

Space News Roundup

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National Aeronautics and Space Administration



Members of the American Association of University Women gather for a closer look at a plaque honoring 51-L Mission Specialist Judy Resnik following its unveiling June 24 at JSC. Resnik was a member of the AAUW, and the association has established a \$320,000 educational fellowship in her name. JSC Director Dr. Aaron Cohen and astronaut Shannon Lucid accepted the plaque on behalf of the center.

NASA answers accident report

NASA Administrator Dr. James C. Fletcher has submitted to the President a report on the status of NASA's work to implement recommendations of the Presidential Commission on the Space Shuttle *Challenger* Accident.

The 191-page illustrated report describes the ongoing Shuttle recovery effort relative to the commission's nine recommendations, and several other return-to-flight actions.

"I believe that this NASA report to you details an appropriate response to every item in the Commission report," Fletcher wrote in a June 30 transmittal letter. "We will keep you advised of our progress, major problems, and any additional requirements in restoring the Shuttle to safe and effective flight status."

The Rogers Commission presented its recommendations to the President on June 6, 1986. On July 14, Dr. Fletcher presented an interim response and promised to deliver another report after one year.

The report details changes to the solid rocket motor design, reviews of every element of the Shuttle system, establishment of new pro-

cedures to provide independent safety, reliability, maintainability and quality assurance functions, and sweeping changes in personnel and organization. It is divided into sections on:

- Solid Rocket Motor Design;
- Management Structure and Improved Communications;
- Criticality Review and Hazard Analysis;
- Safety Organization;
- Landing Safety;
- Launch Abort and Crew Escape;
- Flight Rate;
- Maintenance Safeguards; and
- Related Return-To-Flight Safeguards.

Included in the report's eight appendixes are Associate Administrator Rear Adm. Richard Truly's March 1986 memo establishing a strategy for safely returning the Space Shuttle to flight status, a description of the organization and operation of the NSTS Program, and the National Research Council's summary of responsibilities for both the Solid Rocket Motor Redesign and the Criticality Review and Hazard Analysis Audit Committees.

Ask Mr. Foster to replace SATO Travel Office

A national travel agency called Ask Mr. Foster will soon take over responsibilities of the SATO Travel Office at JSC and all other NASA Centers except KSC.

SATO, which stands for Scheduled Airline Traffic Office, has made airline reservations for JSC employees since July 1965. SATO represents each of the major airlines which publishes a flight schedule and has provided travel services to both NASA and the Department of Defense (DOD) for more than 20 years.

But a changing airline and travel agency marketplace and several other factors led to a decision by NASA in 1986 to competitively acquire travel services for the Agency, according to Pete Brunner, Chief of the Transportation Management Office at NASA Headquarters.

Those other factors included changing legislation, airline dereg-

ulation, dissolution of the Civil Aeronautics Board and the anticipated withdrawal of the limited anti-trust immunity under which the SATOs at NASA and the DOD have operated for years, Brunner said.

Another factor for seeking competitive bids on NASA's travel services was the March 1986 legal action by a group of travel agencies who sought an injunction which would require NASA and the DOD to seek competitive bids for their travel reservation operations. In April 1986, NASA announced it would compete the contract Agency-wide and issued a formal request for proposals (RFP) in October, according to David B. Homer, JSC Transportation Officer.

"The decision to compete the travel services contract was not a reflection of poor services by the SATOs," Brunner said, "but rather a result of the many changing

conditions in the travel marketplace."

The DOD also has issued an RFP for travel services, he said.

A NASA procurement evaluation committee representing each center evaluated 40 proposals and awarded a contract to Ask Mr. Foster for all NASA centers except KSC, which will be served by All World Travel.

Homer said Headquarters is now negotiating the contract with Ask Mr. Foster. The company is expected to begin serving JSC within 90 days, he said.

The contract, known as a negative cost contract, represents a first for the federal government and may in fact be a first for the travel industry as a whole, Brunner said. "Our goal was to incentivize the contract," Brunner said. "We established a variable rebate concept, and the theory behind that is to make it to the contractor's advantage to provide the best services

possible."

Travel agencies exist on the commissions and revenues they earn from airlines and rental car companies, the suppliers of travel services. Under the negative cost contract, NASA will pay nothing for the services rendered, but will allow the travel contractor to earn commissions on the Agency's estimated \$20 million worth of annual travel.

A key provision of the contract provides the incentive, Brunner said. NASA will periodically evaluate the services rendered and will share in those travel commissions accordingly. "The better we judge them to have performed, the less of their rebate they are expected to share with us," he said.

Under the new contract, services will include hotel and motel reservations, airline and automobile reservations, and seminar and meeting support. Homer said the seminar and meeting services will

include helping organizers find competitive rates on blocks of hotel rooms, dinners, meeting places and many of the other logistical considerations of any large gathering.

Personal travel services will also be available for employees, but cannot interfere with scheduling official travel, Brunner said.

Ask Mr. Foster is a national firm with three offices in Houston. The company has been in business since 1888, Homer said, and the unusual name stems from the firm's origins. "A Mr. Foster owned a gift shop across from a major hotel in St. Augustine, Florida back in the 1800s," Homer explained. "He was very interested in train and steamship schedules and could recite them off the top of his head. Whenever a guest would go to the hotel desk and ask for train or boat schedules, it was easier for the clerks to tell them to go ask Mr. Foster. The name stuck."

Jib(e)s at sea

It's not as important to win the NSTS Regatta as not to lose

By Barbara Schwartz

While the competition may not have been merciless, the commentary certainly was when old salts from JSC gathered June 17 for the fifteenth running of the NSTS Regatta.

The race, a periodically-held event dating back to 1978, has been known as the LaCaWaFa Cup, the St. SOPO Cup and the SPIDPO Cup, mirroring the various names and mail codes of participating organizations, most of them associated with the Space Shuttle Program. But while the names may have changed, the innocent haven't always been protected.

The race is heavily laden with traditions, chief among them the practice of denouncing fellow captains, questioning one another's nautical capabilities and heaping the lion's share of abuse on the final finisher. In this

regatta, the most important thing is not to win, but rather, not to lose.

Eleven participants began the race from Marker No. 2 in the Seabrook Channel. The standard course calls for the racers to make for Redfish Island and return to the Seabrook Channel.

People

Starting times varied according to assigned handicaps. Showmanship and one-upmanship are an integral part of the action, and the traditional amount of whining and moaning, excuses and complaining accompanied the issuance of the established handicaps.

The Race Committee, knowing what to expect in advance and not to be outdone by the racers, issued a special tongue-in-cheek note along

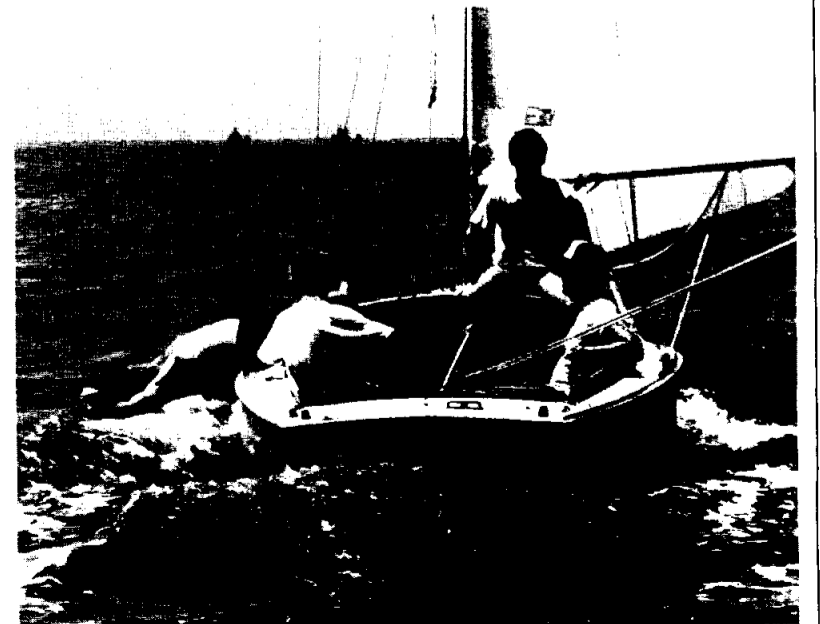
with the starting sequence. The note described their "unimpeachable integrity," acclaimed the Committee to be "intellectual giants in the field of yacht handicapping," but also included physically impossible instructions for filing formal protests.

Bob and Janet Gish, owners of *Sceptre*, volunteered their yacht for use as a Committee boat and hosted 11 workers and guests. Precision timekeeping, dexterous flag signaling and expert horn blowing are talents the Race Committee modestly described as their contributions to the successful running of the regatta.

Race Committee members, eager to display their knowledge of seamanship, used numerous highly technical nautical terms while observing the race, such as, "Look, all the boats are around the first 'thingy.'"

In the final analysis, the handicapping was thought to have been well done because the race was close. Only 32 minutes elapsed between the

(Continued on page 2)



The crew of *Valvandi*, the winning entry in the NSTS Regatta, displayed championship form as they sailed out into Galveston Bay on the first leg of the race. (Photo by Dave Ladrach)

Space News Briefs

Station software contract goes to Lockheed

NASA selected Lockheed Missiles and Space Co. June 29 for negotiations leading to the award of a contract for software support to the Space Station. The work will take place at Lockheed's facility adjacent to JSC and at other NASA centers as required. The nine-year contract, valued at approximately \$140 million, covers design, development and operations of a software production capability for the Station, similar to that now employed for the Space Shuttle through the Software Production Facility at JSC. The Station Program Office in Reston, VA, will have overall management of the contract. The only other firm to submit a proposal was IBM's Federal Systems Division of Houston.

JSC extends Singer-Link contract

JSC has completed negotiations with the Singer Co., Link Flight Simulation Division, for extending the contract to support the Shuttle flight simulation complex here. The work includes development support and upgrades to the complex, where astronauts train to fly the Space Shuttle. Value of the cost-plus-award-fee extension from July 1 to Dec. 31, 1988 is approximately \$15.48 million. Funding of \$4.7 million to cover work added by NASA under the contract schedule ending June 30 also was negotiated with Singer.

Lunney appointed Rockwell Station VP

Dr. Glynn S. Lunney, former Shuttle Program Manager here, has been named executive vice president of Rockwell International's Space Station Systems Division. Lunney joined Rockwell in 1985 following his retirement from NASA. "It's really fun to be back in the manned space flight business," Lunney said. "The Space Station project is very hectic right now and there's a great deal to do. I'm looking forward to it." Lunney has served as both executive vice president and president of the Satellite Systems Division.

Bartoe is new Station chief scientist

Dr. John-David Bartoe, a Spacelab 2 (STS 51-F) payload specialist, has been named chief scientist of the Space Station Program. He will serve as principal advisor to Andrew Stefan, Associate Administrator for Space Station, for plans, policies and user-related requirements. His appointment, effective June 15, is for a two-year period. After his tenure, he will return to his position at the Naval Research Laboratory in Washington, D.C.

Bulletin Board

PSI chapter to meet July 8

The Clear Lake/NASA area chapter of Professional Secretaries International (PSI) will hold its next monthly meeting July 8. The meeting will begin with a social and dinner at 5:30 p.m., followed by the business meeting and program at 7 p.m. The program will feature a slide show entitled "Invitation To Houston," presented by the Southwest Houston chapter of PSI. All clerks and secretaries are invited to attend. For more information, call Beverly Anderson, x34042. Reservations for the dinner should be made with Carol Cribbs, 488-7070.

Blood drive set for July 21

The second onsite JSC Blood Drive of 1987 is scheduled for July 21 from 8 a.m. to noon and from 1 to 4 p.m. at the Gilruth Recreation Center gym. Prospective donors are asked to call for an appointment. Contact the Chairman of the JSC Blood Bank Committee, Helon Crawford, at x34714, Co-Chairman Bob Jones at x33004, or Co-Chairman Mary O'Rear at x36531. To give blood, donors must meet certain criteria, Jones said. Donors must be at least 110 lbs., in good health, and from 18 to 65 years old. Seventeen year-olds may donate with signed parental consent. Donors cannot have a history of jaundice, hepatitis, internal cancer requiring surgery, or heart disease. Any donor taking medication should check with the blood technician to ensure that he or she can still give blood. Donating one unit of blood covers all blood needs of the donor, his immediate family, dependents, parents and in-laws for one year following the date of donation. Those who cannot donate may have someone else give blood in their name, he said.

BAPCO to meet July 21

The next meeting of the Bay Area PC Organization (BAPCO), the local IBM PC users' group, will be held at 7:30 p.m. July 21 at the Holiday Inn on NASA Road One. The group is open to anyone interested in microcomputers. BAPCO meets on the third Tuesday of every month. For more information, call Earl Rubenstein, x33124 or Jack Calvin, 326-2983.

History Office to hold open house

The JSC History Office will hold an Open House on July 22 from 10 a.m. to 4 p.m. in Bldg. 420, Room 105B. The open house will include a demonstration of the office's data retrieval system.

Secretary Aldrige to address forum

Air Force Secretary Edward C. Aldrige Jr. will address a forum on "The U.S. Air Force space program and Commercial Competitiveness" July 10 at the Hyatt Regency Downtown. The luncheon and speech begins at noon. Tickets are \$25 in advance and \$30 at the door. Sponsors include the Houston Chamber of Commerce. For more information, call 658-2480.

Gilruth Center News

Call x30304 for more information

Softball league sign-up—Summer softball league sign-up is July 14-20. Call the recreation center for more information.

Moonwalk Softball Tournament—Men's Open C softball tournament will be July 18 and 19. Deadline for entries is July 15. Cost is \$95.

Aerobic dance—Aerobic dance classes will meet from 5:15 to 6:15 p.m. Mondays and Fridays from July 7 to August 27. Cost of the eight-week class is \$24.

Exercise class—This eight-week class meets Mondays and Wednesdays from 5:15 to 6:15 p.m. beginning July 13 and ending September 2. Cost is \$24.

Scuba—Six-week scuba class meets Mondays and Wednesdays from 6:30 to 9 p.m. beginning August 17. Cost is \$40 plus additional fees.

Weight safety—This is a required course for those employees wishing to use the Rec Center weight room. The class will be held July 22 from 8 to 9:30 p.m.

Defensive driving—Learn to drive safely and qualify for a 10% reduction in auto insurance rates. All-day Saturday class meets August 22.

Al-Saud still generating record interest in space

STS 51-G is two years old, but Arabsat Payload Specialist Sultan Alman Abdelazize Al-Saud still is generating record space interest in Saudi Arabia through American school children.

Al-Saud recently met the students during a visit to Ras Tanura Elementary School, where children of the Arabian American Oil Co. (Aramco) employees from the United States are educated.

Al-Saud was invited by the school's 27 second- and third-grade members of the Young Astronauts Club. Teacher Mary Fry launched the club last fall after attending the Aerospace Education Institute at JSC and the University of Houston.

"See what happens as a result of attending the Aerospace Education Institute?" she wrote to JSC Education Officer Jim Poindexter. "Not only has our Young Astronaut Club been a year-long success, the visit from Prince Sultan has triggered record-high interest in space and space-related subjects throughout our entire community."

The visit also has improved Saudi-American relations within Aramco communities, according to Robert Gaw, superintendent of Aramco Schools.

Al-Saud provided live commentary of a videotape of his mission for the students, and discussed many aspects of space travel and the Space Shuttle.

"One of the main reasons we had a good mission was that we had a very good team—scientists, technicians and many, many others," he said, according to a story in the Arabian Sun newspaper.

STS 51-G, launched June 17 and landed June 24, 1985, deployed three communication satellites, initiated the Spartan program of extended sounding rocket tests and included several in-cabin experiments. The seven-person crew



Sultan Alman Abdelazize Al-Saud accepts a Young Astronaut Club T-shirt from students at the Ras Tanura Elementary School in Saudi Arabia after talking to them about his June 1985 flight aboard *Discovery*.

consisted of Daniel Brandenstein, Commander; John Creighton, Pilot; Mission Specialists Shannon Lucid, John Fabian and Steven Nagel, and Payload Specialists Patrick Baudry of France and Al-Saud.

Al-Saud was Payload Specialist associated with ARABSAT-A/PAM-D, the second of two communication satellites sponsored by the Arab Satellite Communications Organization and designed to transmit S and C band frequencies for domestic and regional communication, as well as educational television.

During his recent visit to the Aramco school, Al-Saud answered the children's many questions about the Shuttle, crew training, the mission and working in space, and was rewarded with his own Young

Astronaut Club T-shirt.

Teachers from 24 countries, including about 15 foreign nationals, are expected to attend this year's Aerospace Education Institute in Houston July 6 through 17. Included will be sessions on NASA education materials, lunar science education, nutrition in space, Space Station living, the Tracking and Data Relay Satellite System, communications and the Teacher In Space program.

One highlight of the week is expected to be Canadian-American Space Day on July 14. Special activities that day will include a luncheon in the Gilruth Recreation Center, and a Canadian-American Banquet in the Gilruth ballroom. Canadian Astronaut Ken Money will be the keynote speaker at the banquet.

Winning isn't everything

(Continued from page 1)

finish time of the winner, *Valandi*, skippered by Matt Matthews, and the loser, *Sweet Pea*, skippered by Kelly Whippo. Had heavy rain on the third leg of the race not presented an additional challenge, the race might have been even closer.

And "close" would certainly be one way to describe the race's most colorful event, which has since come to be known as "The Incident." In a tacking duel reminiscent of the *Stars and Stripes* and the *Kookabura* in last February's America's Cup, Drum Simpson, skippering *Lindrum*, cut across the bow of *Halcyon*, skippered by Leonard Nicholson, and left little sea room to spare. One definition of *halcyon* is calm or peaceful, although the deck of Nicholson's boat was anything but that as he and his crew discussed Simpson's career-limiting technique.

After the race, the participants gathered at Bal Harbour Yacht Club to further enhance the sea lore associated with this and previous events, trading barbs, making more excuses, and exhibiting all the other qualities of good sportsmanship.

"It was purity and righteousness that won," Matthews said, adding that a good crew was also important. The pure and righteous crewmembers were Kirk Griffin, Craig Carothers, and George Nield.

Sweet Pea's crew was upbeat about the finish. "We had a good time and we're ready to do it again," Skipper Kelly Whippo said, adding that it is the loser's responsibility to organize the next race, and in the interests of carrying that distinction for as little time as possible, they're hoping for a rematch as early as September.

Whippo also denied the rumor that crew member Jan Atkinson

had been, for a time, the only race participant to be temporarily without a boat. During the race, word spread on the Committee boat that she fell overboard and the other crew members argued about going back to get her. "Actually, that's not true," Whippo said. "We lost some life jackets overboard and had to go back to get them, and that cost us."

Other boats and skippers, in order of their finish, were *Thursday's Child*, Stanley Blackmer; *Confetti*, Charles Shaw; *Dead Duck*, Douglas Cooke; *Halcyon*, Leonard Nicholson; *Lindrum*, Drum Simpson; *Alicia*, William Hungerford; *Otro Mundo*, Blaine Goeckler; *Nepenthe*, Harvey Hartman; and *Eclipse*, Norm Talbott.

Official awards were scheduled to be presented at 4:30 p.m. July 9 at the Gilruth Center's outside pavilion.

JSC runners make tracks in Intercenter Run

JSC runners won First Place in the two-mile leg and Third Place in the 10-kilometer leg of the Spring 1987 Intercenter Run, due in large part to participation that was four times greater than last year's.

Winners were determined through a point system. In the two-mile run, JSC won with 1,605.74 total points, compared to Goddard's 1,591.28 and the Jet Propulsion Laboratory's 913.04 points. In the 10K, JPL won First Place with 448.04 total points, followed by Goddard with 370.94 and JSC with 342.36.

Competition also was tough within JSC. Top finishers in the two-mile run were P.J. Chimes with a time of 10 minutes, 6 seconds (10:06), and Debra Zelenak (13:30). Top finishers in the 10K were Kent Joosten (36:09), and Shari Miller (51:43). Bill Jordan's EE division edged out Paul Romere's ED division for First Place among

JSC offices.

Runners may obtain a copy of the race results at the recreation office.

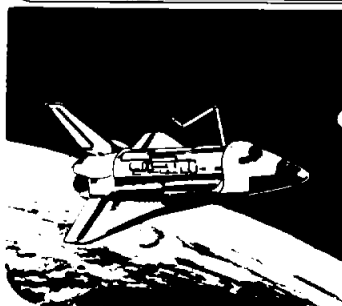
A total of 755 JSC runners participated, 635 in the two-mile run and 120 in the 10K, said Shari Miller of

the Gilruth Recreation Center. Only 135 runners entered the fall 1986 run.

The Fall 1987 Intercenter Run will be October 1 through 30. For more information, call x30304.

NASA
Lyndon B. Johnson Space Center

Space News Roundup



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Assistant Editor: Kelly Humphries

Variety of events planned for Spaceweek

Spaceweek, the seventh annual celebration of U.S. space exploration, begins July 16 and continues through July 24 with a variety of activities planned locally and nationwide.

Over 70 cities are expected to participate in Spaceweek events this year, organizers said.

A highlight of the local events will be the Spaceweek Banquet July 16, featuring keynote speaker Philip Culbertson, NASA Associate Administrator for Policy and Planning, and Sanford N. McDonnell, Chairman of the Board of the McDonnell Douglas Corp.

Houston events taking place throughout the week will include:

- Observatory tours at Burke Baker Planetarium, and "Starship Houston," a simulated ride through space, at 2, 3, and 4 p.m. daily. Admission is \$3 for adults, \$1.50 for children; call 526-4273 for reservations. The public is also invited to see the "Blueprints for the Future" exhibit at the Museum of Natural Science.

- Guided tours of the Boeing Corporation's Flight Equipment Processing Laboratory. Visitors will see preparation of flight equipment used on Space Shuttle missions. The laboratory is located at 1045 Gemini, and will be open July 16 and 17, and July 20-24 from 2-3 p.m. Tours are scheduled by reservation only. For more information, call Julia Sorrels at 280-2023.

- Noon weekday discussions of space-related issues at the JSC Visitor Center, coordinated by the Institute of Electrical and Electronic Engineers. The talks will include a special panel assembled by the Clear Lake Area Economic Development Foundation.

- A Spaceweek exhibition at Baybrook Mall of displays provided by local aerospace companies.

- Space posters on display at various public libraries, including branches in South Montgomery County and the Woodlands.

- McDonnell Douglas Space Station Young Artist Program, featuring space station art entries of second graders in the Clear Creek Independent School District, will be on display throughout Spaceweek at the JSC Visitor Center and at the Childrens' Museum at 3201 Allen Parkway.

Other Spaceweek events will include:

Wednesday, July 15

- The Space Business Roundtable will sponsor a talk by Courtney Stadd, a space commercialization official with the U.S. Department of Transportation. The talk begins at noon July 15 at the Houston Club. Call 332-0779 for reservations.

Thursday, July 16

- The Clear Lake Area Economic Development Foundation

(CLAEDF) will sponsor a panel discussion as the opening presentation of the week-long noontime lecture series in the JSC Visitor Center Teague Auditorium. Panelists for the discussion, "Charting our Future in Space," will be Dr. Larry Bell, a space architecture specialist with Bell and Trotti; Dr. Maxime Faget, President of Space Industries; Dr. Arthur Porter, representing the Texas Space Science Commission; Alcestis Oberg, an author and freelance writer; Peter Sivillo of Singer-Link; and Steve Sandstedt of CLAEDF.

- The Lunar Rendezvous Festival will hold an art auction July 16. For details, call Rita Dehmer at 486-7600.

- The Spaceweek Banquet, featuring a keynote address by Philip E. Culbertson, will begin with a social hour at 6 p.m. at the Nassau Bay Hilton. Dinner and the program will follow at 7 p.m. Sanford N. McDonnell, Chairman of the McDonnell Douglas Corp., will present awards to industry leaders for their support of Spaceweek's educational programs. Tickets are \$25 per person or \$45 per couple and are available at the Bldg. 11 Exchange Store, the Nassau Bay Hilton, the Clear Lake Area Chamber of Commerce or South Shore Harbour. Tickets can also be ordered by calling 334-7501. The deadline for obtaining tickets is noon Tuesday, July 14.

Friday, July 17

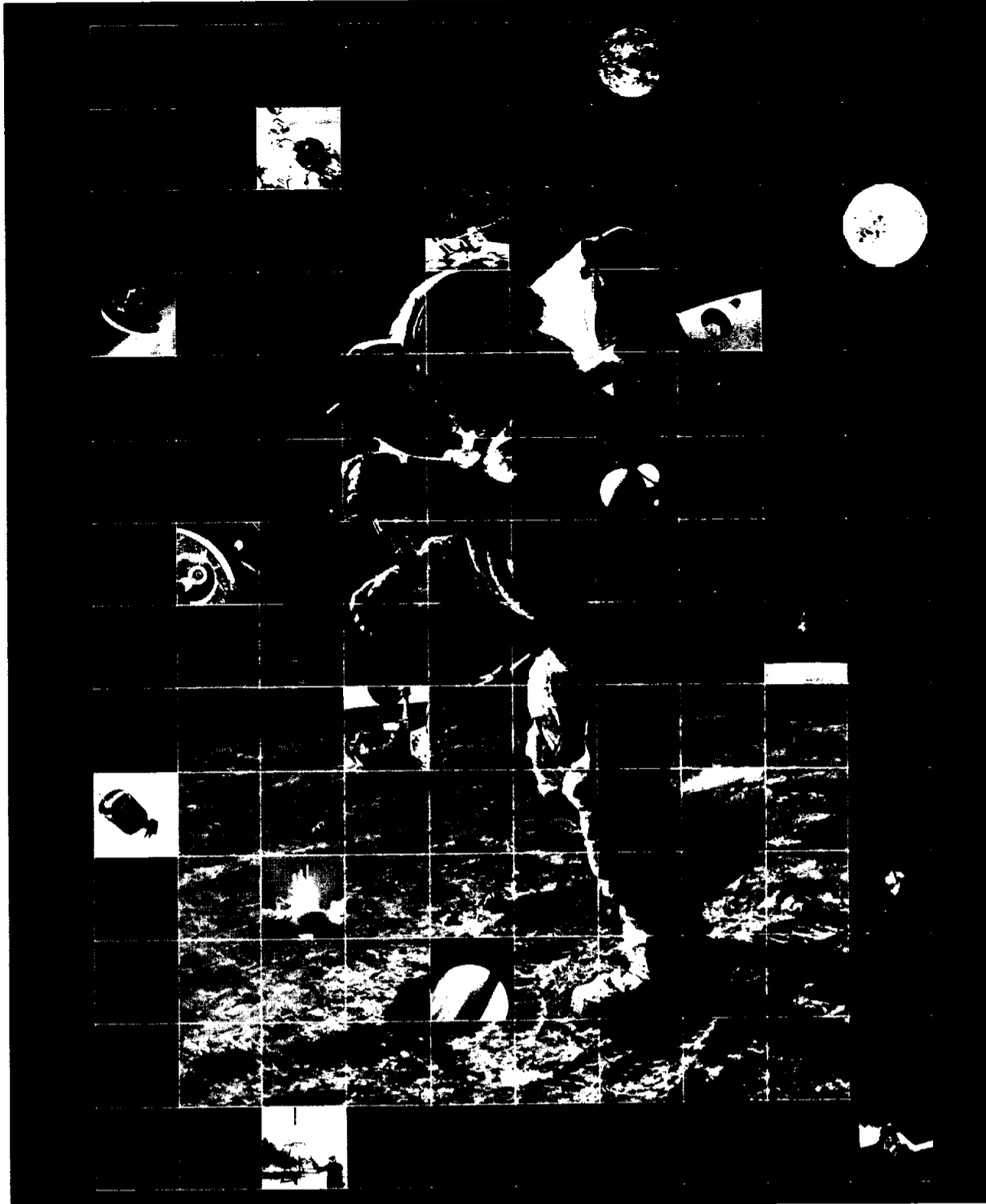
- Dr. Wendell Mendell of JSC's Solar System Exploration Division will discuss NASA's plans for future exploration of space in a talk to begin at 7:30 p.m. at the University of Houston. The talk, sponsored by the Houston Space Society, will be held in the S & R Bldg., Room 117, at 7:30 p.m. For more information, call Jeff Larson at 996-6854.

Saturday, July 18

- "Solar Day" will be held at the Armand Bayou Nature Center from 1-4 p.m. featuring talks about solar flares and sunspots, and will include safe public viewing of the Sun through telescopes. At 2 p.m., native Texas trees will be planted and dedicated to all cosmonauts and astronauts. For more information, call 474-2551.

- Model rocket launches will be conducted throughout the afternoon in a demonstration behind the Saturn V rocket at JSC. The launches will begin around mid-afternoon, organizers said. The event is being coordinated by the National Association of Rocketry.

- "Space Voyage Night," traditionally one of the most popular Spaceweek events, will be held from 7:30 to 10:30 p.m. at the JSC Visitor Center. Films about Mars, Jupiter and Uranus will be shown, followed by telescope viewing. The



Former astronaut Alan Bean's painting "Galactic Navigator," was adopted as the centerpiece for this year's Spaceweek poster, which also includes snapshots from the past and future of America's space program.

event is being sponsored by the Lunar and Planetary Institute and the JSC Astronomical Society.

Sunday, July 19

- Three events associated with the Lunar Rendezvous Festival are scheduled for July 19. Details were still pending at Roundup press time, but plans called for a dance and YMCA day and a fun fair at Clear Lake Park on NASA Road One. For more information, call Rita Dehmer at 486-7600.

Monday, July 20

- Mitch Mitchell of Ladybase One, a private corporation whose goal is to sell lunar materials in low

Earth orbit, will be the speaker at the noon lecture in the Bldg. 2 Teague Auditorium. Mitchell is a Friendswood-based real estate developer.

Tuesday, July 21

- The noon lecture series in the Teague Auditorium will feature Jeff Roberts of Space & Telecommunications, Inc., who will discuss "Interests and Goals in Space."

- Richard Underwood, a JSC retiree whose slide presentations are widely acclaimed, will present "A Photographic Journey to the Moon" at 7 p.m. at the Bayou Bldg. auditorium on the campus of the University of Houston-Clear Lake.

Wednesday, July 22

- Dr. Wendell Mendell will discuss future manned explorations of the Moon during the noon lecture at the Teague Auditorium.

Thursday, July 23

- At press time, a noon lecture for July 23 had not yet been scheduled. The Lunar Rendezvous Festival was also scheduled to hold a fashion show. Call Rita Dehmer at 486-7600 for late information on both events.

Friday, July 24

- Dick Underwood's slide presentation, "The Earth From Space," will be the noon lecture in the Teague Auditorium.

Charges against Beggs dropped

The Department of Justice announced June 22 that an indictment against four General Dynamics Corp. employees, including former Administrator James M. Beggs, has been dismissed.

The action was taken by U.S. District Judge Ferdinand F. Fernandez upon the government's filing its motion to dismiss the indictment on Friday, June 19.

Assistant Attorney General William F. Weld of the Justice Department's Criminal Division in Washington, D.C., and United States Attorney Robert C. Bonner of the Central District of California (Los Angeles), said the dismissal was sought because of the Department's discovery of testimony and documents relating to the factual and legal theories on which the indictment was based.

This evidence caused the government to reevaluate the allegations in the indictment relating to alleged fraudulent mischarging of costs to overhead accounts prior to the expenditure of the contract price, and alleged misstatements by the contractor to the government concerning charging allocations.

"As a result of analyzing all the statements and documents discovered subsequent to indictment, and their bearing on the facts in the case," a NASA Headquarters statement said, "government prosecutors concluded that there was insufficient evidence to prove the allegations in the indictment. (Department of Justice guidelines require a determination that admissible evidence will probably be sufficient to obtain and sustain a conviction.) Accordingly, the Department of Justice urged the federal court in Los Angeles to dismiss the action, in the interests of justice."

Beggs and the three others were indicted in November 1985. In February 1986, Beggs resigned from the Agency to devote his full time to the case.

World's largest wind tunnel reopens with improvements

The world's largest wind tunnel, boasting greatly increased test capabilities after major modifications, reopened June 17 at NASA's Ames Research Center.

Known as the 40-By-80-Foot Wind Tunnel (a reflection of the test chamber dimensions), the tunnel dates from 1944 and has been used to test most of the aircraft designed and built in this country in the last 40 years.

Like a sister tunnel at the Langley Research Center, the 30-By-60 Full Scale Tunnel, the Ames facility is large enough to test many full-scale aircraft, eliminating some of the uncertainties of scale model testing.

Both the Ames and Langley Full Scale Tunnels were designed and built by the National Advisory Committee for Aeronautics, NASA's predecessor agency. The Langley tunnel was built in the 1930s.

Before modification, the Ames tunnel was powered by six 6,000-

horsepower electric motors which generated airspeeds within the test chamber of up to 230 miles per hour. The modified tunnel now has six 22,500-horsepower motors, increasing drive power from 36,000 to 135,000 horsepower and pushing the top test speed from 230 to 345 MPH.

The modified tunnel is considered the first phase of a new facility to be known as the National Full-Scale Aerodynamics Complex (NFAC). The second phase, due for completion later this year, will be a "straight through" leg with an 80-by-120-foot test section.

In remembrance: Dr. Phil Johnson

The untimely passing of Dr. Philip C. Johnson in May occasioned this remembrance by his colleague, Dr. Michael Bungo:

"The sudden death of Phil Johnson on May 24, 1987, leaves a void in the hearts of his friends and colleagues as well as in the NASA Life Sciences Program. As Chief Scientist of the Medical Sciences Division at JSC, Phil's biomedical research in manned space flight spanned the Gemini, Apollo, Skylab, and Shuttle programs. Author of more than 200 scientific publications and recipient of numerous awards, his work toward a better understanding of man's adaptation to the space environment represented a significant contribution to science. As a teacher, a physician and a friend, he will be sorely missed by all."

Roundup Swap Shop

All Swap Shop ads must be submitted on a JSC Form 1452. The forms may be obtained from the Forms Office. Deadline for submitting ads is 5 p.m. the first Wednesday after the date of publication. Send ads to Roundup, AP3, or deliver them to the Newsroom, Bldg. 2 Annex, Room 147. No phone in ads will be taken.

Property & Rentals

Lease: Camino South 3-2-2, FPL, new carpet, ready Aug. 15. Don, x35213 or Lyn, x34012.

Lease: West Galveston Island beach house, 3-2, furnished, day/wk./mo. Ed Shumilak, x37686 or 482-7723.

Two acre corner lot, wooded, all utilities, 40 mi. NE of Houston in Splendora, \$2,000 down on total cost of \$16,000 w/owner financing balance at 6% PA. 332-0047.

Lease: 2-2 El Dorado Way condo, W/D, FPL, new carpet, \$375 deposit plus \$375/mo. Danny, x39674 or 326-5754.

Galveston-Jamaica Beach marina house, sleeps 8, central air/city water, \$50/day (min. 2 days), plus \$20 service fees. Darrell, 280-2493 or 337-3970.

Sale: Westwood Shores/Lake Livingston lot, utilities to Dec. '87, golf course, rec center, \$5,000, note assumable. George, x30162 or 578-9230.

Rent: Deats Rd., 1 BR apt., Dickinson area, \$259/mo. plus \$89 deposit. 337-2376.

Sale 1/2 acre lake lot on Toledo Bend Village on cul-de-sac, boat ramp. Doug, 554-3896.

Rent: 1 BR condo, swimming pool, party room, tennis courts, between Hwy. 3 and I-45, \$300/mo. Gary, 333-6214 or 486-1869.

Furnished 1 BR Baywind condo, \$290/mo. Dan Lockard, 333-3925.

Sale: Meadowbend, L.C., 3-2-2, assume VA 10.5% loan, approx. \$61,000, \$736/mo., zero equity, split closing costs. Dean, x37761 or 488-7032.

Sale: Palestine, Texas, 16.87 acres, close to town, wooded, spring-fed creek, \$2,200/ac., 501-369-2715.

Sale: 13.5 acres, gently rolling wooded East Tx. land, fronts cty. blacktop, near Tyler and Henderson, assumable, low cost Tx. Vet. loan. McLeaish, 480-7445.

Lease: El Dorado Trace condo, 1-1-CP, W/D, FPL, pools, clubhouse, whirlpool, sauna, ex. cond., \$350/mo. plus deposit. Alan, 282-3968 or 334-7814.

Sale: Meadowbend 4-2-2 by owner, 1/3 acre at end of cul-de-sac, split BR, drapes/miniblinds, garden, fruit trees, attic fans, fence, assumable 10.5% FHA loan, \$71,900. Ann, x34475 or 538-3683.

Sale: 5 BR ranch, 1/2 block to school, pool, 15 min. to JSC, under \$78,000. Ken, 282-2406 or Cathy, 996-0027.

Sale: League City 3-2-2, landscaped, near school, pool, tennis, 9.5 fixed, FHA assumable, low equity. David, x35464.

Rent/Sale: Condo on hwy. frontage lot, wooded, in Paradise Acres S/D FM 356, 8941.5 sq. ft., or .205 acre. Roger, x30093 or 472-5650.

Rent/Sale: Condo on Seawall and 72nd, 2 BR, pool, tennis, sleeps 6, 2 day min. at \$160. Clements Jr., 474-2622.

Lease: Lake Livingston waterfront house, 3-2, sleeps 8, furnished, pier, fishing, skiing, swimming, weekend and weekly rates. 482-1582.

Lease: El Dorado Trace condo, large 2-2-2 CP, W/D, FPL, wet bar, new carpet, pool, hot tub, tennis, etc., \$425/mo. Tim, x38843 or 554-4353.

'77 mobile home, set up at TAMU, 14' x 65', 2-2, central A/H, new carpet, \$9,500. Doug, x30964 or 480-2929.

Sale: wooded lot, 75' x 150', w/view of Taylor Lake, all utilities, \$19,500, 474-3181.

Sale: Miramar, Seabrook, 3-2-2, new roof, mirror paint, fans, FPL, fenced, beside fishing pond, dog run, 12 min. from JSC, \$54,900. Ed Irvin, 486-9770.

Sale: '86 Meadowbend home, 3-2-2, corner lot, formals w/den, large kitchen w/breakfast nook, walk-in pantry closets, screened back patio, more, \$5,000 down, assumable. David, x39564 or 538-1002.

Lease: Scarsdale, 3-1.5-2, central A/H, near schools and malls, \$450/mo. plus deposit. 482-1582.

Sale: Ivanhoe Land Of Lakes near Woodville, 1 acre lot, wooded, 24-hr. security at gate, fishing, swimming, skiing, Coy Martin, x39282 or 337-2682.

Lease: CLC 1 BR condo, FPL, pool, game room, tennis, two weeks free. Wiltz, x39009 or 944-0451.

Sale: Friendswood custom built 4-2-2, large, fenced lot, many extras, 7 mi. to JSC, good construction, near Baybrook Mall, schools, approx. \$50,000. Sarma, 333-6556 or 482-9666.

Sale: country home, 1.33 acres, 3-2-CP, high efficiency A/C, all electric, well, 2 blocks off FM 518, near 146, \$90,000. 334-1883.

Sale: cabin and 8 lots, secluded, furnished, near private lakes and Lake Livingston, fishing, \$18,000. Leona Germany, call collect 214-886-6636 or 409-967-4460.

Lease: 2-1 condo on Clear Lake, 24 hrs. security, pool, tennis, \$400/mo. plus utilities. 480-5583 or 482-7156.

Lease: CLC Baywind II condo, upstairs 1 BR, drapes, new carpet, FPL, appliances, W/D, tennis, pool, \$295/mo. 488-5019.

Rent: Galveston Victorian Gulf-front condo, sleeps 8, fully furnished, 2 swimming pools, 3 whirlpools, 2 tennis courts, 480-5270.

Sale: 4-3.5-2, gameroom, boat port, pool share, two FPLs, cathedral ceilings, walk to Galveston Bay, \$95,000. Jerry, 534-2702 or 337-4931.

Sale: Lakeway townhouse, Austin, Lake Travis, 2,000 sq. ft., on golf course, furnished, ex. cond. 326-2461.

Cars & Trucks

'78 Olds Cutlass, 2 dr., \$1,200. Robert, x39170 or 482-7835.

'82 Audi 4000S 4E, 4 dr., auto, A/C, plus extras, \$5,000 OBO Demetrius, 476-0069.

'78 Camaro, ex. cond., \$2,300. 482-1505.

'79-'81 Honda, 2 mo. use, no compressor, \$250 OBO. Vincent, x30879 or 333-1316.

'78 T-Bird Town Landau, velour int., 74K mi., good cond., original owner, \$1,200 OBO. Pam, x36966.

'74 Toyota Corona station wagon, \$500. Dean, x37761 or 488-7032.

'85 Honda CRX, hardly used, 7,000 mi., AM/FM cassette radio. 266-6513.

'81 Pontiac Phoenix, LJ, V4, 67K mi., loaded, good cond, 2,300, Wolfgang, x35320 or 333-5326.

'80 Ford Fairmont station wagon, standard 4-spd., good cond., A/C, AM/FM stereo cassette, 87K mi., \$1,750. Nellie, x34867 or 488-4828.

'85 Toyota Cressida, A/C, AM/FM cassette, tinted windows, leather seats, PS, PB, Phyllis, 282-4306.

'69 Datsun 2000, custom body/paint, roll bar, seats, many spare parts, custom dash, 2 tops. BO. Jay, 474-2622.

'80 Pontiac Bonneville, clean, 4-door, V6, BO. Rick, 480-1218 or x36156.

'84 Chevette, good cond., A/C, \$2,000 OBO. Carey, 280-1982.

'80 Buick Skylark Ltd., vinyl top, 4 door, manual, good rubber, A/C, AM/FM, CB, no rust or dents, \$1,500, 333-2717.

'79 Mazda RX 7 GS, 5-spd., sun and moon roofs, cruise control, good cond., \$3,200. 333-3957.

'75 Buick Le Sabre convertible, \$850. Don, x31995.

'86 Mustang hatchback, 4-spd., AM/FM, A/C, cruise control, power door locks, ex. cond., \$7,500. Carolynn, x39834 or 480-3940.

'61 Chevy Apache 10 P/U, flatbed, rebuilt 305 V8, needs inspection and license, \$600 as is, \$700 w/current license and inspection. Dudley, x32526 or 824-6009.

'86 Olds Delta 88 Royale, loaded, 16K mi., \$11,000, VW Bug parts, some performance. Ray, x30620 or 554-5434.

Boats & Planes

50 hp. Chrysler outboard w/control cables, \$300. Ben, x31588 or 488-1326.

Sailboat, Lido-14, w/sails and trailer. R. Hoover, x31360 or 996-7716.

Outboard motor, 55 Chrysler 1974 for parts \$50. Harry, 280-7413.

Windsurfer, beginner board, new sail, car racks, needs mast, \$350. Ann, x34006 or 488-7648.

'80 Compac, 23', 8 hp. '82 outboard, 2 jibs, bimini, trailer, VHF, ex. cond., \$10,000. Kelly, x31356 or 488-4870.

Windsurfer, 10 ft., 2 in., good cond., \$350. David, x31470.

Monark 16', deep, heavy gauge aluminum boat, 18 hp., Mercury outboard, Dilly galvanized trailer, anchor, lifevests, seats, etc., little use, \$2,100; Wellcraft 180 Bowrider, family ski boat, 165 Mercruiser, galvanized trailer w/brakes, with skis, ski vests, hydraslide, etc., \$6,800. Vern, x35970 or 482-2231.

Trac Catamaran, 18', galvanized trailer, many extras, \$3,690. 333-3056.

Cycles

'84 Honda Nighthawk "S", 700 cc., 17K mi., \$600. Dave, 333-1425 or 333-4074.

'83 Suzuki RM125 dirt bike, ex. cond., \$500. Lonnie, x30694 or 480-2348.

'85 Yamaha Virago, 700 cc., 2,200 mi., fumer helmet incl., \$2,700. 331-8079.

'83 Honda 200, 3-wheeler, \$350 OBO. Michelle, x31165 or 409-925-7878.

Kawasaki 1300 touring motorcycle, AM/FM cassette, fairing/baggage and trailer hitch, ex. cond., \$2,200. David, x39564 or 538-1002.

'84 Yamaha Virago, 1000 cc., 8,500 mi., like new. Richard, x33858 or 484-4598.

'83 Honda Passport, 70 cc., \$265. Don, x31995.

Audiovisual & Computers

American XT personal computer, IBM compatible, 640K RAM, two floppy ports, multi-function card, Hercules Graphics, DOS and operation manuals, several programs, \$800. Lisa, x36729.

Commodore Software, Productivity and games. Steve x35272.

Household

Couch and loveseat, ex. cond., \$100. TV stand, \$10; dresser, \$20; fish aquarium, \$20; dresser, needs work, \$5. Lorraine, 480-3337, x59.

Queen size sleeper couch, 7 mo. old, herringbone upholstery, \$250. Dale, 481-0046 or x39039.

Pool table, 6 ft., slate, \$200; waterbed w/12 drawer support unit \$150. Robert, x39170.

J.C. Penney microwave oven, large, like new, \$120. Joe, x31597 or 996-1667.

Complete antique dining rm. set, table, 6 chairs, buffet, china cabinet, linen chest, walnut, \$2,500; 4 upholstered Spanish design chairs, dinette type, \$50. 488-5564.

Wicker chair, \$25; small wicker 3-drawer chest, \$25; large wood and marble coffee table, \$50. Ann, x34006 or 488-7648.

Traditional sofa, gold print, good cond., 6', 8" long, \$50. 488-6521.

Kirby upright vacuum cleaner, all attachments, \$150. Michelle, x31165.

Baby items: Jenny Lind cribs, two high chairs and car seats, much more. Rick, x39292 or 334-4378.

Matching eggshell sofa, oversized chair and ottoman, plus glass-top coffee and end tables, \$650. 474-3181.

Washer and dryer, both electric, sold as a set, \$250 OBO. Jon, 480-8710 or x31710.

Pine bookcase, two shelves, cupboard below, 6.5 ft. high, 14 in. deep, 2.5 ft. wide, \$35 OBO. Debbie, x36234 or 333-4652.

China cabinet, dark wood, \$75. Nancy, x31010 or 996-8567.

Dining rm. table and chairs, \$40; couch and recliner, \$100; double bed, \$50. Donna, 480-8190, ext. 53.

Range hood, 30 in., Coppertone, Sears Best, still in box, \$50; RCA 25 in. color TV, mahogany console, 26 x 48 in., suitable for stereo speakers, \$295 OBO. Bea, x33626.

Sofa bed, fair cond., new mattress, linens included, \$75; barstool, good cond., \$15; twin size box spring, fair cond., \$15. Gail, x39838.

Sewing Machine, Montgomery Wards Signature Model, wooden cabinet, \$125; upholstered reclining chair, good cond. \$45. 488-8273.

Photographic

MC Auto Zoom CPC Phase 2 CCT lens, 75-200mm. macro, Minolta mount, \$70. Jane, x31653 or 480-5527.

Pets

Terrier mixture, good w/children, free. Rick, x36156 or 554-2464.

Free, male neutered cat, 2 yrs. old, affectionate, needs good home. 334-1883.

Golden retrievers, AKC registered, male, to caring home, free. E. Rubinstein, x33124 or 326-2354.

Samoyed, male, 7 yr. old, 35 lbs., needs large, fenced yard, free to good home. Douglas, x32860 or 486-7412.

Musical Instruments

Premier snare drum set, incl. bells, good cond., \$150. Marvin, 488-3647 or x38312.

Spencer flute, closed hole, C concert, ex. cond., \$300. 488-6521.

Lost & Found

If you have lost some money within the last month, please call R. Hergert, x31108 and identify the loss.

Lost: male, adult, Irish setter/Golden retriever, 6/18/87 Bay Area Blvd. and Reseda. 480-8357, Reward.

Wanted

Want non-smoking carpooler from Spring (HS) to JSC, hours 7 am.-3:30, Patnesky, x38636, Panna Amin, x32459 or Roy Parker, x38233.

Want Peavey Int'l. 115 speaker cabinet or equal full range musical instrument speaker system, Joe, x31597 or 996-1667.

Want used trampoline, preferably circular. Nellie, x34867 or 488-4828.

Do you like dragons? Janus Weyr, an Anne McCaffrey sf club, seeks members. Bi-monthly nl., active members. Chantal, x55114 or 326-2186.

Want carpooler, drive 1 day a week, every fourth week, drive twice, 7.30-4, Pasadena, Strawberry-Spencer area. 946-4752.

Want used, touring class 10-spd. bike, prefer Shimano or Sun Tour Brakes and derailleurs. Rick, x32294 or 333-5866.

Competitive water skier needs partner w/boat to practice. Will pay for gas and increase your skills. Rich, x38519 or 996-7630.

Want baby items: crib, high chair, stroller. Rich, x38519 or 996-7630.

Want 110 volt refrigerator compressor. Wilber, x37341.

Want two dressmaker's forms to fit sizes 10 and 14; small, used, working microwave; bed for college student. Cheryl, x54406.

Want 13'-15' sailboat for adult and two children, \$300-\$450. Don, x31995. NASA/contractor group seeks women to play on co-ed softball team. Play begins late July at Gilruth Center. Joe, x31597 or Chuck, x31701.

Want non-working Casio calculator watch for parts. Bruce, second shift, x33586 or 486-8652 days.

Miscellaneous

Sears Craftsman Weedwacker, adjustable handle, 3/4 hp., semi-auto line feed, pivoting cutting head, 400 ft. line, \$50. Brian, x38648 or 480-5194.

Exercise bike w/heart rate monitor, like new, \$70; various firearms, 664-9472.

Brunswick "Gold Crown" billiard table, 4-1/2'x9', \$500 or trade for bumper pool table w/card game top. Demetrius, 476-0069.

O/U shotgun, Model 5000 Grade I Golden Eagle, ex. cond., \$500; Golden Eagle 7 mm. Rem. mag., ex. cond. \$400. James, x36142.

Sears dog run, approx. 4' x 12', \$40. 482-1505.

Exercise equipment, 1 rowing machine, 2 exercise bikes and 1 mini-trampoline. 488-4385.

Oak desk, office-sized, \$175; oil painting, 24" x 36", make offer. Dean, x30017.

Ladies' solitaire diamond ring, platinum body, appraised at \$1350, asking \$700 firm, appraisal available. Pearson crossbow, 250 lbs. pull, w/leather pouch, specially made arrows and hunting heads, was \$500, want \$300 firm. Harold, x38497 or 488-1044.

Portable electric typewriter, hardly used, \$125. 488-5564.

Weight bench and weight set, weights total 189 lbs., includes pair of dumbbells, triceps bar, curl bar, straight bar, \$75. 480-2367.

Camper shell for full-size P/U, \$300. Rick, x39292 or 334-4378.

Golf balls, 2, 3 and 4/\$1. Steve, x35272. Strawberry flavored fig preserves, \$2/pt. 946-4752.

Four Hurricane aluminum wheels w/two 60's and two 70's tires, fits GM 5 lug cars and trucks, \$100 the set. Bill, 486-9144.

Camping equipment: air mattress, sleeping bags, two canvas folding cots, Coleman lantern and stove, all in ex. cond. John, 488-4487 or x30018.

Fluke model 8060A true RMS digital multimeter w/carrying case and instruction manual, seldom used, \$250. Tommy, 337-7082.

5'x8' light duty, opened trailer in ex. cond., w/two motorcycle ramps, \$395. Larry, 488-3300 ext. 335 or 481-2892.

Oak top bar, 7' long, \$75 OBO; Hamilton wood drafting table, 3' x 5', \$50 OBO; Victor gauges w/cutting torch, misc., \$50 OBO. 487-1654.

Rain barrel, steel, 30 gal. drum w/ spigot, free. 333-3071.

Pool table, Valley, tavern size, 50 x 87 in., 1 pc. slate, \$250. Glen, x34496 or 534-4958.

Cookin' in the Cafeteria

Week of July 6 — 10, 1987

Monday — Chicken & Rice Soup; Wieners & Sauerkraut, BBQ Ham Steak, Steak Parmesan, Beef & Macaroni (Special); Green Beans, Carrots, Au Gratin Potatoes. Standard Daily Items: Roast Beef, Baked Ham, Fried Chicken, Fried Fish, Chopped Sirloin. Selection of Salads, Sandwiches and Pies.

Tuesday — Tomato Soup; Potato Baked Chicken, BBQ Spare Ribs, Mexican Dinner (Special); Squash, Broccoli, Ranch Beans, Spanish Rice.

Wednesday — Seafood Gumbo; Liver & Onions, Baked Turbot, BBQ Ham Steak, Baked Meatloaf w/Creole Sauce (Special); Beets, Brussels Sprouts, Green Beans, Whipped Potatoes.

Thursday — Beef & Barley Soup; Chicken & Dumplings, Corned Beef w/Cabbage, Smothered Steak w/Cornbread Dressing (Special); Spinach, Cabbage, Cauliflower au Gratin, Parsley Potatoes.

Friday — Seafood Gumbo; Pork Chop w/Yam Rosette, Creole Baked Cod, Tuna & Salmon Croquette (Special); Brussels Sprouts, Green Beans, Buttered Corn, Whipped Potatoes.

Week of July 13 — 17, 1987

Monday — Cream of Celery Soup; Braised Beef Ribs, Chicken a la King, Enchiladas w/Chili, Italian Cutlet (Special); Navy Beans, Brussels Sprouts, Whipped Potatoes. Standard Daily Items: Roast Beef, Baked Ham, Fried Chicken, Fried Fish, Chopped Sirloin. Selection of Salads, Sandwiches and Pies.

Tuesday — Beef & Barley Soup; Turkey & Dressing, Country Style Steak, Stuffed Cabbage (Special); Corn Cobbette, Okra & Tomatoes, French Beans.

Wednesday — Seafood Gumbo; Catfish w/Hush Puppies, Roast Pork w/Dressing, Pepper Steak (Special); Broccoli, Macaroni & Cheese, Stewed Tomatoes.

Thursday — Cream of Tomato Soup; Beef Tacos, BBQ Ham Slice, Hungarian Goulash, Chicken Fried Steak (Special); Spinach, Pinto Beans, Beets.

Friday — Seafood Gumbo; Liver & Onions, Deviled Crabs, Roast Beef w/Dressing, Tuna & Noodle