

National Aeronautics and Space Administration

Lyndon B. Johnson Space Center Houston, Texas



Perfect practice

Shuttle astronauts and Russian cosmonauts participate in two weeks of medical and scientific training. Photos are on



Lesson plan

The president of the University of Texas visits JSC to discuss joint programs between the center and the University. Photos on Page 4.

Space News Roundup

Huntoon begins sweeping reorganization

Vision stresses better teamwork

JSC Director Dr. Carolyn Huntoon last week announced a series of organizational changes designed to position the center to meet the challenges of today and the opportunities of the future.

Huntoon said the need to assure the success of the shuttle and International Space Station programs in light of reduced budgets provided the impetus for change.

"Faced with unprecedented challenges in the form of diminishing resources and the need to effectively support two major programs, we must find ways to take even greater advantage of the unique combination of expertise in engineering, science and operations at this center," Huntoon said. "We currently enjoy the greatest level of public support in recent years, and we must deliver on that support. These changes will help us

do that."

Huntoon said JSC's current structure and business practices have served the center and NASA well in the past, but that the new organization, combined with new ways of doing business, is needed to position JSC for the future.

"This reorganization offers a great opportunity to become more efficient and effective, both in our business practices and our technical activities," Huntoon explained. "We have the chance to realign valuable resources at this center so that they can be applied creatively to meet any new challenge, and at the same time enrich our employees with broader experience and our organizations with greater depth of talent.'

The three principal goals of the moves are Please see **HUNTOON**, Page 4

Transition team works on details

Although many of the details of JSC Director Dr. Carolyn Huntoon's reorganization are still being worked out, a broad framework of the changes to come is now being fashioned.

A transition team, chaired by Sue Garman, Executive Assistant to Huntoon, has been set up to oversee the issues and details involved in implementing this organizational change. The team already is working on ground rules, refining details and recommending a timetable for implementing cultural change initiatives.

To meet the first major thrust of the reorganization—streamlining and strengthening program and project support—a new JSC Projects Office is being created. Larry Bourgeois will serve as deputy projects manager and acting head until a manager for the new office is named.

The new organization will include the Orbiter Project, headed by Dan Germany, and the

By James Hartsfield

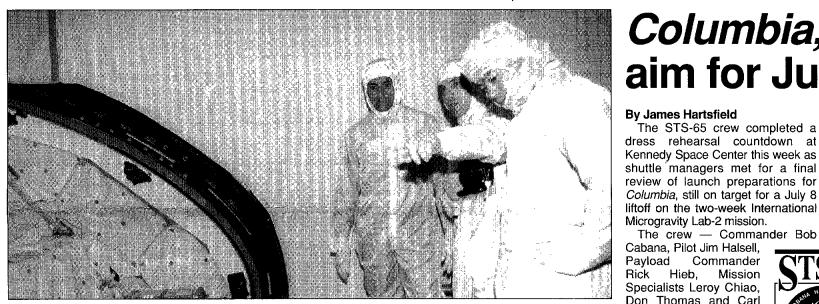
Phase I Russian activities led by Frank Culbertson. The new office will become the focal point for ground systems engineering and engineering integration support

Charlie Harlan will continue to lead the Safety, Reliability and Quality Assurance Office, but in an effort to bring additional operations strength, Astronaut Steve Nagel will be detailed to SR&QA as deputy director for operations and development. SR&QA functions will be realigned internally to provide the best possible support to all JSC programs and projects.

The second principal thrust, to strengthen JSC's core technical capabilities, will be accomplished through a number of changes to JSC's major line organizations.

The Mission Operations Directorate, under the leadership of John O'Neill, will continue to

Please see CHANGES, Page 4



At Kennedy Space Center, from left Don Thomas, Carl Walz and Leroy Chiao examine elements of the International Microgravity Laboratory-2 Spacelab module. The module was integrated into Columbia's payload bay in readiness for the launch of STS-65. Liftoff currently is targeted for July 8.

Bolden departs JSC for Marines

By Kyle Herring

Four-time shuttle astronaut Charlie Bolden will leave NASA to become deputy commandant of midshipmen at the Naval Academy in Annapolis, Md., effective Monday.

In his new role as deputy commandant of midshipmen, Bolden will assist the commandant with the formulation and

execution of Naval Academy policy. He will be responsible for the execution of the day-to-day routine of the brigade. Bolden also will coordinate and direct the training of the brigade officers.

Bolden leaves NASA after a 14-year career. He was selected as an astronaut in 1980 flying his first mission in January 1986 aboard Columbia on the STS 61-C mission During the six-day flight, the crew deployed a communications satellite and conducted several experiments in astrophysics and materials processing.

His second flight was aboard Discovery on the STS-31 mission to deploy the Hubble Space Telescope in April 1990. As commander of Atlantis' STS-45 mission in March 1992, Bolden watched over the orbiter during the conduct of 12 experiments that made up the first Atmospheric Laboratory for Applications and Science payload.

Bolden's final Shuttle mission was in February aboard Discovery on STS-60. The mission marked the first joint U.S./Russian shuttle flight with cosmonaut Sergei Krikalev flying as a crew member. It was the first flight of the Wake Shield Facility designed to evaluate the effectiveness of growing semiconductors, high temperature superconduc-

tors and other materials using an ultra-high vacuum behind the spacecraft.

"It is with mixed emotions that we say goodbye to Charlie, but we wish him well at Annapolis," said Dave Leestma, flight crew operations director. "Having served as a crew member with him, I saw a clear demonstration of the leadership qualities he has. While we will miss Charlie, he certainly has left a positive mark, not only on the astronaut corps, but on everyone who knows him throughout NASA."

In addition to flying more than 680 hours during his four space missions, Bolden has logged more than 6,000 hours flying various aircraft. The 47-year-old graduated from the Naval Academy in 1968 and earned a

master of science degree in systems management at the University of Southern California in 1977.

Microgravity Lab-2 mission. The crew — Commander Bob Cabana, Pilot Jim Halsell, Payload Commander Hieb, Mission Specialists Leroy Chiao, Don Thomas and Carl Walz, and Japanese Payload Specialist Chiaki Mukai — spent the first half of the week at KSC the countdown rehearsal and required

The STS-65 crew completed a

dress rehearsal countdown at

review of launch preparations for

Columbia, still on target for a July 8

liftoff on the two-week International

Columbia, crew take

aim for July lift off

pre-launch safety training. Other work this week to ready Columbia for flight included a flight readiness test of the main engines and aerosurfaces, and helium leak check testing of Columbia's main engine plumbing system. Preparations also are under way for the loading of hypergolic propellants aboard the spacecraft next weekend. Technicians also were replacing the outer pane of one of Columbia's windows.

Elsewhere, Endeavour continues to move toward a mid-August launch on STS-68, the second flight of the Space Radar Laboratory. In KSC's Bay 1 shuttle processing hangar, work this week included verification of the main propulsion system, checks of the opening and closing of the cargo bay doors, replacement of a thruster on the left orbital maneu-

> vering system pod and the removal of one of the auxiliary power In the Vehicle three units. Assembly Bldg., the solid rockets for STS-68 are stacked and work is in progress to attach the external fuel tank for Endeavour to them.

> In the Bay 2 hangar, work on Discovery also

progressed smoothly this week toward an early September launch on STS-64, a mission that will carry the Lidar in Space Technology Experiment aloft for the first time.

Work this week included preparations to install Discovery's three main engines; leak and functional checks of the auxiliary power units, tests of the flash evaporator system and the installation of the Get Away Special canisters support beam.



JSC Photo by Scott Wickes

COOPERATION PACT—NASA Contracting Officer Lee Evey, at JSC from NASA Headquarters, and Russian Space Agency representative Nikolai Zhulin sign an agreement for the two countries to work together on Phase I Russian Program science and research aboard Mir and some Phase II international space station development activities. The contract was delivered to Washington, D.C., for final signatures by NASA Administrator Daniel Goldin and RSA Director Yuri Koptev.

Astronaut hopefuls arrive at JSC

By Kyle Herring

Over the next several weeks, more than 100 astronaut-hopefuls will visit JSC for orientation, interviews and medical interviews.

The first of several groups of prospective astronauts will be at JSC beginning Monday.

More than 2,962 applications were received for this year's selection process. Interviews will continue throughout June, July and August with final selections of approximately 20 astronaut candidates to be announced in the fall. The new astronaut class will report to JSC in early 1995.

Those selected will join an international astronaut candidate representing Japan.

Bolden

The first group of 20 interviewees includes Navy Lt. Cdr. Scott, San Diego, CA; Janice Bishop. Providence, RI; Navy Cdr. David Brown, Fallon, NV; Navy Robert Curbeam, California, MD; Navy Lt. Cdr. Joe Edwards, Fairfax, VA; Lorraine Fesq, Playa del Rey, CA; Joan Higginbotham, Titusville, FL; Stanley Koszelak, Riverside, CA; Taylor Lawrence, Arlington, VA; Dan Lubin, Arlington, VA; Air Force Maj. Pamela

Melroy, Edwards, CA; Air Force Capt. Robert Nolan, Niceville, FL; Marine Corps Maj. Carlos Noriega, FPO, AP; John Phillips, Los Alamos, NM; Mark Polansky, JSC; James Reilly, II, Mesquite, TX; Eileen Stansbery, JSC; Huy Tran, Mountain View, CA; Tonie Vandam, Beltsville, MD; and John Wilson, Brighton, MA.

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

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 information, call x35350 or x30990. Sleeping Beauty: Tickets available for June 24 performance of Sleeping Beauty by Friendswood Ballet at the Grand Opera House in Galveston. Cost is \$21 for special seating and \$8.40 for general seating.

Six Flags: Tickets available for one-day weekend and weekday admission. Cost is \$20.95 for weekend and \$16.75 for weekday. Two-day admission, either weekend or weekday, is \$27.25. 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 \$19.95; children under 54 inches tall, \$17.75.

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

Space Center Houston: Discount tickets: adult, \$8.75; child (3-11), \$4.75; commemorative, \$9.55.

Metro tickets: Passes, books and single tickets available.

Movie discounts: General Cinema, \$4.75; AMC Theater, \$4; Loew's Theater, \$4.50.

Stamps: Book of 20, \$5,80

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

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

Weight safety: Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. June 28. Pre-registration is required. Cost is \$5.

Defensive driving: Course is offered from 8:15 a.m. 3 p.m. Saturday. Next class is July 9. Cost is

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

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

Softball Tournament: "Fun in the Sun" softball tournament will be held June 25-26. Cost to enter is \$100. Registration deadline is June 22. For additional information, call x33345.

Salling Club: Sailing lessons are planned for May and June. For information, contact Richard Hoover at x31360 or 996-7716.

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

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.

Dates & Data

Today

JSC

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

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: cream of chicken. Vegetables: buttered corn, steamed spinach, vegetable sticks, navy beans.

Tuesday

NCOSE meets — The Texas Gulf Coast Chapter of the National Council on Systems Engineering meets at 5:30 p.m. June 28 at the International House of Pancakes on NASA Road 1. Brad Cohen of the Boeing Space Station team will discuss 'System Engineering in the Integrated Product Team Process' Cost to attend is \$7. For information, contact Jonette Stecklein, 244-7146; Nancy Wilks. 244-7127; Al Sexton, 333-6961; or Claude Graves, 483-9073.

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

Wednesday

JAS meets The JSC Astronomy Seminar will meet at noon June 29 in Bldg. 31, Rm. 129. For additional information, contact Al Jackson, 333-7679.

Lecture series - A taped lecture course on Ayn Rand's Philosophy of Objectivism runs from 5-6:30 p.m. June 29 in Rm. 3002, Bldg. 4N. For additional information, contact Chris Land, x41059 or Paul Hill, x41092.

Cafeteria menu -Special: Mexican dinner. Total Health: ground turkey tacos. Entrees: Parmesan steak, beef cannelloni, catfish and hush puppies, 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

Cafeteria menu — Special: baked meatloaf. Total Health: lite 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.

July 4

Independence Day — Most JSC Labor Day Holiday.

offices will be closed in observance of the Independence Day Holiday.

July 13

Future Fighters — The Space Station Future Fighters (formerly Space Station Freedom Fighters) will meet at noon and 5 p.m. in the meeting room at the Freeman Memorial Library on Diana St.

PSI meets — The Clear Lake/NASA Area chapter of Professional Secretaries International meets at 5:30 p.m. July 13 at the Holiday Inn on NASA Road 1. For additional information, contact Elaine Kemp, x50561 or Diana Peterson, x30390.

July 21

Apollo anniversary — A 25th anniversary splashdown party is planned from 4:30-7:30 p.m. July 21 at the Gilruth Center. Cost is \$3 per person. Tickets may be purchased at the Bldg. 11 Exchange Store through July 15. Requests for specially designated reunion areas should be made to x34322.

August 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, x50561 or Diana Peterson, x30390.

Sept. 5

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

Swap Shop ads are accepted from current and retired NASA civil service employees and on-site contractor 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 AP3, or deliver them to the deposit box outside Rm. 147 in Bldg. No phone or fax ads accepted.

Property:

JSC

Sale: Nacogdoches, Tx, 3-2.5-2, 3013 sq ft, 3/4 acre, GHA, WB, FPL, screened patio, 20'x30' workshop w/garage & storage shelter, \$110k, 409-560-6537.

Rent: Colorado condo, furn, sleeps 6, no smoking/pets, low summer/fall rates. 488-4453. Rent: Galveston beach house, dly/wkly, cent air, furn. Ed Shumilak, x37686 or 326-4795.

Sale: Galveston beach house, 3-2, cent air/heat, furn. Ed Shumilak, x37686 or 326-4795. Sale: Luxurious condo, Ft Lauderdale, Fl, time share, have video and floor plans, \$10k. 334-

Sale: Friendswood, 4-2-2. all brick, 1/2 ac, approx 2100 sq ft, \$123.5k, 7% fixed. Mark, x38013 or 992-4132.

Sale: Santa Fe, (Alta Loma) 2.5 acres. Raymond, 409-925-1468.

Sale: Lake Houston, lake front property, 60x180, clean. Raymond, 409-925-1468. Rent: Heritage Park, 3-2-2, 1700 sq ft, new floor/carpet & A/C, new roof. Sonny, x38533 or

Sale: Friendswood, 4-2.5-2+, 2137 sq ft, FPL, jacuzzi, formal dining, ceiling fans, sec system, cul-de-sac, \$105.9k. 992-1466.

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

Sale: Point Blank, Tx, 1.9 acres, close to Lake Livingston, William, x37310 or 326-2307.

Lease: Pipers Meadow, 3-2-2A, brick, fenced, new Hi-Eff A/C. \$750/mo. x31275 or 486-0315. Lease: Pipers Meadow, 3-2-2A, large, brick, FPL, A/C, \$890/mo. x31275 or 486-0315.

Lease: Condo, 1 BR, W/D, FLP, sec alarm, appliances, cov'd parking, upstairs. Jim Briley, 244-4632 or 488-7901.

Sale/Lease: BayWind II condo, Ig BR, FPL, W/D hookup, blinds. \$26.9k or \$425/mo. John,

333-4144 or 333-4114. Sale: Galveston condo, Seawall, everything

included, \$28.9. 532-4237. Lease: week vacation, Sat to Sat, anywhere in

U.S./some Foreign countries, depends when avai, \$350/U.S./\$450 Foreign. x34354. Sale: Lake Livingston, 30x70 lot, paved roads,

utilities avail, \$3k will negot. Walt, 422-6369. Lease/Sale: University Trace condo, 2 BDR, cov'd parking, \$450/mo or \$35k. James, 286-

Lease: Hunting, 3300 ac, N/W of Uvlade, \$800. Bill, x34447 or 479-5129.

Cars & Trucks

'92 Honda Accord EX Coupe, loaded, tint, alarm, 5 spd. 14k mi, \$14k. 334-5067.

'88 Ford Tempo, black, new engine, 4 dr, pwr locks/doors, A/C, auto, AM/FM, \$3k firm. 481-

'84 Mazda 626, 4 dr, AC, 94k mi, ex cond,

\$2.2k OBO. x33755 or 280-9173.

'84 Jeep CJ7 w/roll bar & soft top, \$3.2k, Brett, 482-3775

'82 Dodge Stakebed, Dot inspected, new tires/transmission & sideboards, \$2.5. 485-7274

'91 Honda Prelude SI, 28.5k mi, Cupp brown, .ex cond, \$13k. Lynn, x34716.

Boats & Planes

Alum 12', 5 hp motor, galv trailer, seats, oars, gas tank, & anchor. \$750. x30079 or 332-6302. Laser Sailboat, 13'-11" L.O.A., 76 sq ft sail,

centerboard, OBO. Jerry, x35226 or 333-2778. '88 Sportcraft Pesca, 36' x 13', quality components, dry docked, \$90.5k. 360-1978. Chrysler Classic family boat, 14', O/B

Crestliner 45 hp, galv trailer, needs work inside, \$750 OBO. Phil, x31936. Sunfish Sailboat, ex cond, multi-colored, sail,

galv trailer, custom cover, \$1.2k. Mike, x39147 or 474-7370. '81 Hobie Cat 16', EC, mesh trampoline, dou-

ble trap, white w/blue sails, sailbox, trailer, extras, \$1250. 996-5739. '85 Mariner outboard eng, 20 hp, very low hrs, clean, \$1k OBO. Robert, 334-1677 or 717-8231. Chrysler 22' Sailboat, sleeps 6, w/galley &

head, fixed keel, 5 hp outboard, mainsail & 2 iibs, \$2.5k, 282-1727. Sea Ray Cuddy cruiser, 22.5', 228 hp I/O, new Alpha One, VHF, color Furuno depth

sounder, \$6.5k. Mark, x38013 or 992-4132.

R/C Plane-Royal Air 40 | w/Futaba 4 channel controller, ready to fly, everything included, \$370. Anthony, 488-7743.

Audiovisual & Computers

Sony Discman D-211 w/remote and car adapter, ex cond, \$150. Thanh, x31464.

Original Apple IIe. Apple dual disk drive. Apple monitor & dot matrix printer, \$100 OBO. Allen,

Bondwell B310 Laptop PC 286, monochrome LCD w/40 MEG HD & 1.44 FD, Docs, orig disk, mouse, case, spare batteries, \$400. Chris, x30794 or 280-8921.

Macintosh Powerbook 100, system 7.1, FD, 6 MEG of RAM, carrying case, new battery, portable, \$900. 488-9621 or 480-6014.

Musical

Everard player piano, good cond, dark wood w/thirty-five Master Touch Wordroll music scrolls, made in New York, 1929, \$600, 480-7736.

Violin, model 13c, 1990, 3/4 inch body made in W. Germany, Glasser bow, cast & music stand, \$500, 488-5517.

Peavey Bass speaker enclosure with one 15" speaker, like new, \$160 OBO. Jim Bates, x31347 or 944-4687.

Base speakers; Panasonic keyboard; piccolo; coronet; claranet, 482-2498.

Pets & Livestock

Basenji pups, AKC, red/white males, pointed sire & dam, \$400. x33042 or 482-3858.

Arab/Welsh pony, gelding, 14.2 hands, dressage trained, will go western, 7 yrs old, experienced, caring rider only. Rene, x35121 or 488-7909.

Free adult male Tabby cat, neutered, indoor/outdoor, friendly. x31470 or 532-1789. Free 7 mo female kitten, grey tiger w/white paws & chest, all shots, feline leuk neg, will

spray if desired. Liane, x34322.

Free kittens, DOB-4/16, different colors, 2 calico's. Wayne, x32568 or 486-7141.

Household

Brn tweed recliner, ex cond, \$100; brn print loveseat, ex cond, \$100; pastel print loveseat, good cond, \$50, x34772 or 286-0219.

Cherry wood 4 drawer chest of drawers, newly, refinished, 41" x 29" x 17", \$120. Sam, 332-

Tappen solid surface electric range, w/hood, continueous cleaning oven, \$300 OBO. Jean, 922-6674. Babybed/jr bed w/matress, \$100. 474-5976.

Brown vinyl sofa & loveseat w/oak arms & legs, \$225; Magnavox console, \$100. x34354. Qn sz sleeper sofa, beige w/brown & black stripes, comtemporary, good cond, \$100. 488-

On sz hide-a-bed, country blue w/tiny peach flower print, \$350 OBO; 2 tan wing back chairs, \$75/ea; oak colored microwave cart, \$35; oak entertainment center, \$150. Gloria, x31891 or 538-2283.

Black wood stand for 35" TV, like new. Laurie,

x35590 or 991-0821. Sectional 3-piece sofa, cream, matching coffee table, \$600; Panasonic microwave, 700

watts, \$75. 334-3998. Couch, 100", great cond, \$300 OBO. Helen, x30811 or 332-0441. Trundle bed w/mattresses, \$200; rollaway bed

c/mattress; wooden dbl bed wo/mattress, \$35; metal dbl bed frame wo/mattress, \$10, x30446 Bassett bedroom dresser & mirrored hutch,

\$150. Karen, 480-1658. Formal dining room table & chairs, dark oak,

40" x 60" w/2 leaves 40" x 84", 2 arm chairs, 4 side chairs, new, \$2k, sell \$850. Mark, x38013 or

Sofa, 82", beige print, ex cond, \$150 OBO. White bedroom set, 3 pc, \$150 OBO;

sparkling water carbonation machine, \$50 OBO; upright vacuum & attach, \$40 OBO. Tony, x47401 or 482-4156. Med 6-sided dining table w/4chairs, \$60:

veneer end table, good cond, \$15. Cindy, x32188 or 488-5944 Solid wood frame, brn, fine tweed matching couch/loveseat/coffee & end tables, \$300. Allen,

x30791 or 326-4720. West Bend mini food chopper, new, \$10; Black & Decker cup-at-a-time coffee maker,

Master bedroom furn, 5 pcs, kg sz oak waterbed w/mirrored wood canopy, motionless water mattress, Ig oak mirrored dresser & stand-up chest of drawers w/two night stands, \$500, 480-

Cookware, 20 pcs, 18/8 stainless steel, 5-ply Strata Therma, heat resistant handles, new \$1k sell \$600. Sonda, x39326 or 489-4558. Steel G.I. bunkbeds, \$100. Bill, x34447 or

Wanted

new. \$10. 480-3424

Want considerate, responsible housemate, Bay Glen, CLC, 3-2-2, non-smoking, \$300/mo + \$200 dep +1/2 utili. Larry, x33168 or 488-7460 Want non-smoking female roommate to share 3-3-3 house in Meadowbend, LC, no pets, \$350/mo + 1/3 util. Gloria, x31891.

Want personnel to join VPSI van pool, West Loop Park & Ride lot at 6:55 a.m. to NASA/contractors. Richard Heetderks, x37557 or Ed Rangel, x36124.

Want inexpensive car or truck, some repairs

ok. 771-0955.

Want "Squared" are similar orbital style floor sander, finisher. Gary, x31059 or 480-9716.

Want male, non-smoking roommate to share 4 bdr house, Kemah, no pets, \$300/mo + 1/2 util +dep. Jeri, 333-7552.

Want roommate share 3BR condo on lake, all appliances, prefer non-smoker, 1/2 rent + utilities. Hank, x32010 or 338-5068. Want Van pool riders from Sugarland, S/W of

Houston to JSC area. Alice, x35234. Wanted Roller blade skates, ladies, sz 7 & sz 8.488-6798. Want girls to play on mixed C softball team

located in Bldg. 1, some experience desirable, x32077 or 35180. Want responsible M/F roommate to share 4-2-

2, non-smoker, \$295/mo + 1/3 utilities, Co-Ops welcome. Karen, x37389 or 992-3783. Wanted female Doberman puppy. Fran, 333-6277 or 339-3562.

Wanted hunting lease, preferrably near Sonora or Comparable, yearly or daily. Nelda, 333-7686 or 332-5641.

Want roommate to share 3BR house

Landing, LC, \$275/mo + 1/2 utilities. Cathy, x41267 or 554-4579. Wanted personnel to join VPSI Vanpool departing Meyerland Park & ride lot, 7:05 a.m. for JSC. hrs 8 a.m./4:30 p.m. shift, currently have 13 good members, looking for 3-8 more. Travis

loebes, x45765 or Don Pipkins, x35346. Want to buy sofa bed, single or double sz for sm apartment, reasonable cond. x40250 or 941-

Want to buy glassed-in curio cabinet; bread-maker w/book; storybooks w/matching cassette tapes; Ninetendo & Sega tapes; vanity table w/matching chair or bench, dbl bed hdbd, dresser, chest, 2 night stands w/lamps Heather 486

Wanted builfrogs or known source for bull-

Miscellaneous

Liquidating collection, 15 plates, "Collectables" various artist & series, \$15 ea or 2/\$25. Earl Rubenstein, 480-1998.

Nostalgia & collectibles, original piano sheet music of early '40's; LP records, orig Broadway cast shows, classicals, inventory list avail, \$1.00/ea. Earl Rubenstein, 480-1998.

Counter top vending machine, 5 ea sold on location & stocked w/snack products, \$4k. Larry, x33168 or 488-7460.

Bridal veil, new, white w/sequined headband & pearls, \$90. 334-3998. Herb plants both container grown/fresh cut; 3

boxes Hartco wood parquet floor tile, Bran, 25 sq ft per box, \$55/per box. 339-3562 or 333-6277. Toule skirt for under wedding gown, \$25. 280-0031. Box chain necklace, 14k gold, 18' long, 1.0

mm wide, new \$120; sell \$50. Eric, 482-3552. Pres & First Lady Gold membership, lifetime yrly renewal, \$75 or \$6.30/mo, \$500; four Astroworld/Waterworld season passes, \$175/all or \$45/ea. 648-4555.

Plywood, 1/2", 8-10 sheets, new, \$7/per sheet. John, 240-8050 or 482-7616. Oceanic aquarium, 60 gal w/pump/filter/light.

\$200 OBO. Ted, x36844 or 335-1930. Women's black leather skirt fully lined, sz 3/4 made by Phoenix, new \$125 sell \$75. Debra, x38601 or 331-5772.

Motorcycle, Honda 350; 3 motorcycle trailer;

2-two meter radios; 2 sewing machines; 1 bunkbed, 482-2498.

Pro-3000, programmable, stairstepper, \$400 firm. x39034 or 474-2660. Larry Dyke paintings, 14 pcs, signed & numbered, some are framed; 1-Lazy Boy recliner, ex

cond, \$125. 359-4771. RCA color TV, solid wood console, 27", stereo sound, new \$950 sell \$600 or OBO; official sz pool table, needs new felt, \$800 OBO.

Diane, x47129 or Water Lilies, tropicals & hardies, assorted bog

plants, 337-5392 Two twin beds, mattress, box spring/frame, ex cond, \$25 ea; Trek 1200 62 cm aluminum frame; Cateye micro computer, \$300. Doug, x38551.

Complete set, 33pcs of Star Trek: Next Generation, action figures, \$400 OBO; NASA space shuttle pres kit collection kit, STS-1 -STS-61, NASA & contractor publications. Andrew,

x34312 or 280-0647. Free: Xerox 3701 copier; wood mouldings &

windows, cheap. Don, x38039 or 333-1751 Pr solid wood kitchen or dining room chairs, \$30/both non-matching; beveled glass mirror, unframed, 30" x 39", \$10; barometer, 3 gage, \$10; old clothes hamper, ex cond, \$10. 488-

Smith & Wesson 9mm, model 39, semi auto, nickel plated, pistol, ex cond, \$300; Ruger Security Six, stainless steel, snub nose revolver, ex cond, \$250. 998-0407.

Four exterior French doors w/venetian blinds sunscreens, curtins, frame, \$150/all; solid wood natural table, kitchen or game table 35" sq, \$45; childs red wagon, \$25; pr auto ramps, heavy duty, \$20, 488-5564.

Golf cart, golf bag, 5 Irons & 5 Woods, \$250. 30446 or 338-2625.

John Deere STW 38 riding mower, 12.5 hp, 38" cut, neww \$2k sell \$850. x38135 or 326-Ping golf carry bag, \$15; Sear carpet cleaning

machine \$175; paint sprayer w/2.5 gal pot, \$60;

Pansonic cellular phone, \$35; Kenwood TS430S w/FM, \$600. Mike, x39491 or 409-925-2330. Washer/drver. ex cond; children's swing set, \$50; 2 rabbit hutches, \$120 OBO; 6 drawer

dresser w/mirror, \$50. 331-2289. Sears car top luggage carrier, \$30. 554-7660. Upflow electric furnace, 40k btu, runs great; Big Wheel, walk-behind mower, rusty deck, 8

hp, needs work, \$35/ea. Fred. 333-2166. '90 Moon globe, shows Apollo sites thru A-19, indentifies crews A17, Cernan, Evans, Engle, ex cond. Gary, x31059 or 480-9716.

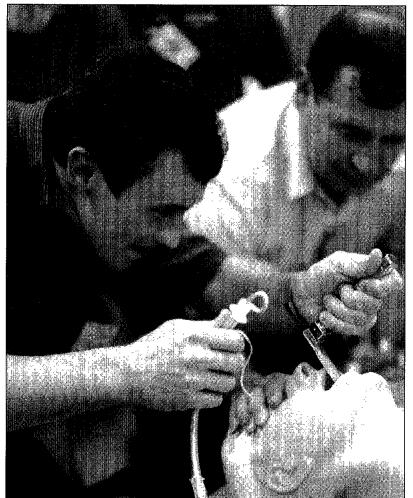
Engagement ring, 14 KT gold, .55 marquise diamond on 7mm wide band, appraised \$4k, sell \$2k. x37501.

Six 1909 Tobacco baseball cards, \$100 OBO; unopened baseball card sets, \$30 OBO. Tony, x47401 or 482-4156.

Colt AR15 .223 cal SPI, made 1968, \$1150. 280-0008. English saddle, 17" seat only, good cond, \$50. x30737.

Snapper mowers, 6 hp rider, \$500; mulcher, \$250, both w/bagging attachment. Chris, x30794 or 280-8921 '88 Capt chairs (4), bench seat for full sz van.

navy blue, \$300; assume existing Houston Cellular account, NASA employee only, mthly rate, \$25, no trans/startup fees, \$100 free air time, includes phone. x33748 or 996-1408.



Astronauts, cosmonauts receive medical training for joint space missions

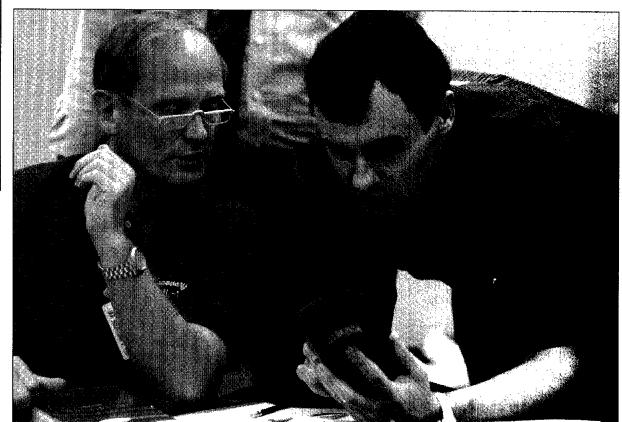
rew members for the joint Space Shuttle/Mir missions recently spent three weeks at JSC to participate in medical operations training for their cooperative flights.

In a precedent setting flight, Astronaut Norm Thagard will be launched with Cosmonauts Vladimir Dezhourov and Gennadiy Strekalov to Mir early next year for a threemonth mission, designated Mir 18, on the Russian space station.

Then in late May, the Space Shuttle *Atlantis* will rendezvous with Mir to pick up the Mir 18 crew and transfer Cosmonauts Anatoly Solovyev and Nikolai Budarin to the station for the Mir 19 mission.

STS-71 Mission Specialist Bonnie Dunbar is training as Thagard's backup. Yury Onufrienko and Alexandr Poleshchuk are training as the backup crew members and also participated in the JSC activities.

During Thagard's stay on Mir and STS-71, a series of medical tests will be conducted to continue NASAis study of how the human body adapts to long-duration spaceflight. More than 30 investigations from across the nation comprise the Spacelab-Mir science payload.







Top left: Mir 18 Commander Vladimir Dezhourov practices an emergency medical procedure to open a blocked airway. Top Right: **Dezhourov and Mir 18 Astronaut** Norm Thagard practice using a barcode reader during medical operations training. Center Left: Mir 19 Commander Anatoly Solovyev, left, and STS-71 Mission Specialist **Bonnie Dunbar practice respiratory** distress emergency procedures with the help of Flight Surgeon Mike Barrett. Center right: Lead Medical Training Engineer Ezra Kucharz and Mir 19 Crew member Gennadiy Strekalov sort through the contents of the shuttle medical kits. Lower left: Dunbar and Solovyev practice physical examination procedures under the watchful eye of Barrett. Lower right: Crew members pose for an official portrait -- (first row, left to right) Thagard, Dezhourov, Strekalov, (back row) Yury Onufrienko, Solovyev, Dunbar, Nikolai Budarin and Alexandr Poleshchuk.





New era of space exploration focuses on future

As NASA leads the nation into a new era or space exploration, Americans must once again accept the risks involved with such a "bold, exciting course of action," Administrator Daniel Goldin told members of Washington's press corps this week.

"What was Apollo if not risky?" Goldin said. "Armstrong and Aldrin landed with less than 15 seconds of fuel left. On the way down, they had to contend with alarms and klaxons going off. Taking risk is what NASA is supposed to do.

We heard the same criticism then that we hear about the space station today: 'Why spend money on space

Abstracts for meeting due

The call for papers to be presented at the 1995 Aerospace Mechanisms Symposium is out.

Conference coordinators are looking for summaries of papers for presentation at the May 1995 event to be held at JSC. The symposium will deal with the problems of design, fabrication, test and operational use of aerospace mechanisms. Papers should address fully developed, tested and/or flow space or aircraft mechanisms.

Paper summaries should be about 1,000 words in length and include a description of the principal results of the investigation as well as the scope and status of the work. Illustrations or tables illustrating the maturity of the work also should be include.

Authors also should indicate if the subject under discussion previously has been presented at another meeting. The summary, along with the full address, phone, fax and email of the author and co-authors, must be submitted by Aug. 26 to Edward A. Boesiger, P.O. Box 3504, Orgn. 74-12, Bldg. 150, Lockheed Missiles & Space Co., 111 Lockheed Way, Sunnyvale, Calif., 94088-3504.

The review committee will notify all authors by Oct. 7 and final papers will be due Dec. 20. The full text of the paper will be included in the symposium proceedings and the authors will make a 25-minute presentation during the symposium.

Child's concert set for Monday

A special celebration of space-oriented music for children will be presented at noon Monday in Teague Auditorium.

Educator and children's folk artist Tonja Evetts Weimer will perform a selection of children's songs on her Autoharp. JSC civil service and NASA-badged contractors may invite their spouses and children to the concert.

Weimer, already a children's recording artist, was inspired to record an album of space-oriented children's songs after witnessing a shuttle launch in 1992. Weimer's songs, many of them sing-a-longs, are well suited for children toddler age and above.

Families should enter through the main gate and park in the lot south of Bldg. 2. No food or beverages are allowed in the auditorium. For additional information, please contact

Corrections

Two stories in the June 17 issue of the Space News Roundup contained incorrect information.

In the story on funding for the International Space Station, the Roundup reported NASA's 1995 fiscal budget at \$14 million, with a requirement to trim an additional \$240 billion. NASA's budget for the 1995 fiscal year is little more than \$14 billion, with an additional \$240 million to be trimmed.

Also, the story on American Heritage Day incorrectly reported the event would be celebrated on July 8. American Heritage Day will be observed on July 15.

when there are so many people starving on Earth?' If we had listened to the critics, though, we wouldn't have taken the risks that have paid off with a bonanza of technology that permeates our daily lives.

Goldin said the attitude of the nation has changed in the last 25 years.

"Since the early '70s, we've been a risk-averse society," he said. "The Vietnam War was winding down, national debt was beginning to be a problem, and America was losing confidence in itself.

"In the midst of all that, private industry and the public sector made a variety of decisions, all with the same

theme—concentrate on today; don't look ahead to the future; just survive."

This change has ultimately had an adverse impact on the economy.

"In 1971, we canceled the supersonic transport," he said. "We let the Europeans build the Concorde out from under us. We said it was too noisy, too expensive and too hard on the environment. What we meant was: It's too daring, too risky to solve these problems, it doesn't come with a money-back guarantee.

"What happened is that Europe built on the knowledge it gained from the Concorde program and formed Airbus Industries, which has walked away with 30 percent of what had been America's share of the market. We've lost hundreds of thousands of jobs over the last 20 years because we were afraid to step up to new challenges. We were afraid to take risks.

"Another fateful decision we made in the early 1970s was not to build a lunar base. We had just accomplished one of the most daring exploits in history by landing on the Moon, but we shrank back from this next step. People said America couldn't afford it."

This attitude still exists today. The cancellation of the Superconducting Supercollider last year also was a similarly fateful decision, he said.

"That won't hurt us one year from now or two, but in 30 years, it's knowledge we won't have," he said.

Goldin said the nation must begin to take risks again, and must reach out to involve and inspire America's people. There are many ways Americans can reclaim their heritage as risk-takers.

"Building the space station means we choose risk instead of the status quo, challenge instead of mediocrity," he said. "The space station is pushing the boundaries of scientific knowledge and high technology. Without the station, without a long-duration presence in space, we're short-changing ourselves and future generations."

Clinic's new card may help save a life

By Eileen Hawley

Keeping track of your personal health record just became easier through the efforts of a new medical information card developed by JSC's Total Health Program.

"This card lists the type of information that can be very important in an emergency situation," said Joyce Mason of the clinic. "It can provide a doctor or emergency medical technician an instant familiarity with your medical history, that can save time and in total health extreme instances,

The size of a credit card, the record contains a photographic image of the holder's latest electrocardiogram, blood type, information on allergies or special medical needs, as well as an emergency point of contact.

The medical information card is available to all JSC civil servants when they receive their regularly scheduled physical at the JSC Clinic.

One employee already knows how valuable the card can be. Stung by a scorpion while on vacation, he was taken to a hospital where the medical team was ready to perform some tests to determine

if a the employee was suffering a result of complications from the scorpion sting. The employee's wife remembered his medical information card and showed it to the medical team.

The doctors were very impressed with the quality of the EKG on the card," Mason said. "And it verified to them that the patient was not exhibiting threatening systems and that further tests were not required."

The medical information card was developed through the joint efforts of Kelsey-Seybold and RMS Photo Services. For additional information on the medical information card, contact Mason at the JSC Clinic at



GETTING ACQUAINTED: Above: During a June 15 visit to JSC, from left, Hans Mark, former NASA deputy administrator and currently professor of aerospace at UT Austin, and Dr. Robert Berdahl, president of the University of Texas listen as astronaut Mike Baker explains shuttle operations during a tour of the shuttle mockup in Bldg. 9.

Huntoon seeks cultural change to meet challenges

a life."

(Continued from Page 1)

to streamline and strengthen program and project support; strengthen core technical capabilities; and streamline and improve business management and support functions, Huntoon said.

"Above all, I believe these changes in organization will enhance our ability to work together as a team," she explained.

Restructuring alone won't accomplish these goals, she cautioned.

"In order to meet the challenges of the future, we must dig deeper into our traditions and culture and seek basic change," Huntoon said. "We must create situations and opportunities which enhance teamwork."

Some of those changes will include the use of rotational assignments and cross-organizational teaming. Greater emphasis will be placed on recognizing and rewarding leadership of change efforts.

"A strong rotational assignment program will help build well-rounded, multidisciplinary professionals ready to meet tomorrow's challenges, Huntoon said.

Organizations will be encouraged to work together more closely, and to develop partnerships and teaming arrangements with industry, academia and other government agencies. These relationships will help JSC learn about and utilize state-ofthe-art technology applications, innovative approaches and "best practices.

The decision to reorganize followed an extensive review of the center's strengths, weaknesses, commonalities and overlaps by a cross-section of JSC managers and employees who provided their recommendations to Huntoon.

"I have reviewed their recommendations and made some adjustments to their proposal," Huntoon said. "I believe we have an excellent plan to help us meet the challenges we face, capitalize on our opportunities, and carry us into the future.'

Huntoon emphasized that the reorganization is not a one-time event, but is in itself a change in the way we do business. JSC will continue to examine itself and its ways of doing business, looking for additional improvement opportunities even as changes are being made.

"During my years at JSC, I have been impressed by the teamwork, cooperation and can-do spirit that are integral parts of our culture," Huntoon said. "Never have those qualities been more needed than now as we embark on this journey of organizational and cultural change. I know I can count on each of you -the JSC team—to give our new organization and our new approach to doing business your full commitment and support. You are the only ones who can turn these plans into reality."

Changes to organizations strengthen technical capabilities

(Continued from Page 1)

be the focal point for operations support at JSC, providing services to other organizations as an extension of its control center, simulator and training functions by moving engineering support staffs in the Flight Crew Operations Directorate to MOD. It also will become the primary supplier of technical support to the Astronaut Office. David Leestma will continue as director Flight Crew Operations, and Astronaut Tom Akers will be detailed to MOD as deputy director.

Leonard Nicholson will continue as acting director of Engineering with a charter to strengthen technical capabilities by emphasizing more hands-on skill development and experience in manufacturing and design, strengthening skills in total vehicle systems engineering, and developing the capability to do small, low-cost flight projects.

Don Robbins will continue as acting director for Space and Life Sciences as JSC increases its efforts to inform the public and industry on the benefits of NASA and JSC-derived technologies. Space and Life Sciences also will place increased emphasis on twoway technology transfer. In line with the center's desire to give a new focus to the contributions JSC can make to Earth sciences activities, Robbins will rename the Solar System Exploration

Division the Earth Sciences and Solar System Exploration Division. Within this division, a new Earth Sciences Office will be created.

The third factor driving the center's Center Operations. reorganization efforts was to streamline and improve JSC's business management and support functions.

A new Business Management Directorate, combining the functions currently performed in the Administration Directorate and the business management organizations from the Office of the Comptroller, will be led by Terri Hesse. Hesse comes to JSC from her previous position as assistant director in the Houston Internal Revenue Service district office.

The BMD will take a new approach to providing business support, colocating specialists who will provide integrated procurement, budget and business management support to their host organizations.

Chris Christensen will serve as acting deputy director in the new directorate. Christensen will be at JSC on a temporary assignment from NASA Headquarters where he is the deputy associate administrator for management systems and facilities.

The Information Systems Directorate will restructure its efforts on the development, maintenance and operation of basic institutional services and

management support systems and will assume responsibility for the Image Sciences and Management Services Divisions, formerly part of

Jane Stearns has been named acting director pending the formal announcement of this position.

Jack Garman has been named to the newly created position of Chief Information Officer reporting to the center director. In this position, Garman will be responsible for systems architecture, standards, measures, compliance and reporting.

The Center Operations Directorate, led by Jim Hickmon with Dick Thorson as deputy director, will concentrate its efforts on basic center support functions such as facility design, maintenance and operations.

The mission of the Office of Public Affairs will be expanded to include the development and implementation of a strategic approach to centerwide communications, including effective public outreach programs.

Harold Stall, former PAO director, will join the director's staff as special assistant for community relations and special projects, identifying areas of common interest between JSC and the greater Houston community. Jeff Carr will serve as acting head of Public Affairs while the director's position is competitively announced.

Joe Atkinson, currently director of Equal Opportunity Programs, will join a combined Education and Public Services Branch within PAO, focusing on strengthening the center's ties to minority education institutions throughout the country.

Hank Davis will continue as acting director of technology transfer. The patent attorney staff will be reassigned from the Legal Office to the Technology Transfer and Commercialization Office to better facilitate the technology transfer process.

While there are no organizational changes planned at White Sands Test Facility, rotational opportunities for technical and administrative personnel to gain hands-on experience with small programs will increase. Grady McCright will be facility manager.

Harv Hartman will continue as director of Human Resources. While the basic organizational structure will remain intact, the Human Resources training and development charter will expand to include the computer training currently managed by ISD, and the astronaut candidate training currently managed by FCOD.

In the Equal Opportunity Programs Office, Estella Gillette will be acting director while the position is competitively filled.

NASA-JSC