak. Total Health: stir fry pork with rice. Entrees: liver and onions, catfish and hush puppies, stir-fry

pork with rice, steamed fish, Reuben sandwich. Vegetables: steamed broccoli, yellow squash, macaroni and cheese, vegetable sticks.

## Thursday

**Cafeteria menu** — Special: chicken fried steak. Total Health: fat-free vegetable soup. Entrees: beef tacos, scrod with Hollandaise sauce, steamed fish, French dip sandwich. Soup: navy bean. Vegetables: spinach, cut corn, breaded okra, pinto beans.

## Friday

**Cafeteria menu** — Special: tuna noodle casserole. Total Health: steamed salmon steak. Entrees: steamed salmon steak, roast beef, baked chicken, steamed fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: French cut green beans, cauliflower with cheese, green peas, black-eyed peas.

## Aug. 10

**PSI meets** — The Clear Lake/NASA Area chapter of Professional Secretaries International meets at 5:30 p.m. Aug. 10 at the Holiday Inn on NASA Road 1. For additional information, contact Elaine Kemp, x30556 or Diana Peterson, x33077.

**Blood drive** — McDonnell-Douglas will host a blood drive from 8:30-11:30 a.m. and from 1-3:30 p.m. in the rear parking lot at 13100 Space Center Blvd. For information, contact Teresa Esquivel, 212-5036.

## Aug. 11

**Blood drive** — Loral will host a blood drive from 7-11:30 a.m. at Loral Bldg. 1, 1322 Space Park Drive and from 1:30-4:30 p.m. at Loral Bldg. 11, 1816 Space Park Drive. For an appointment, call 335-5030.

## Aug. 16

**Blood drive** — Loral will host a blood drive from 8-11 am. at Loral Bldg. 3, 3700 Bay Area Blvd., and from 1:30-3:30 p.m. at Marina Plaza, South Shore Harbour. For an appointment, call 335-5030.

## Aug. 17

**Book signing** — Astronaut Alan Shepard will be at Jeremy's Bookshelf from 4:30-6:30 p.m. Aug. 17 to sign copies of his book Moon Shot. The store is located at 2441 Bay Area Blvd. For additional information, call 486-8028.

## Aug. 21

**Chorus auditions** — The Bay Area Chorus will hold auditions for the Fall 1994 season from 3-5 p.m. Aug. 21 at Clear Lake Presbyterian Church, 1511 El Dorado Blvd. For an appointment, call 684-6030.

## Aug. 25

**Blood drive** — Krug Life Sciences will host a blood drive from 8:30-11:30 a.m. in the parking lot at 1290 Hercules. For information, contact Beth Brumley, 212-1204.

**Blood drive** — Barrios Technology will host a blood drive from 12:30-3:30 p.m. at 1331 Gemini. For additional information, contact Tom Hanson, 244-7473.

## Sept. 5

**Labor Day** — Most JSC offices will be closed in observance of the Labor Day Holiday.

## Sept. 14

**PSI meets** — The Clear Lake/NASA Area chapter of Professional Secretaries International meets at 5:30 p.m. Sept. 14 at the Holiday Inn on NASA Road 1. For information, contact Elaine Kemp, x30556 or Diana Peterson, x33077.

tion, \$50. Ken Gary, 282-4318 or 996-1094.

'72 Honda 350CL, good cond, tires, runs, \$350 OBO. Chuck, 282-3907.

Honda CX500 motorcycle, good cond, \$800. Rusty, x35589 or 474-9140.

## Audiovisual & Computers

AST color notebook, 386SX/25, 4MB RAM, 60MB HD, 1.44MB FD, fax modem, DOS, Windows, carry case, \$1.2k; new Canon BJ-10SX bubble jet printer w/carry case, \$220. Kelly, x36818 or 488-8194.

Panasonic 27" stereo/remote color TV, \$300; RCA 19" color TV, \$45; Emerson VCR, \$50; ans mach, \$20. x47882 or 992-8875.

386DX 25MHz computer, 4MB RAM, 90MB HD, 3.5" and 5.25" FD, SVGA monitor and card, \$600 OBO. Chad, x35786 or 482-9263.

Sega Game Master Control w/7 games; Atari Master Control w/numerous games. 326-2307.

Macintosh Classic II, 4MB RAM, 80MB HD, HP Deskwriter, academic programs, Word 5.0 & Excel 4.0, carrying case, dust covers. x34825.

Computer 286, 1MB RAM, 40MB HD, 3.5 and 5.25" FD, Super EGA 14" monitor, fax/modem 2400/9600 card, Panasonic KX-P1191 dot matrix printer, \$350. Gunter, 485-8398.

## Musical Instruments

Yamaha CVP3 keyboard, \$500. 332-8111.

Boss 4-track recorder w/4 channel mixer, \$100; Yamaha RX-17 drum synthesizer, \$75. Jim, x36926 or 554-5375.

Vito Reso Tone clarinet w/Vandaren mouthpiece and case, \$150; Bundy, Selmer, flute w/case, \$125. Linda, 283-0311 or (409) 925-4862.

Noblet B flat clarinet, wood, ex cond, was \$1120, now \$400; B&H B flat clarinet, wood, good cond, was \$600, now \$150. Linda, x30069 or 286-5937.

Fender Telecaster, professional model made in USA to 1952 specs, blonde w/blk pick guard, Fender amp, \$750. x35180 or 326-3706.

Yamaha 6-piece maplewood custom drum set w/Zildigian symbols, \$1650; Remo rotor toms, \$95. x35180 or 326-3706.

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Solid wood rollout desk, \$500. 332-8111.

Oak entertainment center, adjustable shelves, ex cond, \$125. Mark or Vicki, 488-4014.

White wicker kitchen set w/



# Remembering one small step

## From splashdowns to galas, events recall Apollo 11 glory

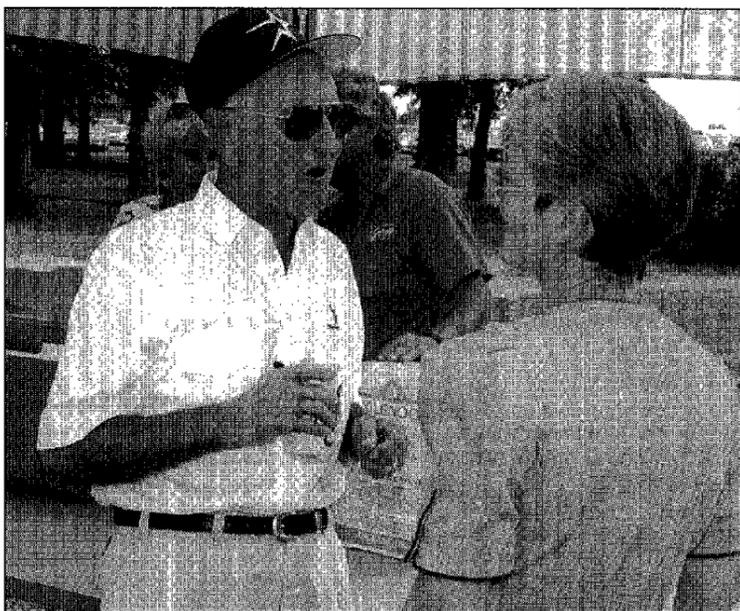
**T**hroughout the month of July, a number of events throughout the JSC area celebrated the 25th anniversary of the first lunar landing.

More than 1,700 current and former JSC employees celebrated the silver anniversary at an old-style "splashdown party" at the Gilruth Center. Other Apollo 11 commemorations included an appearance by space enthusiast and musician John Denver at Space Center Houston, a baseball game between current and former astronauts and former Houston Astros baseball players, the annual Loral space run and the unveiling of a commemorative lunar postage stamp.

In addition a group of Apollo flight controllers led by Apollo 11 Flight Director Gene Kranz helped students at the Challenger Center conduct a simulation of the first lunar landing.

- Left to right, top to bottom:
- 1) At Space Center Houston, Dot and Bob Thompson sign autographs.
  - 2) Ted Guillory, left, and Steve Bales, right, work with a student at the Challenger Center.
  - 3) Gene Kranz gives a hug to Cathy Bright, an Image Sciences Division television services worker, after she brought him a cigar to celebrate at the splashdown party.
  - 4) Apollo Mission Control veterans work with students at the Challenger Center in a reprise of the Apollo 11 mission.
  - 5) Guillory shares a happy moment with a Challenger Center student.
  - 6) Christopher Kraft Jr. talks with JSC Exchange Manager Teresa Sullivan at the splashdown party.
  - 7) Astronaut Walt Cunningham give his perspective during an Apollo panel discussion at Space Center Houston's Silver Anniversary

- Gala. Cunningham flew aboard Apollo 7.
- 8) Houston City Councilman Joe Roach presents a proclamation recognizing the significance of the 25th anniversary of the Apollo 11 landing as Kent Black, Rockwell's executive vice president, looks on.
- 9) Astronauts Brent Jett, Mario Runco, Rick Linnehan and Kent Rominger celebrate Space Day at Space Center Houston with Marilyn Lunney and Betty Ann Kraft.
- 10) Raymond Smith, a communications controller during the Apollo 11 mission, gets autographs in his "mission book" at the splashdown party.
- 11) Rockwell's Keith McClung, left, director of support system operations, and Kent Black check out the new stamp commemorating the first Moon landing with country and western singer Joe Diffie and U.S. Postmaster Andrew Kerr. □



JSC Photos by Robert Markowitz  
Space Center Houston Photos by J. Pamela Photography  
Challenger Center Photos by Houston Museum of Natural Science, William F. Ferreira

## Emergency team named

Keith McQuary recently was named emergency preparedness manager by Center Director Dr. Carolyn Huntoon.

In this newly created position, McQuary will coordinate all existing JSC emergency operations and plans, develop training plans for employees, and act as liaison with state and national agencies and local communities for all emergency situations at JSC.

Robert Gaffney, Chief of the Security Operations Branch, recently was detailed to the Emergency Preparedness office.

Gaffney will join Keith McQuary in coordinating JSC's emergency preparedness program. The Emergency Preparedness Manager and staff are

hardlined into the Center Operations Directorate, but report to the center's Deputy Director.

### Roeh named chief

William Roeh has been named Chief, Plant Engineering Division of the Center Operations Directorate.

Roeh will fill the vacancy created by the reassignment of Keith McQuary as JSC's Emergency Preparedness Manager. Previously Roeh served as chief of the Project Design Office, Facility Development Division for the past five years.

### Kemp receives award

Elaine Kemp recently was awarded the Marilyn J. Bocking award for secretarial excellence.

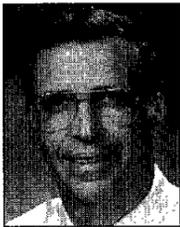
Kemp supports the Flight Crew



McQuary



Gaffney



Roeh



Kemp



Aven



Garza-Flores

Operations Directorate and was cited for her "willingness to perform beyond the requirements of her position description."

Kemp's enthusiasm and dedication has made her an "outstanding asset not only in her immediate office but to the entire directorate," according to the award nomination.

### Aven receives honor

Honey Aven, secretary in the

Orbiter Resources and Analysis Office, recently received the Marilyn J. Bocking Award for secretarial excellence.

Aven supports the office with "efficiency and dedication," according to the award nomination. Aven also was cited for her ability to meet critical deadlines and coordinate complex award fee evaluations with other organizations.

### Garza-Flores honored

Rosalina Garza-Flores recently received the Outstanding Secretary Award from the Space Station Program Office. Garza-Flores "is an outstanding asset to the space station operations organization" and has taken the initiative in guiding the "organization from its inception to a viable efficient office," according to the award nomination.

## Interviews continuing for astronaut hopefuls

The fourth of about six groups of prospective astronauts was at JSC this week for orientation, interviews and medical evaluations.

The 20 applicants interviewing this week included: Jeffrey Ashby, Lemoore, CA; Owen Brown, Mountain View, CA; Alan Carroll, Houston, TX; Nancy Fechtig, Great Mills, MD; Michael Fossum, JSC; Robert Fuschino, Gulf Breeze, FL; Carlos Grodzinsky, Strongsville, OH; Monica Halka, Knoxville, TN; Patricia Hall, New Orleans, LA; Sharon Houck, Lexington Park, MD; Steven Lindsey, Eglin AFB, FL; Michael Massimino, Houston, TX; Pamela McCauley-Bell, Oviado, FL; Robert Niewoehner, Jr., California, MD; Thomas Phelan, Oak Harbor, WA; Shelly Pope, Mountain View, CA; Kimberly Smith, Arlington, TX; Martin Sullivan, Quantico, VA; Richard Tubb, Troy, IL; and Rex Walheim, Palmdale, CA.

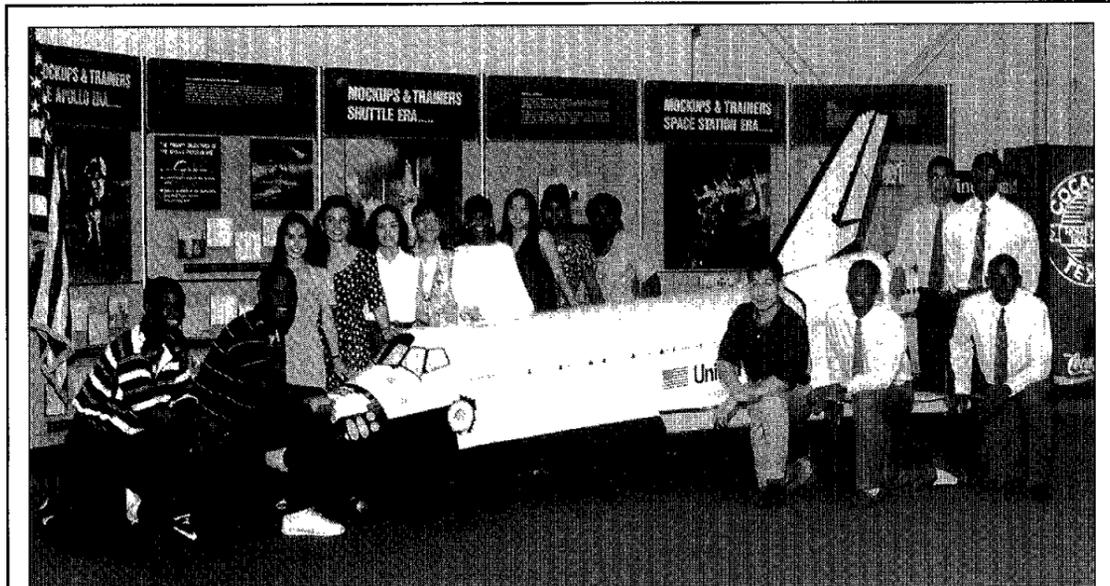
Next week, the fifth group of astronaut hopefuls will arrive for interviews and medical evaluations.

The fifth group includes: Robert Alvarez, Albuquerque, NM; William Arnold, Akron, OH; Andrew Benjamin, JSC; Bruce Betts, San Juan Capistrano, CA; Deepak

Boggavarapu, Eugene, OR; Austin Boyd, Fredericksburg, VA; Jill Brigham, JSC; Yvonne Cagle, North Highlands, CA; Jeffrey Campbell, Monument, CO; Andrea Donnellan, Altadena, CA; Deborah, Falley, Leucadia, CA; Kevin Ford, Wright-Patterson AFB, OH; Christopher Habig, Edwards AFB, CA; Janet Kavandi, Renton, WA; David Lazerson, Tehachapi, CA; Wilson Miles, Jr., JSC; Clyde Rosamond, CA; Maurena Nacheff-Benedict, Redondo Beach, CA; Gary Plumb, Niceville, FL; and David Tobin, Layton, UT.

About 120 of the 2,962 applicants will be interviewed throughout the month for a chance to be among approximately 20 named as astronaut candidates. The final selections will be announced in the fall with the new astronaut class reporting in early 1995. Those selected will join an international astronaut candidate representing Japan.

Astronaut candidate selections are conducted approximately every two years. The number of candidates selected depends upon the space shuttle flight rate, overall program requirements and astronaut attrition.



**BRIGHT FUTURES**—Fifteen high school students spent their summer vacation at JSC gaining valuable skills as part of the Summer High School Apprentice Research Program. SHARP students worked with JSC mentors on a variety of projects and programs, including the Shuttle Amateur Radio Experiment, the Shuttle Plume Impingement Flight Experiment flown set to fly on STS-64, and the redesign of the Mobile Transport Servicer. These students also received advice on college admission, financial aid and scholarships. All 15 SHARP participants were honored at an Aug. 5 banquet at South Shore Harbour. Clockwise from front left, Ronnie Glenn, Rabu Leyva, Andrea Rodriguez, Jackie Willis, Tina Montoya, Xue Huang, Kelly Haskins, Julia Garcia, Andrea Hayes, Edian Nelson, Michael Castillo, Thomas Benford, Terrance Cravins, Alex Williams and Mike Rodriguez.

## JSC employees honored at award ceremony today

More than 100 JSC employees will receive the center's highest honorary award at a ceremony at 3:30 p.m. today in the Gilruth Center Ballroom.

The JSC Certificate of Commendation will be presented to 104 employees by Center Director Dr. Carolyn Huntoon and Deputy Director George W. S. Abbey.

Directors and program managers will join Huntoon and Abbey on stage during the presentation ceremony.

A reception for award recipients and their guests will be held following the awards presentation.

Supervisors are encouraged to allow JSC civil service and contractor employees to attend as workloads permit.

Award winners are: Matthew R. Abbott; Timothy M. Ames; David A. Amidei; Joseph D. Atkinson, Jr.; Lambert D. Austin, Jr.; Patricia A. Bahr; Lori E. Beauregard; Albert F. Behrend, Jr.; Chester E. Bennett; Donald R. Blevins; Leon A. Blum; Robert L. Bond; Lisa M. Bowen; Jill D. Brigham; J. Travis Brown; C. Marc Buntin; Lynn E. Buquo; Tommy E. Capps; Peter J. Cerna; Lizabeth A. Cheshire; Philip J. Cleary; Deborah A. Conder; Joseph F. Cook; Lawrence O. Corcoran, Jr.; Sharon L. Cordes; Maryann Cresap; Emily G. Darnell; Billie A. Deason; John E. DeFife; Philippe Dejour; James H. Dewberry; Marilyn E. Dotson; Wilbert E. Ellis; Heibert G. Epps; A. Gerald Esquivel; Donna L. Fender; Steve M.

Fitzgerald; Ernest M. Fridge III; Jeannette M. Gillogly; Allan D. Gist; Gary L. Gutschewski; Robert A. Handley; William J. Harris; Michael F. Heidt; John B. Henderson; Donald L. Henninger; Jewel R. Hervey; Clifford W. Hess; Wanda S. Hoble; James R. Jaax; Linda R. Kirbie; Gary H. Kitmacher; Cindy L. Kochan; Carl F. Koontz; Allison L. Kruetz; William A. Larsen; Thomas Quan Le; Matthew J. Lemke; Larry C. Li; Mark A. Martin; John P. McManamen; Melvin D. Mears; Heather M. Moncrief; James D. Moncrief; Dianne J. Murphy; Lisa A. Navy; Son D. Nguyen; Mary M. Nordin; Christine A. O'Neill; Jose M. Olivarez, Jr.; Albert Y. Ong; Robert J. Panneton; Louis A. Parker; George F. Parma; Nancy J. Patrick; Mary Anne G. Plaza; Michael R. Powell; Michael E. Read; Elisabeth M. Rigby; Dale R. Roberts; Michelle A. Rucker; Patricia J. Sampsel; Merri J. Sanchez; Penny E. Saunders; Margaret G. Savoy; Richard A. Schmidgall; Sidney H. Schmidt; Howard J. Schneider; Calvin Schomburg; Ben L. Sellari; Michael T. Suffredini; James E. Townsend; Alexandria G. Truong; Linda J. Uljohn; Jennifer D. Villarreal; James S. Voss; Joel B. Walker; Carl C. Weber; Stephanie A. Wells; Peggy A. Whitson; Donald L. Wiley; Clarence E. Williams; Sue U. Wilson; Lucy V. Yates.

For additional information, contact Helen Harris at x38413.

## Papers due for logistics symposium

The sixth Space Logistics Symposium is set for February, 1995 at South Shore Harbour Resort & Conference Center.

The deadline for submitting paper abstracts for presentation at the conference is Aug. 24. Papers may cover a wide variety of subjects including hardware processing and development, or topics involving engineering or logistics. For addi-

tional information on submitting an abstract, contact Greg Opresko at Kennedy Space Center, (407) 861-5370.

Several tutorials and workshops also are planned during the two-day event, planned for Feb. 24-25, 1995.

For additional information on the conference, contact Program Co-chairman Lee Graham at x30913.

## Space News Roundup

The Roundup is an official publication of the National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, Houston, Texas, and is published every Friday by the Public Affairs Office for all space center employees.

Editor ..... Kelly Humphries  
Associate Editor ..... Kari Fluegel  
Associate Editor ..... Eileen Hawley

## STS-64 crew to brief press

The STS-64 pre-flight press briefings will take place Tuesday from JSC and Goddard Space Flight Center.

STS-64 is scheduled to launch the Lidar In-Space Technology Experiment payload on Sept. 9. LITE is a technology demonstration payload which will beam narrow pulses of laser light through the atmosphere and use a telescope to measure the laser's light as it is reflected from clouds, suspended particles in the air and the Earth's surface.

The briefings will begin at 8 a.m. with a mission overview. At 9 a.m., panelists will discuss the LITE payload. That briefing will be followed by a discussion on the Robot Operated Materials Processing System, Shuttle Pointed Autonomous Research Tool for Astronomy, and Get Away Special payloads.

A briefing on the Shuttle Plume Impingement Flight Experiment begins at 12:30 p.m. from JSC. That briefing will be followed by a discussion of the Simplified Aid for EVA Rescue at 1 p.m.

The STS-64 crew — Commander Dick Richards, Pilot Blaine Hammond, and Mission Specialists Carl Meade, Mark Lee, Susan Helms and Jerry Linenger — will participate in the crew pre-flight press conference.

## JSC workers join effort to revise purchase policy

A team of NASA employees is working together to redesign the agency's small purchase system.

The team consists of employees from different field centers and disciplines including finance, procurement, logistics as well as technical customer representatives. The Small Purchase Reengineering Team was chartered by Deputy Administrator Gen. John Dailey to redesign the small purchase process to maximize customer satisfaction, minimize regulatory interventions and make the best use of government resources.

The team first met in April at Goddard Space Flight Center and final recommendations should be

presented to NASA management by the end of August.

"Our goal is to create a small purchase system that is flexible, fast, easy and meets the needs of our customers," said team leader John Scully of GSFC. "By eliminating redundancy and finding ways to maximize our resources, we can offer our customers more choices and authority."

Team members are Sally Branson, JSC; Connie Stott, LaRC; Bernice Johnson, ARC; Carl Eichenlaub, Headquarters; Rick Keegan, GSFC; Bill Potter, GSFC; and Debbie Carraway, LaRC. Logistics representative is Kyle Longstreth of IM-SAT-1.

## MCC open for viewing

The Mission Control Center viewing room will be open to JSC and contractor badged employees and their families during portions of the STS-68 mission.

Based on a Thursday launch, employees may visit the MCC from noon-2:30 p.m. and 5-7 p.m. Friday.

The MCC also will be open from 1-5 p.m. Sunday; and from 11:30 a.m.-2:30 p.m. and 5-7 p.m. Aug. 23. Viewing hours continue from 11:30

a.m.-2:30 p.m. Aug. 25, from 11:30 a.m.-2:30 p.m. and 5-7 p.m. Aug. 26 and from 1-5 p.m. Aug. 27. There will be no scheduled viewing hours on Aug. 28 due to the planned landing.

Employees must wear their badges and escort family members through the regular public entrance on the northeast side of Bldg. 30.

For the latest schedule, call the Employee Information Service at x36765.

## Craft observe universe

(Continued from Page 1)

of the probe's axial boom which is exposed to the sun.

Both Voyager spacecraft are continuing their journeys through the solar system.

The Voyager 1 spacecraft used two of its scientific instruments to observe any ultraviolet emissions or radio signals during the July comet

collision with Jupiter. Neither instrument detected any emissions. Voyager 1 will continue to observe the giant planet until Aug. 17.

Voyager 1 is currently 5.2 billion miles from Earth and Voyager 2 is about 4 billion miles away.

Both spacecraft are healthy and continuing to take data on fields and particles in interplanetary space.