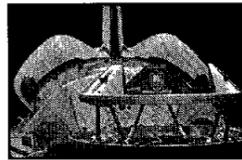




The Director's Safety Page offers a look at Safety Awareness Day coming next month. Story on Page 3.



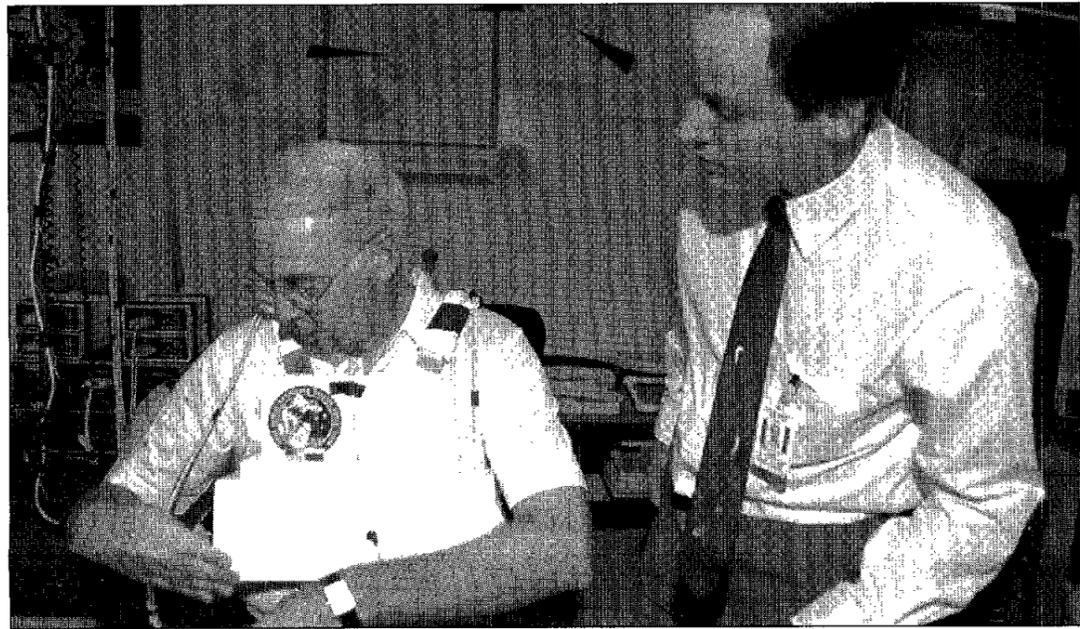
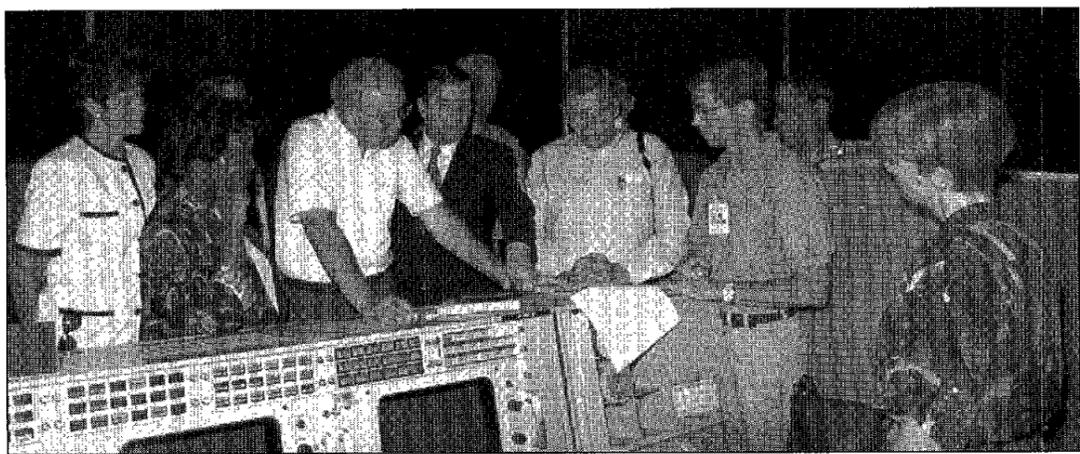
People from all over the world left comments about the new Shuttle Home Page. Story on Page 5.

Space News Roundup

Vol. 34

July 28, 1995

No. 30



JSC Photo by Robert Markowitz

SCIENCE LESSONS—House of Representatives Science Committee Chairman Robert S. Walker, R-Pa., and the Senate Science, Technology and Space Subcommittee Chairman Conrad Burns, R-Mont., recently visited JSC. The visit gave the key science and space members a first hand look at Phase I docking simulations, space station development, robotic advances and the new Mission Control Center. Top: from left are, JSC Director Dr. Carolyn L. Hunttoon; House of Representative Member Sheila Jackson Lee, D-Texas; Walker; House of Representative Member Steve Stockman, R-Texas; Burns; Space Shuttle Program Director Brewster Shaw and Staff Director of the House of Representatives Space and Aeronautics Subcommittee Shana Dale. Bottom: Walker suits up to try out virtual reality.

STS-69 crew to do double duty

With one space shuttle safely back on Earth, another is undergoing its final preparations at the Kennedy Space Center for a third shuttle launch in just 39 days.

Technicians are putting the final touches on *Endeavour* out on Launch Pad 39-A, ready to begin a new countdown on Wednesday at 2 p.m. CDT for the ship's blastoff on Saturday, Aug. 5th on the STS-69 mission, the fifth shuttle flight of the year and the 71st in shuttle program history.

Endeavour's five astronauts, Commander Dave Walker, Pilot Ken Cockrell and Mission Specialists Jim Voss, Jim Newman and Mike Gernhardt, will fly to KSC Monday for final prelaunch work just hours before the countdown begins.

Endeavour's launch on Aug. 5 is scheduled at 9:45 a.m. CDT at the start of a 2 1/2 hour launch window. An on-time launch would result in landing on August 16 at about 6:15 a.m. CDT.

During the 11-day mission, a pair of satellites will be deployed and retrieved in a single flight for the first time in shuttle history.

The SPARTAN-201 solar science satellite will be released into orbit on the second day of the mission by robot arm operator Gernhardt for a 48-hour free flight to train its instruments on the solar corona and the Sun's effect on Earth-bound communications systems. Gernhardt will pluck SPARTAN out of orbit on the fourth day of the mission, again using the

Canadian-built robot arm to grapple the satellite following its scientific investigations.

The next day, Newman will take over operation of the robot arm, unberthing the Wake Shield Facility from its truss structure in the cargo bay to begin "cleansing" it of atomic oxygen particles as *Endeavour* streaks around the Earth at more than 17 thousand miles an hour.

The pristine condition of the WSF is vital to its ability to grow thin films during its 54-hour flight free from *Endeavour*. Those films,



to be used to prove the technology concept for enhanced semiconductor production, will grow in a chamber on the wake side of the WSF, in what researchers say will be the most perfect vacuum environment ever created as the satellite plows through Earth orbit, churning up a wake of atomic oxygen behind it,

much like a motorboat in water.

The WSF will also serve as a target for dozens of jet thruster firings right before its retrieval. At distances of 400, 300 and 200 feet at the conclusion of *Endeavour's* rendezvous with the WSF, Walker and Cockrell will fire the shuttle's jets at the saucer-shaped satellite to collect data researchers have requested about the effect of plume impingement on orbital satellites. The Wake Shield will be left attached to the robot arm overnight following its retrieval for an experiment the next day involving the study of the effect of charged parti-

Please see **SPACE**, Page 6

New name for NASA's employee motivational program

One of NASA's most popular and recognized programs is adopting a new name. Formerly known as the Manned Flight Awareness program, the agency effort designed to impress on NASA and Industry employees the importance of their work will now be known as the Space Flight Awareness program.

In announcing the change to SFA, NASA Associate Administrator for Space Flight J. Wayne Littles gave several reasons for the new name. "The title is clear, concise and establishes SPACE as the focal point," Littles said. "It also allows inclusion of international activities such as the International Space Station along with other types of payloads in support of human space flight and is not potentially offensive to participants."

While the name is changing, A.T. Dannessa, program manager of the SFA effort stresses the scope and objectives of the program remain very much the same.

"SFA will continue to be a focal point for motivation by impressing on NASA and contractor employees the importance of their efforts on flight systems and other critical mission support efforts that contribute to safe space flight," Dannessa said.

NASA's employee motivational program has a rich and fully history, having been in existence for over 30 years. Created in the early 60s by Werner Von Braun and the original seven astronauts, the Manned Flight

Awareness program played an integral and increasingly forceful role in the Mercury, Gemini, Saturn, Apollo, Skylab and Apollo-

Soyuz projects by infusing the space program with a strengthened consciousness of quality and safety.

Today, as regular space shuttle flights of ever increasing complexity are made and the International Space Station Program is prepared, the motivational efforts of the SFA program provide an effective way of recognizing efforts of the government and contractor workforce and reminding them of the special nature of their work in fostering safe human space flight.

The involvement and support of NASA's astronauts in the various SFA programs continues to be very strong according to Dave Leestma, director of Flight Crew Operations. "The astronaut office fully supports the goals and efforts of the SFA program," Leestma said. "The astronauts have long recognized the value of these motivational programs to enhance safety through personal involvement with the NASA and contractor workforce. These programs will play a critical role in motivating the total workforce—including the international community—as the nations of Earth continue the exploration of space."

The SFA program accomplishes its objectives through a variety of awards and activities.

Please see **EXCELLENCE**, Page 6

Crew praises support teams

Just shy of nine days in space, *Discovery* and its five crew members returned home Saturday to complete a successful mission that included a satellite deployment and a variety of middeck experiments.

STS-70 Commander Tom Henricks guided *Discovery* smoothly down at 7:02 a.m. JSC time, ending the 70th flight with a mission elapsed time of eight days, 22 hours and 21 minutes. The landing occurred on the second deorbit opportunity of the day. Flight controllers opted to pass on the first opportunity to allow improvement in weather conditions.

Upon their return to Houston the crew rained praise on ground support and training teams.

"It was a team effort, it is a credit to the team that trained us, twice," Henricks said of

the flawless flight with no major problems reported. "The folks at the Kennedy Space Center got us a vehicle ready to go, twice. The folks here at JSC ready to get us on the

ground, twice. We certainly did get it right. I could not have asked for a better crew, each and everyone of them did their job in a superb manner, just as they folks on the ground did."

Pilot Kevin Kregel agreed that it was a team effort.

"It is a testament to the people that we have working at JSC, any match of people is a great crew and any match of the trainers are great trainers, because we all have really good folks and we are on the leading edge of human space flight and I really feel proud to be a part of that," Kregel said.

Please see **STS-70**, Page 6



JSC Photo by Mark Sowa

A large crowd was on hand at Ellington Field to welcome home the STS-70 crew and praise them on their successful mission.

JSC

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.

Cowboys vs. Oilers: Aug. 26, San Antonio. Tickets cost \$60, available on 20, 30-yard-line and end zone. Tickets include transportation.

Sock Hop: 50's Dinner and Dance Aug. 19 at the Gilruth Center. Tickets cost \$15.

Schlitterbahn: Tickets cost \$17.80 for adults and \$15.30 for children 3-11.

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

Six Flags: Tickets cost \$23.70 for a one day pass, \$31.75 for two day pass and \$20.30 supersaver not valid on weekends in June July and August.

Astroworld: Tickets cost \$18.10.

Splashtown: Tickets cost \$11.05. NASA family days Aug. 12-13. Tickets cost \$9.50.

Fiesta Texas: Tickets cost \$20.35 for adults and \$15.80 for children 4-11 and seniors over 55.

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.

Metro tickets: Passes, books and single tickets available.

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

Stamps: Book of 20, \$6.40.

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

Upcoming Events: Caribbean Getaway Oct. 13-16.

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.

Weight safety: Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. Aug. 9 and Aug. 24. Pre-registration is required. Cost is \$5.

Defensive driving: Course is offered from 8:15 a.m.-3 p.m. Saturday. Next class is Aug. 5. Cost is \$19.

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. Tuesdays and Wednesdays. 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.

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

Swap Shop

Property

Sale: West Friendswood, 4-2-2, 3.3 acres, 2 barns, riding pen, deep well. 482-7160.

Rent: Friendswood, 3-2-5-2, formals, den, FPL, Jen-Air kitchen, \$900/mo + dep. Mark, 282-5271.

Sale: Time share in Acapulco, 1 week RCI member, \$2.5k. x37124 or 335-5357.

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

Sale: Webster condo, 2-2-2cp, new A/C, appli, FPL, ceiling fans, 3% down \$39.9k. 280-0285.

Lease: Friendswood/Pearland area, FPL, 3-2-2, cathedral ceilings, \$625/mo. 992-5447.

Rent: Lake Travis cabin, priv boat dock, furn, sleeps 8, summer/fall, \$650/\$550 wkly/\$120 dly. 474-4922.

Sale/Rent: University Trace condo, 1 BR, 832 sq ft, FPL, W/D, ready 8/1, \$32k or \$450/mo. 286-1934.

Rent: Baywind II condo, 2-2, split plan, FPL, W/D, \$585/mo. Pete, x38614 or 480-4028.

Sale: Clear Lake forest, 4-2-5-2, den, FPL, formals, family rm, new roof/paint, carpet. 333-5300 or 326-2307.

Sale: Webster, 3-2-2, new appli, pool, new land scaping, \$67.5k. x32066 or 332-4608.

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

Sale/Rent: Baywind I condo, 1-1-1, appli, CF, \$380/mo + \$200 dep or \$22.k. Bill, 471-3999.

Sale: Pasadena, 3-2-2, game rm, FPL, new kitchen, tile floors/carpet, appli, fans, \$70.9k. 488-0664.

Rent: CLC, 1 BR condo, FPL, sec alarm, W/D, new carpet. Jim Briley, 244-4632 or 488-7901.

Sale: Middlebrook, 3-2-2, oversized garage, 1968 sq ft, \$99.5. Mary Ann, 414-9132.

Sale/Rent: Waterfront condo 201A on Lake Livingston in Coldspring, 2-2, sleeps 6, wkly/wkend rates. Barbara, 337-1494 or 1-800-367-2256.

Sale/lease: Dickinson, 3-1.5-1 w/det garage/workshop, approx 1 ac, trees, assumable, \$87k. x47180 or 301-1480.

Lease: Pipers Meadow, lg clean 3-2-2A, game-room, FPL, fenced, deck, \$880/mo. 486-0315.

Rent: Efficiency apt Seabrook, furn, utilities pd, except phone, no pets, non-smokers, \$395/mo. x48848 or 532-1725.

Rent: Arkansas cottage on Blue Mt Lake, stone FPL, \$250/wkly \$50/dly. Corcoran, x33005 or 334-7531.

Lease: El Lago, 4 BDR, gameroom, Jacuzzi, decks, FPL, \$1.2k/mo, 1st & last + dep. 326-2093 or 648-8960.

Sale: Nassau Bay townhome, 2-2.5-2CP, newly remodeled, new wall paper thru out, new appli/cabinets, \$69.9k. 335-2562 or 335-1466.

Cars & Trucks

'94 Nissan Sentra SE-R, loaded, ex cond, 10k mi, \$14.5k. Brian, 333-6691.

'74 VW thing, white, new engine/battery, good tires, \$3k obo. Dick, 335-6842 or 286-4444.

'86 Mercedes 190E 2.3 cabernet, auto, sunroof, 131k mi, maintenance records, good cond, \$7k. Polly, 337-5392 or 484-8928.

'80 Mercedes 300 SD, 118k mi, new brakes/trans, power, very clean, \$5,995 neg. 983-7660.

'90 Suburban Silverado, silver/blk, dual A/C, diesel, equalizer hitch, capt chairs, good cond, \$11.5k. 648-8960 or 326-2093.

'92 Grand Marquis, new tires, 35k mi, loaded, ex cond, \$12.9k. Virginia, x34156 or 280-9491.

'73 Mercedes Benz 450 SLC, restored, A/C, red w/beige leather, \$15k. x32257.

'86 Hyundai Excel, 4 dr, A/C, auto, new tires/CU joints, eng & trans rebuilt, \$1,250. 464-8694.

'92 Honda Accord LX wagon, 60k mi, burgundy/gray, ex cond, ext warr & main recds. Bob, 334-5894.

Cycles

'91 Honda VFR 750, ex cond, 8k mi, extras, \$5.4k. Steve, x47398 or 409-935-0777.

'91 Suzuki RM 125 dirt bike, ex cond, \$1.9k. x38741 or 945-5576.

'94 Harley Davidson Heritage Softtail FLSTN, limited prod, ex cond, 27k mi, \$21k firm. 333-6821 or 326-2093.

'78 PE dirt motorcycle, 3, \$1.1k. 332-7149.

'92 Yamaha 4 wheeler, shaft drive, 12 yrs & older, ex cond, \$1.3k. x39138 or 474-5260.

Boats & Planes

Bermuda racing sloop, 21', fast & maneuverable, cabin, \$5.9k. x37187 or 488-0323.

Laser 2 sailboat w/trailer, spinnaker rigged, trap, vest, \$900. x41095 or 486-8185.

Audiovisual & Computers

TI-6400 computer, software, Fred, 944-3523.

AIWA #AXR-004 stereo audio/video recvr w/rem. \$120 obo; Sony CD player w/remote, \$75 obo; Sanyo VHR9370 dbl azimuth, 4-head, VHS VCR w/remote, needs service, \$35 obo; Pioneer KEHM-5500 detach face full function cass player w/CD changer controller; Pioneer CDXMX30 6-disc CD changer, \$225/set will sell sep. Lisa, x40213 or 554-4140.

Macintosh SE w/Imagewriter II printer, built in monitor, 20 Mb HD, 1 Mb RAM, floppy drive, software, MS Works, MS Word, MS Excel, and more, \$395 firm. Jim, 282-4510 or 337-4953.

IBM PS2 model 502, 286 w/HD, 3.5" FD, 3 Mb RAM, mouse, color monitor, dot matrix printer, S/W, computer desk w/hutch & chair, sell sep or \$500/all. Shane, 244-1022 or 992-1162.

Radio Shack Pro-Logic home theater surround sound processor, center & rear channel built-in amps, in warr, \$70. Musgrove, x38356 or 488-3966.

CGA monitor, \$35; Compaq mono monitor, \$10; Panasonic portable XT, 2 FD, no HD, fair cond, \$45. Terry, x35026 or 554-6549.

Citizen printer "CSX-140" w/GSX color option, \$199. Magdi Yassa, 333-4760 or 488-0788.

"Football" Dynamix, \$15; "Spear of Destiny" Wolfenstein, \$5; spacesaving desktop computer keyboard, \$15; Hewlett-Packard Deskjet 500 printer, \$190 obo. 332-5790.

Mac Powerbook 540C, 4/320, warranty, carrying case, \$3.1k. x36243 or 488-8775.

Phone Mate 8400 phone answering mach, \$45; NEC hand held cellular phone, model #P110, 2 batt, batt eliminator, charge/case, \$175. Faye, 470-1455.

Pioneer recvr, 160 watts, w/many features, \$200

Today

Cafeteria menu — Special: meat sauce and spaghetti. Total Health: baked potato. Entrees: rainbow trout, liver and onions, beef cannelloni, ham steak, fried cod fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: steamed broccoli, breaded okra, cut corn, black-eyed peas.

Saturday

MAES banquet: The Society of Mexican-American Engineers and Scientists will host its 12th annual scholarship banquet at 7 p.m. July 29 at the University of Houston Hilton. For more information call Michael Ruiz at x38169.

Monday

Cafeteria menu — Special: turkey and dressing. Total Health: herb flavored steamed pollock. Entrees: breaded veal cutlet, chicken fajitas, steamed pollock, beef, French dip sandwich. Soup: beef and barley. Vegetables: Brussels sprouts, mixed vegetables, egg plant casserole, winter blend vegetables.

Tuesday

ABWA meet: The Clear Lake Area Chapter of the American Business Women's Association will meet at 5:30 p.m. Aug. 1 at Space Center Houston's Silver Moon Cafe. For more information call Nancy Hutchins at x34006.

Cafeteria menu — Special: pepper steak. Total Health: barbecue chicken. Entrees: baked lasagna, pork chop and fried rice, turkey a la king, baked chicken, fried cod fish, French dip sandwich. Soup: black bean and rice. Vegetables: breaded squash, steamed spinach, baby carrots, navy beans.

Wednesday

Astronomy seminar: The JSC Astronomy Seminar will meet at noon Aug. 2 in Bldg. 31, Rm. 129.

An open discussion meeting is planned. For more information, call Al Jackson at 333-7679.

Toastmasters meet: The Space-land Toastmasters will meet at 7 a.m. Aug. 2 at House of Prayer Lutheran Church on Bay Area Blvd. For additional information, contact Elaine Trainor, x31034.

Cycle club: The Space City Cycle Club will meet for a 25-mile ride beginning at 6 p.m. Aug. 2 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: steamed pollock. Entrees: broccoli cheese quiche, spare ribs and sauerkraut, steamed fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: Spanish rice, pinto beans, peas, broccoli.

Thursday

Cafeteria menu — Special: hamburger steak with onion gravy. Total Health: baked potato. Entrees: corned beef, cabbage and new potatoes, chicken and dumplings, meat ravioli, French dip sandwich. Soup: broccoli cheese and rice. Vegetables: navy beans, cabbage, cauliflower, green beans.

Friday

Cafeteria menu — Special: tuna noodle casserole. Total Health: broiled chicken breast. Entrees: deviled crabs, broiled pollock, liver and onions, broiled chicken with peach half, Reuben sandwich. Soup: seafood gumbo. Vegetables: Italian green beans, cauliflower au gratin, steamed rice, vegetable sticks.

Aug. 8

Photo club meets: The Bay Area Photo Club will meet at 7:30 p.m. Aug. 8 at the Faith Covenant Church. For more information call

Kelly Prendergast at x37655.

Aug. 9

ABWA meets: The American Business Woman's Association will meet at 11:30 a.m. Aug. 9 at the Holiday Inn on NASA Road 1. Certified Financial Planner Richard Hergert will discuss "Retirement Plans." For more information call Carolyn Wagner at 332-3413.

SSFF meets: The Space Station Future Fighters will meet at noon Aug. 9 at the Freeman Memorial Library 16602 Diana. For additional information call David Cochran at 335-0185.

MAES meets: The Society of Mexican American Engineers and Scientists will meet at 11:30 a.m. Aug. 9 in the executive dining room in the Bldg. 3 cafeteria. For more information call Michael Ruiz at x38169.

Astronomy seminar: The JSC Astronomy Seminar will meet at noon Aug. 9 in Bldg. 31, Rm. 129. An open discussion meeting is planned. For more information, call Al Jackson at 333-7679.

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Aug. 10

Airplane club meets: The MSC Radio Control Airplane Club will meet at 7:30 p.m. Aug. 10 at the Clear Lake Park Community Bldg. For more information call Bill Langdoc at x35970.

obo. x32567 or 488-3314.

Macintosh Performa 635CD, 5 Mb RAM, 150 Mb HD, 15" multi-scan monitor, CD ROM, 68040, kybrd, \$1.4k; Imagewriter II printer, \$100; LXI 4 head VCR w/stereo & wireless remote, front & rear A/V jacks, \$140; turntable, 33/45/78 RPM's, \$75; AT&T cordless phone, \$60. x42444 or 488-4382.

Panasonic Kx-P1624, 24 Pin MVHI-mode printer, \$175. 244-0046 or 992-0481.

Sony Trinitron 26" color TV w/walnut wood TV/VCR cabinet, needs some work, \$100. 474-3507.

Photography

Enlarger, Besler model 23C, good cond, B/W w/escal & misc. \$100. Terry, x35026 or 554-6549.

Pentax-K-mount, 35-70 mm 200m lens, ex cond, in warranty, \$70. x38356 or 488-3966.

Musical Instruments

Clarinet, Buffet B-flat, wood w/case, prefect of school band, \$350. Kathy, x39190.

King Coronet, \$50; Bach Silver trumpet, \$975 firm. Keith, 534-3279.

Pets & Livestock

AKC Lab puppies, blk, shots, dewclawed, champion B/L. Larry or Liz, 334-6932.

Malaysian water monitor, 3' long, tame, \$200; guinnie mangrove monitor, 3' long, healthy, \$175. x34565 or 397-9388.

Half Rotweiler/half German Shepard, 8 mos, st set of shots, \$25. LuAnne or David, 554-5514.

Uniquely beautiful patterned litter of 5 kittens born 6/22, true calicos. x30514 or 339-2129.

Netherlands Dwarf rabbits, hutch, water bottle, feeder, rabbit pellets. Rich, x47257 or 996-7630.

AKC blk Chow puppies, 5 males/1 female, 5/25/95 available for 7/13/95. Debbie, 334-5987.

Household

TV stand w/glass door bottom, black finish, will fit 30" TV, good cond, \$20. 488-3966.

Black-N-Gold Fantasia sect LRM set, 4 pcs, w/formal dusty rose/teal/gold silk flower arrangement, ex cond, \$850. 738-4515 or 854-5181.

Black futon w/blk futon matt w/fg & sm chintz pillows, \$100; white tile-top kitchen table w/4 chairs, \$100; 1 bedside table, \$25; girl's beige/blond 5 drwr chest of drwrs, \$25; girl's stationary-type desk w/lap drwr & 3 side drwrs, \$10. Robin, x49695 or 480-5906.

Boys BR set, dk oak veneer, wrap-around style, dresser, corner unit, cabinet, 2 book shelves, \$125 obo. 286-4255.

Amara refrig, 14 cu ft, sid-by-side, ice/water door dispensers, almond, \$495. 471-9432.

Oak swivel desk chair w/o armrest, \$60. 482-7529.

Love seat, brown velour print, good cond. 244-0250.

Brown reclining chair, \$100. Bob, 244-4431.

Whirlpool refig, 22.3 cu ft, ice maker, works fine, \$150; Kenmore elect dryer, lg capacity, hvy duty, \$125. 244-8045 or 538-8896.

Bunk bed set, 5 pcs, \$275; wood desk, \$40; cabinet sewing machine, \$35; mitsu items. 332-8444.

Desk, 5 drawer, built '50's, refinished, ex cond, \$150. x34063.

Kenmore washer, hvy duty, lg capacity, good cond,

\$150; Frigidaire gas dryer, hvy duty, lg capacity, good cond, \$120. x48882 or 532-1725.

Kg sz bed w/matt & box springs by Henredon, wood hdbd, \$350; round 4' dia, rattan dinette table w/woodgrain formica top & 4 rattan swivel chairs w/cush, ex cond, \$100; sleeper sofa, full sz bed, ex cond, \$50. x35331 or 488-2656.

Sears solid wood sewing machine cabinet, \$65. Dorothy, 482-1505.

Wanted

Want JSC Coshotta Casino bus trip tickets. Dick, 474-3473.

Want Nordic Trac exercise equip, Challenger or other model. Helen, x38413 or 997-6141.

Want house in Forest Bend, assumable w/low equity. 480-9468.

Want personnel to join VPSI Vanpool departing Meyerland Park & Ride lot at 7:05 a.m. for JSC, on-site personnel working the 8 a.m. - 4:30 p.m. shift. Don Pipkins, x35346.

Want personnel to join van pool departing Southwest park & ride lot at 6:50 a.m. for JSC & offsite locations, 7:30 a.m. - 4:30 p.m. shift. Susan Gaynor, 282-5447 or Ed Rangel, x36124.

Want roommate(s), 3-1.5-2, pets okay, lg yard, workshop, W/D, Dickinson, x47180 or 301-1480.

Want set of left handed golf clubs. Bruce, 286-5677.

Want hitch assembly for Mazda MPV. 332-9105.

Want STS-69 payload & experiment cloth patches/decals, Wake Shield, spartan-201, IEH-1, UVSTA, SEH GLO, CAPL-2; STS-payload & experiment cloth patches/decals, TDRS-G, NIH.R2, Hercules, Windex, Bric, CPGC-II, RME-III, STL-B, MIS-B, VFT-4 & MAST. Andrew, x34312 or 280-0647.

Want roommates 5 BR house, El Lago, deck Jacuzzi, FPL, 2-story, \$400 ea. 326-2093.

Director's Safety Page

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

July 1995

**JSC Safety
Awareness Day**
Take a 'Time Out' for Safety
on August 30



Barricades violated

Construction barricades on site are being violated creating some safety concerns. Story on page 4.

JSC will take a 'time-out' for safety

By Rindy Carmichael

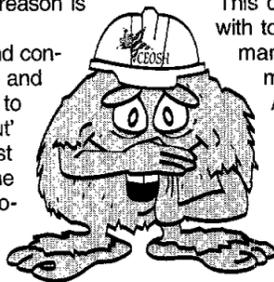
Never before in the history of the Johnson Space Center has the entire center stood down for a whole day. Why now? The reason is Safety Awareness Day.

On Aug. 30, JSC employees and contractors will stop normal activities and devote time to safety. Holding true to the day's theme, "Take a 'time-out' for safety," managers will invest their entire day, while the rest of the workforce will join in another program which has been focused to their respective operations. The investment is hoped to reap significant returns in the future which can be measured in terms of fewer mishaps, fewer personnel injuries, less time off from work due to injury, and a reduced amount of Government property damaged or destroyed due to adverse occurrences.

JSC Director, Dr. Carolyn L. Huntoon, has taken this action as a way to raise JSC employees' and contractors' awareness, at all levels, on the importance of safety in the workplace. Huntoon's commitment to making JSC a Center for Excellence in Occupational Safety & Health is the mandate behind Safety Awareness Day. The Director believes that by working together in a safety program, the center can move another step closer to an accident-free workplace.

"NASA Safety Awareness Day will be a time that we will set aside to review the NASA safety program and assure that JSC has focused on the implementation of safety program requirements. Through center-wide activities, we will

strive to create an awareness of roles and responsibilities, hazard recognition, emergency action plans, and training," said Huntoon.



This day of safety awareness will begin with top-level civil service and contractor managers attending an instructional morning program in the Teague Auditorium where they will be briefed on the institutional safety program at JSC. The session will open with a message from NASA Administrator, Daniel S. Goldin. Huntoon will follow and address her approach on center safety.

Former astronaut, Brigadier General Charlie Bolden, USMC, will speak on his views of the importance of working together safely. The program will continue with an in-depth look into areas such as responsibility for safety, VPP/CEOSH philosophy, incident command system, proper response to various types of emergencies, the new siren warning system, hazardous activities at JSC, the close-call reporting system, hot lines, the NASA Safety Reporting System and traffic safety. The JSC Television Distribution System will air the program from 9 a.m.-noon for those employees whose duties will not allow them to attend. Videotape will be made available for use during the afternoon program as well as for absentee makeup sessions.

Managers will be given safety material kits prior to Safety Awareness Day so they can tailor the afternoon's activities to their own directorate's needs. Each directorate will reflect on its safety posture and its own unique requirements, and what they believe is important to

achieve in those areas. During the first half of the afternoon, each organization will meet and managers will have the responsibility of covering topics similar to the morning program and emphasizing how each of the safety topics applies to their own work areas.

The large meetings will break into smaller groups for the second half of the afternoon where employees will be actively involved in tailored safety activities. Discussion will be held on the hazards of their particular workplace, a questionnaire will be distributed on their local safety program, inspections will be performed and the remaining time will be used for anything else their management deems important relative to safety. For example, Ellington Field will use this time to highlight fire prevention. Rockwell Space Operations Co. will devote some of its time to traffic safety and the Engineering Directorate is interested in focusing on emergency response plans. Finally, a checklist will be composed for selected individuals to use during inspections of their workplaces.

The final part of the day will involve the compilation of the questionnaires and summarizing discrepancies found during the inspections. Each directorate will be responsible for reporting the combined information to the Executive Safety Committee.

Safety Awareness Day will not only be a day of learning, but of sharing and working together as a team. The success of the effort is totally dependent upon the dedication and effort we all put into it. The day will be an important milestone in the history of JSC and the safety program and employees will all be a part of it.

Close call reporting is working at JSC

By Dan Clem

The center-wide Close Call Reporting System has officially been in place since the first of February. Since that date, 76 reports were received from on-site locations, 18 of those were received from Ellington. This 550 percent increase over the number of reports received this time last year is indication that the Close Call System is indeed benefiting the center. Below are some examples of how the system is working.

Several reports were received concerning pedestrian near misses at area crosswalks. As a result, security has agreed to monitor crosswalks more closely and increase patrols around problem areas identified by incoming reports. One such hazard is the crosswalk across Ave. B near Bldg. 37. There has been an increase in pedestrian traffic at that crosswalk. Initial reports resulted in reducing the speed limit to 25 mph. Additional reports indicated that this solution was not effective. Security is now considering placing stop signs there, has conducted a traffic survey at that particular crosswalk and is currently evaluating the results.

Another incident reported via the Close Call Reporting System was a light fixture that fell, almost hitting an employee. After receiving the close call report, the incident was promptly investigated by the Plant Engineering Division. They discovered that the fixture was improperly installed. The fixture was reinstalled correctly and other light fixtures in the building were checked to ensure that they, too, were properly installed.

Earlier in the year, reports were received from workers becoming sick because of a particular solvent being used by the custodial staff to strip wax from floors. Similar reports had been received from other areas. As a result of these reports, the custodial staff is now using a different, less irritating solvent.

The Close Call Reporting System is working. Forms can be obtained from area displays in most buildings or through the Information Management Branch's Program Documentation Center, x36164. This system can only be as good as employees make it. Don't rely on luck or someone else to keep safe.



JSC Center of Excellence for
Occupational Safety and Health

Director's Corner

The effectiveness of Johnson Space Center's safety and health program can be achieved when all management-executive, operations, line, staff and supervisors fully integrate safety responsibility into the mainstream their respective organization. Safety should be accepted as an integral part of each organization and its mission.



As Center Director, I will continue to bring issues of significance to the JSC population.

If you want to report a concern, you can call the Center Director's Hotline at x31234. The

following reflect representative inquiries by JSC civil servant and contractor personnel.

Safety Hotline Call

Question: What are the wavy lines on my workstation monitor and could it pose a health threat? I have reported this problem a couple of times and there appears to be no responsiveness.

Answer: All reports of perceived hazards from Video Display Terminal or other potential sources of electromagnetic interference are very much the concern of center management personnel. The waves, apparently caused by EMI from a nearby power unit installed a year earlier, were investigated by the JSC radiation officer, over a year ago and again within the

last two months. The investigations revealed that all applicable measurements were well below the allowable levels established by the American Conference of Governmental Industrial Hygienist standards. Based on these findings, the determination was made that no known electromagnetic radiation health threat exists.

Safety Training

Question: Where do I find the latest schedule and description of upcoming course offerings at the Safety Learning Center?

Answer: There is a publication distributed periodically that details the next four to five months of course offerings. This publication, *The Safety Net*, details schedule, course description, instructor highlights as well as special features regarding safety training at JSC. Distribution is to the branch chief level and facility managers. To be placed on distribution for *The Safety Net*, contact the JSC Safety Learning Center at x36369.

JSC Facility Managers

Question: How do I find out who the facility manager is for my building?

Answer: You can find out who the facility manager is for your respective building by calling Julia Watkins at x32925 or looking up the listing on the JSC Homepage on the Internet. Within the next month, Facility Manager Information Placards will be installed in each building. Each placard will contain relevant information and numbers on how to contact each facility manager.

The Director's Safety Page

is a health and safety publication produced monthly by the Health, Safety and Environmental Compliance Office (NA3) 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.

External safety surveys are independent and effective

By Andrew Hernandez, Jr.
Input from Kathryn Packard

The external safety survey initiative originated as the recommendation of the 1994 Safety Review Board which was chaired by Captain Dave Walker.

The concept of the external survey is to have an independent, impartial team of safety professionals conduct a comprehensive survey of a directorate, with the results of the survey forwarded only to the director of the organization. Discretion as to whether or not the results of the survey are released to other organizations is exercised only by the respective director. The objective of the survey is to provide a tool for JSC directors to identify in-house shortcomings and/or hazardous conditions through the eyes of experienced safety professionals who are not encumbered by a "...but we've done it that way for twenty years!" mindset. The advantages of these surveys are numerous and include an opportunity for operations personnel to network with safety professionals throughout the country; identification of endemic safety issues that may exist throughout a particular directorate; redefinition of the "safety cop" image that inspection participants routinely assume of their surveyors and empowerment of directorates in the assumption of their responsibility for environmental, safety, and health issues.

The Space and Life Sciences Directorate agreed to be the initial "test subject" for this initiative and the first external survey was conducted in April of this year. The Space and Life Sciences Directorate Acting Director, Don Robbins ensured that the independent team had access to all facilities and personnel, and integrated his people with the survey team very nicely. The team was composed of four Air Force personnel, two from the Navy, two from Dow Chemical, and one from Exxon.

The team was onsite for three days. The first day consisted of an introduction to NASA and JSC and a tour of the center. Team members were supplied with the facility manager's list, the JSC Safety Manual, building plans, protocols and contractor facility safety engineering points-of-contact. The survey was conducted on the second and third day. The team was given the freedom to use whatever evaluation tools they felt were most effective (i.e. checklists, fault tree analysis, etc.) At the conclusion of the survey, Robbins was debriefed by the team leader.

External Surveys are hoped to be conducted every nine months. The Center Operations Directorate has volunteered to be the next directorate to benefit from a survey. That event is tentatively scheduled for the week of Aug. 21.

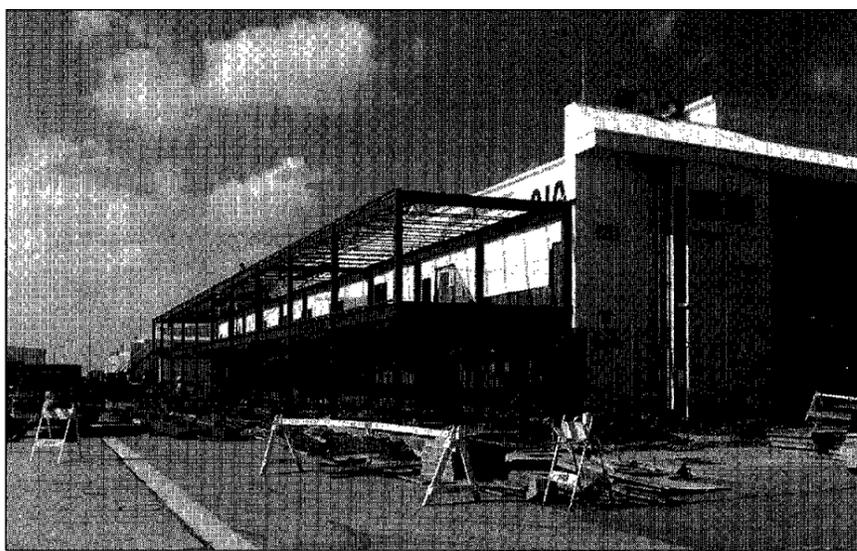
Health-related training is offered

The Occupational Health Office and Total Health are currently distributing their new catalogue for health-related training. This catalogue includes the 1995 training schedule and a description of courses offered. Several new courses, such as Personal Protective Equipment, Lead Safety and Hearing Conservation, have been added to the list. These courses are designed to meet current OSHA regulations. The Environmental Health Office and Total Health will also be presenting monthly "Training Topic of the Month" meetings which will offer expert guest instructors and lecturers from throughout the industry.

In addition to the monthly classes scheduled at JSC and Ellington Field, short training modules are currently being developed for use by those responsible for safety training or monthly safety meetings. These modules include a training video, a module outline for presentation, a master copy of employee handout materials, an attendance list for the meeting or training session and where appropriate, a test which can be administered to participants. For more information on classes or training modules or to obtain a catalogue, call Karen Bleam at x36475, or Sheila Goldberg at x37424.



total health



Heed those construction barricades

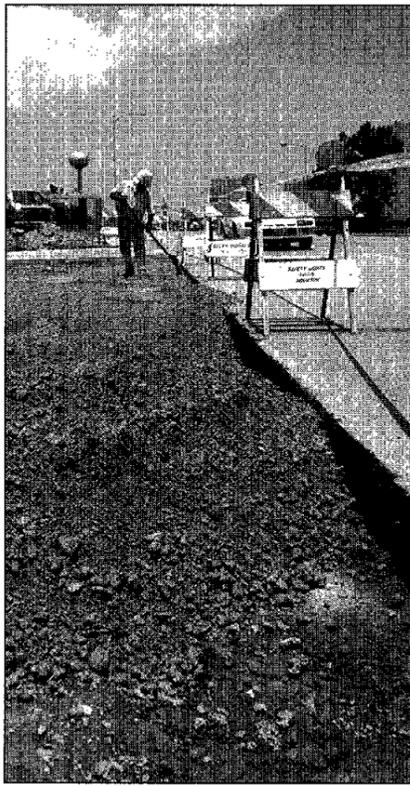
By Glenda Rose

Warning signs and construction barricades have been put in place for employee protection.

Construction sites, in particular, pose many hazards. Construction sites hold the record for the highest number of injuries and fatalities in the United States. At JSC, the construction supervisors have the responsibility to protect the health and safety of their workers. In addition, they must ensure that personnel not assigned to the job site will not enter without permission.

Recent observations indicate that some JSC employees are ignoring warning signs and violating construction barricades. It is imperative that employees recognize them and take the appropriate actions.

Efforts to comply with these signs and barricades will assure an individual's safety and the safety of others. Compliance is not optional. The key to a successful safety program starts with each individual acting in a manner that enhances his or her own well-being.



Have fun—but know the dangers of the beach

Courtesy of the Galveston County Sheriff's Beach Patrol

Texas beaches are popular recreational areas during the summer months, but can pose a threat to visitors if the proper precautions are not taken. Rip currents, sand bars and holes, stings, bites and cuts and swimming on unguarded beaches are just a few of the hazards.

Rip currents, wrongly called "undertow," can sweep individuals into deep water fast. Well known to residents of the Gulf of Mexico, a rip current is a situation where the force of the surf coming in is equaled by the force of the water returning to the Gulf. Big waves equal strong returning water. The rip current's biggest dangers are its strength and suddenness, but by knowing what causes it and how it works, individuals will know what to do if one ever catches them.

If a swimmer gets caught by a rip

current, do not try to swim straight for the shore. The strong current can make even the best swimmer tired and tired is dangerous.

The current is narrow and dies out beyond the breakers. If it is weak, swim parallel to the shore until out of the current, then swim ashore. If it is stronger, float with it until it dies out, then turn toward the shore. However, always observe posted warnings about water conditions, and do not go in if strong currents or rip tides have been reported.

Sand bars, hidden deep spots in the surf, are hazardous—especially for small children. Waves are powerful and dig holes in the bottom near shore that may be several yards wide. They can form at any water depth, so anyone may step into one while wading in very shallow water. The height of the bar and the depth of the trough vary, but the water in the trough is sometimes

"over your head." Do not try to reach the sand bar offshore.

On the Texas Gulf coast there is a greater chance of being struck by lightning or winning the lottery than being bitten by a shark. Encounters with stinging jellyfish are much more likely and swimmers need to be prepared.

Stinging jellyfish abound in Gulf waters and randomly sting whatever they touch. The severity of the sting depends on the species of jellyfish and the reaction of the victim to the toxin. One inch of one tentacle contains 900 stinging cells that fire on impact, injecting toxin into the victim. Lifting the tentacle from the skin and dousing the area with alcohol will bring relief. A paste of meat tenderizer applied to the stings will counteract the toxin. An antibacterial spray will keep the wound from infecting. Do not rub the area with sand—this will only ensure that all the stinging cells fire.

Stingrays frequent shallow Gulf waters and can thrust a sharp shaft into an offending foot or ankle when stepped on. This shaft, located at the base of the stingray's tail must be handled carefully, usually surgically, because the spines point backward and prevent easy removal. One good preventive action is to shuffle feet while wading. When disturbed, the stingray will move away. It cannot puncture with the stinger unless it is held down to provide leverage for the tail to strike.

One good preventive measure for swimmers is to always wear some type of foot gear when in the Gulf or on the beach, particularly children, because shoes don't bleed. Broken glass and sharp shell remnants are everywhere, and children are notorious for not watching where they are going, especially when chasing a frisbee or a butterfly. Old tennis shoes or the popular water sox are

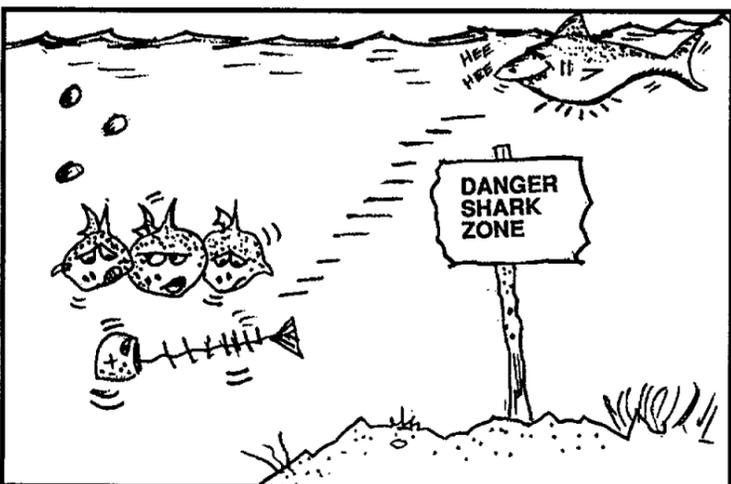
good choices.

Finally, protect against sunburn. Sunburn occurs even on cloudy or overcast days. Ultraviolet rays are harmful to the skin, regardless of the color of that skin. Sunblock can protect the skin if applied properly. The SPF or sun protection factor listed on the sunblock indicates how long individuals can stay in the sun without burning. If, for example, a sun bather wears SPF 15 as recommended and normally burns in 10 minutes, the sunblock allows him or her to stay out for two and a half hours. Then another application is needed or, even better, get out of the sun for a while.

Babies and small children should be protected with sunblock whenever exposed to the sun. Most skin damage occurs before the age of 15—then skin begins to toughen somewhat. The threat of skin cancer begins with the earliest exposure. Enjoy, but be aware at the beach.

The Safe Side

By Tim Allen



One of two things: either Fred couldn't read worth a darn... or our sign campaign was one heck of a flop!

Be wary when swimming, boating

On a scorching summer day, nothing is quite as refreshing as plunging into the water. Cool and inviting but, water can be a killer.

Drownings typically claim 6,000 lives each year and are the third leading cause of accidental death in this country. The National Safety Council estimates that the majority of drownings are caused by trips and falls resulting from horseplay, alcohol or drug use, or simply a child's curiosity. The current rash of child drownings in Houston has already surpassed the total drownings in 1994. Water doesn't have to be deep to be dangerous. People drown in shallow water just as often as they drown in deep water. Hundreds of spinal injuries occur each year, mostly from people diving into shallow water. Many of these spinal injuries result in per-

manent paralysis.

Boating accidents also account for a significant number of drownings. For example, 82 percent of those killed in boating accidents in recent years were not wearing life jackets. Thousands of people would be alive today if they had been wearing some sort of flotation device. Over half of all boating deaths are alcohol-related.

The majority of water-related accidents are preventable. A tragedy can be avoided by following simple safety rules, acquiring swimming and diving skills and recognizing and avoiding hazardous situations.

- Never swim alone. Know limitations and don't exceed them.
- Always check water depth before diving; enter feet first if not sure.

- When diving, always enter the water with arms extended overhead.

- Don't drink alcohol when in or on the water.

- Practice safe boating techniques, whether boat owner or passenger. Be aware of the many safety precautions a recreational boater should know and maintain all the safety equipment required.

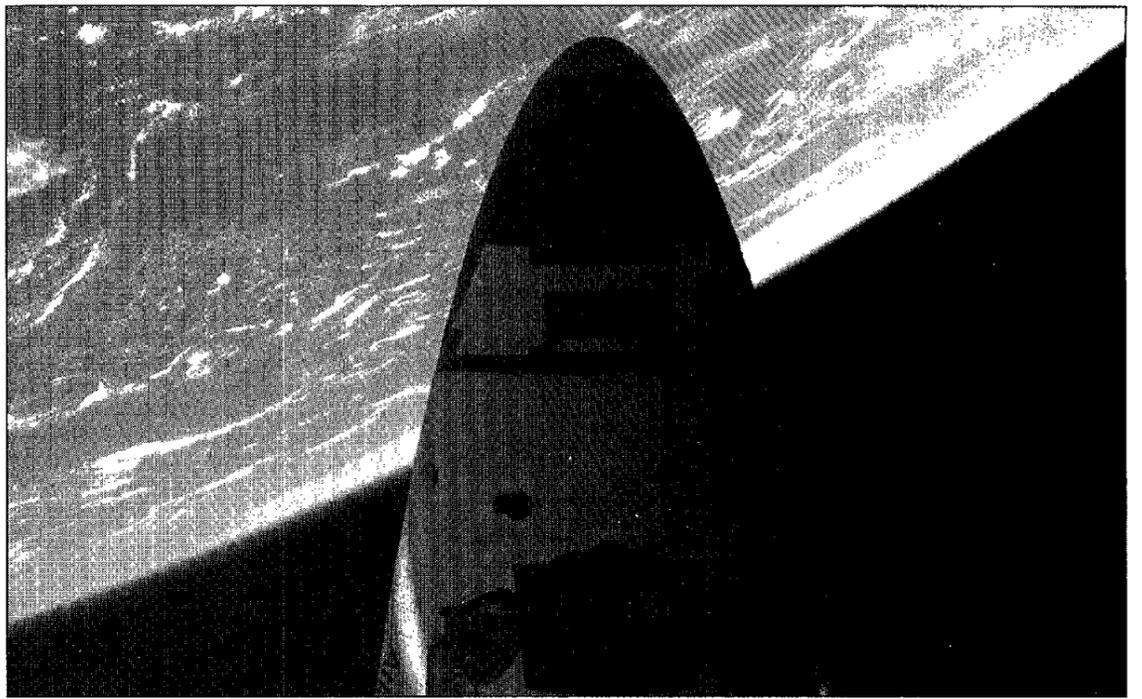
- Provide constant supervision to children. Even children who have had swimming lessons must be watched at all times. When toddlers fall into a body of water, they tend to panic and forget what they have been taught.

- Erect barriers to make pool or spa area safe.

- Learn and practice basic life-saving techniques such as cardiopulmonary resuscitation.

World Wide Response

Shuttle homepage on the Internet receives comments from around the planet



An estimated 150,000 to 300,000 people visited the new NASA Shuttle Web on the Internet during the STS-71 mission, and a great number left comments about the space program in general.

Here is a small sampling of those comments, pulled directly from the server logs:

Bertil Stenstrom, Sweden.

Nice to see you put in so much effort to inform the public of your business. Keep it up.

Thomas I. Amadio, New Hampshire.

Hello, Best of Luck!!! NASA is one of the few Government Programs that can make me proud to be an American.

Zsolt Kiraly, California.

I'm really glad to see that NASA is giving this wide public access to their information.

Jon C. Coulter, Alabam.

Great information. This should help keep more public interest alive!

Timo Pekurinen, Finland.

Yes! A+ for you new www-pages! I have visually spotted three shuttle flights and helped my friend to do SAREX contacts with packet radiol I'm a ham myself (OH2JBB) but not allowed to transmit at 2m band. I would say I'm a shuttle freak and we do track and follow all missions with 57 degree inclination. (Due to location of Helsinki 60 degree N. Like Alaska!) Your web pages are great. Keep up the good work, and since we don't get NASA select here in Finland this is our only reliable and up to date media. Please keep it as up to date as possible.

Guillermo Gonzalez, Florida.

Been a rabid space nut since I was a kid, and continue to be to this day. Good luck!

Dale M. Blondin, Michigan.

Grass-roots support is getting stronger for continuation of your efforts in our nation's space technology.

Patrick J. Finlan, Louisiana.

As a major contributor to the "Information Age", NASA is a natural for using the Net as its communication media. This will provide me with a ready available source for keeping current on space activities. Thank you.

William Roth, Oregon.

This is a wonderful idea. We need more access to our space program. The more personal it is, with this kind of access, the more involved people will be. That might just help come funding time, too!

Michael Cleaver, England.

I know It's a cliché but this is a Historic mission—perhaps more so than Hubble. Cooperation in the exploration of space seems to be the only way our short-sighted governments can justify the expense. Best wishes for an outstanding mission.

Terry A. Taylor Elementary School, New York.

Good luck to all the people of NASA on this historic flight. Godspeed from all the students at Taylor Elementary school.

Deborah L. Padgett, California.

Best wishes on your upcoming flight! I am excited and inspired by this mission and hope all others in both our nations are as well. This astronomer, taxpayer and voter will do her best to inform the government and public that what NASA does is important and vital to all humanity.

Theodor Kleynhans, South Africa.

I wish the crew of STS-71 the best of luck

from all the engineering students at the University of Stellenbosch.

Marcus Dejmek, Canada.

I love this place. I can't get enough of this stuff! All my free time is spent at this address. "Get a life!" you say? Well, this is my future profession so I'd better get a head start. Family matters won't come for few years yet so I'm keening out for as long as possible.

Rolland C. Kunc, Texas.

Space is the frontier from which the technology of our future springs. Let these explorations be fruitful for all of mankind.

Mark Slima, Arizona.

I love the space program and believe in it deeply. If there were one thing I could change about it, perhaps it would to have a much larger budget so we could get on our way to Mars!

Michael A. Lari, California.

To all at NASA, and of course all the astronauts and cosmonauts, in the midst of all pressure of budget cuts, woodpeckers, etc., you provide the American tax payer, byfar, the "Best Bang for our Buck." Everything you do, clearly benefits all of us and I firmly believe that what you do should not be compromised or cut back. The upcoming event will, as you all well know, will be as important as "One Step for Man." I am very proud of all of you and what you have accomplished over the last 20 years. As always, Keep up the good work!

Tim Davis, West Virginia.

I worked shuttle with Rockwell prior to commercialization. The shuttle is a excellent example of American "know-how," got a problem—find a solution. I salute the riders of STS-71, bon-voyage. Space is such a wonderful "entity."

Dave Raab, Utah.

This service is just great, I think NASA in doing these kinds of things is the only pay back some of us feel we ever get. Please don't make cuts in this kind of info that means so much to alot of us out here. The only thing I wish I could do was to look at the videos but maybe I can work that out later. Again, good luck and thank you from an old man who really wishes he could have done it too. Dave—A HAM N7VDV, Army Mars AAR8DS, A Navy vet and worked in the space business long ago.

John Young, Texas.

Cool page! Thanks alot NASA. Lets all go to Mars together!

Matt Gordon, Iowa.

Just like to say that I think that the space program is doing a good job with the Mir mission. It is an important stepping stone to the settling of space by all of humanity. Keep it up!

Louis Davidson, Florida.

There is a saying "If I only knew," that many of us use when we are faced with either a dilemma, or news of something, that if we had followed to completion we would have reaped a beneficial reward. Please: Let the people who are trying to shutdown the space

accumulated technology look at this comment. The reason being, they are the ones that will say, "If I only knew," then for mankind it will be too late.

Chuck Jones, Pennsylvania.

I want to wish you all the best of luck and may God be watching over you. This is really going to be a super accomplishment, Docking with MIR, Amazing! Once again Good Luck and Godspeed.

Rich Grebb, Pennsylvania.

Thank you so much for you efforts. I'm a teacher of 9th grade students in Earth & space science and technology in the Pocono Mountain School District. We are thrilled with the sharing of knowledge, images and information you provide. It is my hope that such efforts will continue and not be ravaged by spending cuts. Mission to Planet Earth so far has not only provided us with critical base line data for the environmental future of man, but has offered my students real living proof that their choices, decisions and actions do impact the planet. All of NASA's web sites have enabled my students to feel a part of

real scientific investigations. You have helped me to bring Earth science to life! From all of us, continued success and wishes for a safe STS-71 *Atlantis* Flight to MIR. Thanks.

Eric Waltersdorf, Michigan.

I still remember watching the first manned moon landing. From that moment on, you at NASA have captured my imagination. Keep up the good work. Those of us who care about space exploration, both manned and unmanned, have voices too. Good luck with STS 71, and God Bless.

Craig Wilson, Japan.

I think this is a great service. Our government is taking a lot of bad raps lately, but NASA and the space program are something we can all be very proud of. I choose to believe that the taxes I pay are going to providing a service like this that lets me be a part of everything, even though I live in Japan. Thanks for making all of this available to us.

Doc Pisapati, Pennsylvania.

I have been enjoying this NASA web for the past two months. My comment: "This is the best on the planet that is the most informative and enjoyable one." I have been a fan of NASA since age 10. It is part of my heart and blood. I have done my Ph.D. in Magneto Fluid Dynamics and the source of inspiration is NASA. Though I work for business systems, I admire the work put by thousands of people at NASA. The fruits are being enjoyed by billions forever. My son, Kereeti Pisapati, is very very thrilled whenever he watches a space flight. In fact, we watched the space shuttle takeoff last year. We all thank NASA for doing excellent job for the mankind. We look forward for the July 4th launch. Good Luck to the people at NASA.

Travers Naran, Canada.

This is a very exciting mission and I think most of the human race is with me when I saw we will be praying and wishing for the spectacular success of the mission.

Michael H. Hobbs, Georgia.

Just wanted to salute a job well done! Our astronaut heroes are always in our prayers,

and NASA is one oasis of government expenditures that I can truly be proud of and actually watch with pride how at least some of my tax dollars work. Keep up the good work, and Reach For The Stars! (Also thanks for the Web Site, hope to see more).

Michael Lee, California.

Congrats on the space dock with MIR. It is as significant as the lunar landing. When once it was a battle between the two countries full of secrecy, now it is a joint effort of sharing camaraderie and on this the 100th mission, it is great to see the two countries united in space. Good job NASA.

Scott Riddle, Alabama.

Keep flying! Build that space station, then go back to the moon and maintain a presence there. Mine the moon, and use the raw material to expand the moon base. You can build an electromagnetic rail gun, say 10km long, to launch the materials and supplies that you have produced on the moon to the space station. You know how expensive it is to lift stuff out of the earth's gravity well, a railgun launched materials from the moon would be orders of magnitude cheaper!

Richard E. Raby, Minnesota.

I am thrilled to see that NASA has met some hard-earned goals this decade and that a great number of tax dollars has been correctly used to position and fix Earth's greatest telescope in orbit and successfully dock with a Russian space station and enter into a joint scientific venture.

Dick Carver Jr., Washington.

This is the way I want my tax dollars spent! I'm all for reducing waste, but to cut beneficial programs such as our space program is ludicrous. Thanks for the continued efforts and service to humankind!!

Chris Tuck, Michigan.

I am very proud of our space program for its inspiration, its lift on the human spirit!

Gerald Moravansky, New York.

I think this mission should set the example to all the Earth's citizens that our planet is finite in the infinite space, and through cooperation and hard work we can all improve the quality of everyone's life. Space is our final frontier and we should remember that when viewed from space, the Earth only seems a single cell in the vast organism which is the Universe—of which we really understand very little.

Stephen Kinford, Ohio.

I would like to tell all of the astronauts American and Soviet, thank you for joining in this mission to help spread world peace. And to further a joining of hands in science. My only wish is to someday be up there with you, but as that is next to impossible I'll be with every launch.

Eric Whitehurst, Nebraska.

I truly believe that space travel it very important! Most of the people I know fell the same way. We believe it will help us understand why we are here. We will enjoy the NASA online service, it seems to be the only way to get good info. Thanks from all of us.□

Above: This electronic still camera photo is one of many taken from the Russian Mir Space Station and beamed down to Earth during the mission. Many photos are available via the Internet on the shuttle homepage.

Prox ops hangs STS-71 mission plaque

The STS-71 mission was the first docking between the Space Shuttle *Atlantis* and the Russian Mir Space Station and was the result of an enormous amount of work by many people.

Those honored in the plaque ceremony included the Payload Officer, Jean Haensly, Russian Interface Operations, Charlie Armstrong, Rob Banfield, Joe Cavallaro and Sally Davis. The positions singled out were the Maintenance Management and Central Systems led by Karl Pohl, Flight Design led by Joel Montalbano, Engineering Integration led by Greg Lange, Flight Activities Officer John Curry and rendezvous and Prox Ops led by Lynda Gavin who hung the STS-71 Mission Plaque.

JSC

People

Rummel new acting director

John Rummel has been named the new Acting Director of the Space and Life Sciences Directorate. Rummel joined JSC in 1966 as a physiologist and has held progressively responsible positions in the Space and Life Sciences Directorate since then; including Assistant Manager, Mission Management Office; Mission Scientist and Assistant to the Director for Science Payloads. Most recently, he has served as Manager of the Program Integration Office and Assistant to the Director for Science Payloads.

Secretaries earn top honors

Two secretaries were recently honored for their secretarial excellence.



Gavin



Rummel



White



McHan



Clem

Anne White of the Operations Division received the Marilyn J. Bockting Secretarial Award for her exceptional performance to anticipate the division's needs, organizational skills and professionalism.

Patricia McHan of the Office of the Chief Information Officer received the Marlyn J. Bockting Secretarial Award for her successful establishment of a new office, her diligent work in learning new information technology, her ability to train new employees

and her leadership abilities.

Clem receives certification

Daniel Clem of the Health, Safety and Environmental Compliance Office recently completed all requirements to become a Certified Safety Profession. Clem passed two seven-hour examinations covering engineering and management aspects of safety, applied safety sciences, legal and regulatory matters and professional affairs.

Astronomers dedicate telescope

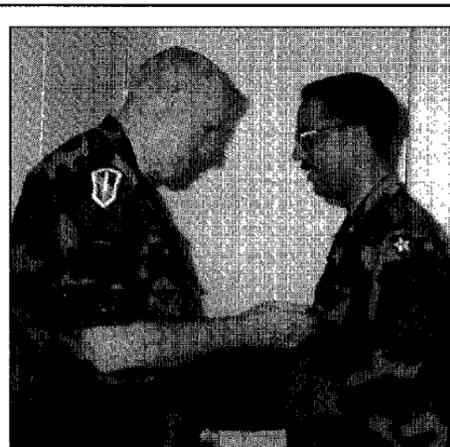
By Chuck Shaw and Wilber Boykin

The JSC Astronomical Society recently dedicated the Gary L. Kraus Telescope at the Armand Bayou Nature Center.

This culminated an 8-month project by several members of the JSCAS which began last September. Club members Tom Buzzi, Hernan Contreras, John Erickson, Paul Hannagriff, Al Kelly, Ed Malewitz, Chuck Shaw, Bob Taylor, Dennis Webb and Brian Zemba refurbished the telescope and designed and built an observatory to house the instrument in its permanent home at the Nature Center. Kraus, who died of a heart attack on June 23, 1994, had been a JSC employee since 1962 and was assigned to the Life Sciences Project Division at the time of his death. His family donated the telescope, an 8-inch long-focus Newtonian optical tube, and some of his astrophotos and collection of slides and published pictures to the JSCAS for public education about the earth, the sky and the universe.

The larger instrument, built by Kraus in the mid 1960s, is a 12.5-inch f/7 Newtonian on a massive home-made steel German equatorial mount. The mount features 2-inch shafts and a remarkable drive system. The optical tube is made of heavy aluminum about 8 feet long with tight fitting end caps to allow the whole assembly to be located outdoors. Kraus ground the mirror himself in 1964 from a Corning blank. The telescope included a very high quality set of 1960s eyepieces. The club adapted the smaller 8-inch optical tube assembly into a nice Dobsonian telescope for lending to club members.

The dedication featured a brief ceremony including the unveiling of a plaque honoring Kraus and JSCAS members who set up the observatory at the Nature Center. Kraus's wife Jann, his adult children Gina and Drew, his brothers, sister and most of their families, his mother and stepfather, and many club members attended the dedication.



TEXAS GUARD HONORED—Brig. Gen. Charles Weaver, deputy commander of operation in the Texas State Guard, left, presents Willie Williams of the Space Flight Training Division the Commanding General's Individual Award. Williams serves as assistant inspector general in the guard and was recognized for his exceptional performance of duty.



Maj. Gen. John Bailey, commanding general of the Texas State Guard, left, presents Stephen Crow, of Mason Hanger the Commanding General's Individual Award. Crow serves as senior aide-de-camp and also was recognized for his exceptional performance of duty.

Excellence is key to award

(Continued from Page 1)

The Silver Snoopy is probably the best known SFA award and best symbolizes the intent and spirit of the program. The Silver Snoopy is presented personally by the astronauts to employees for outstanding performances.

The SFA program also is responsible for the Flight Safety Award. The purpose of this award is twofold: to serve as a continual reminder of what is riding on every human space flight and to acknowledge the people whose personal efforts above and beyond their job commitment have resulted in significant, direct contributions to flight safety.

Another SFA effort is the highly sought after Launch Honoree Program. Achieving this award is the highest tribute paid by NASA to workers. Recipients are given the opportunity to visit a space facility as NASA VIPs. When visiting Kennedy Space

Center, the honorees have the opportunity to view a spacecraft launch, attend a reception in their honor and meet with top NASA and industry officials as well as members of the astronaut corps.

Another honor is the Space Flight Awareness Team Award which recognizes the efforts of smaller teams within the NASA-Industry team.

The SFA program is not just about awards. The SFA effort also involves such things as astronaut visits to facilities to meet with employees. They talk with the employees, stressing the importance of their work, answering questions and updating them on program highlights. Through this one-on-one contact, the true meaning of the customer relationship is realized.

The SFA name may be new but the goals and objectives of the program remain the same—that flight safety comes first and excellence in job performance makes it happen.

Divers honored for quick response

By B.K. Miller

Johnson Engineering Weightless Environmental Training Facility divers were recently honored for their heroic efforts in saving one of their fellow divers during routine training.

Doug Begnaud, a WETF Scuba Instructor, and Sharon Daley were in the pool completing Daley's WETF Safety Diver swim test. B.J. Mundine, and Mark Liles were monitoring the training. Begnaud took a breath and swam to the bottom of the 25 foot tank to prepare equipment for Daley's final test. After approximately one minute, Begnaud was still at the bottom. Daley was sent to check on him. As she neared Begnaud, she noticed his skin was turning blue, his mask had water in it, and his eyes were unfocused. She responded immediately, bringing him to the surface.

Because of immediate actions by WETF and emergency response personnel, Begnaud arrived at St. John's Hospital within minutes. Within a few days he was out of danger and sitting up in bed. He has fully recovered and resumed all of his job responsibilities.

A committee of diving medical, safety and operations experts was convened to determine the cause of Begnaud's accident. This group concluded that the most likely cause was "breath hold blackout." Begnaud held his breath too long, passed out and drowned. This can be called a "near drowning" since he recovered.

This accident involved swimming, not diving. Approximately two thousand dives occur per year. This was one of only two in-water accidents to occur at the WETF since it became operational in 1979.

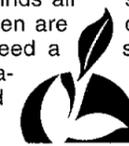
Clinic offers shot tips

By Eileen Hawley

Inoculating youngsters against a wide variety of childhood diseases helps keep them safe. But the Total Health Program reminds all JSC employees that children are not the only ones who need a thorough program of inoculations to maintain good health.

Total Health, in connection with the City of Houston's Health & Human Services Dept., will host a lunchtime seminar on how to "Immunize Yourself and Your Children," from 11:30 a.m.-12:30 p.m., Wednesday in the Bldg. 30 auditorium.

"This seminar will answer basic but important questions," said Terri Lauderdale, seminar coordinator. "When do children need their shots? What routine vaccinations do adults still require? And what special vaccinations are required for employees traveling to foreign countries?"



Seminar participants also will learn about possible side effects from vaccinations, and who should consider obtaining influenza or hepatitis B immunizations.

For additional information on the seminar, or obtaining vaccinations, contact Terri Lauderdale at x37247 or Jackie Villejoia, at x36474.

Space walk to test tools

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cles in low Earth orbit on orbiting spacecraft.

The final highlight of the mission will come two days before landing, when Voss and Gernhardt venture into *Endeavour's* cargo bay for a six-hour space walk, the second for the shuttle program this year.

Voss and Gernhardt will take turns evaluating the thermal improvements made to their spacesuits and will test tools and techniques which may be used in the construction of the International Space Station.

One of the major activities will involve the evaluation of small tools and connectors on a task board mounted on the starboard side of

the payload bay. Two similar, but even more intricate space walks, will be conducted on the STS-72 mission at the end of the year.

Meanwhile, the Space Shuttle *Discovery* is being readied for a ferry flight to Palmdale, Calif. at the end of September to begin nine months of refurbishment and maintenance work prior to its return in early 1997 for the second Hubble Space Telescope servicing mission.

Discovery returned to Earth on July 22 following the STS-70 mission, having incurred virtually no hardware problems as what one flight controller called "the cleanest machine ever flown" in shuttle program history.

STS-70 crew to share memories

(Continued from Page 1)

Mission Specialist Mary Ellen Weber said it was worth every minute of waiting for her first spaceflight.

"It was fantastic. I felt guilty that I was one of the people that got to be up there and that all the people that had supported us on the ground could not be there with me," Weber said.

"I could not believe how smooth everything went," said Mission Specialist Nancy Currie in talking about the deployment of the Tracking and Data Relay satellite. "It really made it easy on us."

Mission Specialist Don Thomas complimented the TDRS training team.

"They worked patiently with me over the months to get me ready to deploy the satellite, and I really appreciate their hard work and dedication," Thomas said.

Discovery is currently being prepared for transport to California for routine inspections and maintenance.

The crew will receive their space flight medals and brief employees from 1-2 p.m. Wednesday in the Teague Auditorium.

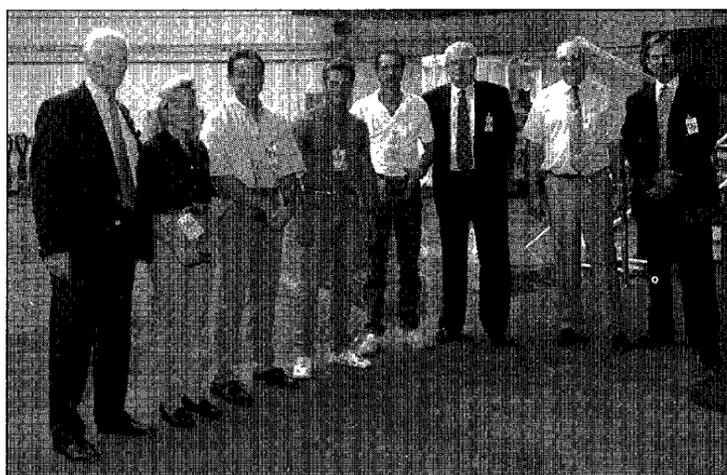
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Johnson Engineering divers were honored for their heroic efforts to save a fellow diver. From left are Gene Cernan, Sharon Daley, Ronnie Howard, Doug Begnaud, B.J. Mundine, Tom Short all from Johnson Engineering, Chris Perner of the Flight Crew Support Division and Bill Jackson of Johnson Engineering.