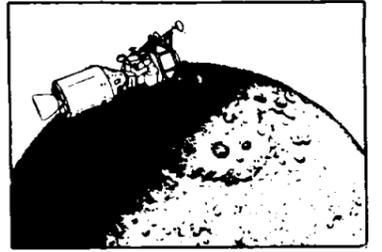


# ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

HOUSTON, TEXAS



Vol. 13 No. 24

Friday, October 25, 1974



**BRAIN EXERCISES**—Astronaut-physician Dr. Story Musgrave matches wits with an electronic psychomotor performance testing instrument during the week-long Spacelab life sciences payload simulation October 1-8 at JSC. The human transfer function demonstration is a potential forerunner of future space crew human dynamic measurements. (More photos on page 4.)

## ASTP Experiments To Study Interstellar Helium

Whether or not the solar system is gaining mass from the influx of helium may be established through one of the experiments aboard the joint U.S./USSR manned space mission next year.

The experiment also may contribute to the understanding of the evolution of stars.

Called MA-088 Helium Glow detector, the experiment will provide the first opportunity for the systematic mapping of inter-

stellar (between stars) gas which includes helium.

Instruments on the Apollo Soyuz Test Project (ASTP) mission scheduled for launch in July 1975 will detect sunlight reflected back toward Earth from the interstellar helium. From these reflections, or helium glow, it may be possible to measure the temperature, density and velocity of the helium.

Earlier rocket instruments have indicated the existence of this interstellar helium and its inflow into the solar system.

Interstellar gas is the medium from which celestial objects form and into which many of the stars dissipate their materials when they expire. It is also the medium through which light rays, and

other radiations which allow scientists to study these objects, travel.

Because this gas is tenuous and because it is sometimes difficult

*(Continued on Page 2)*

## Recruiting Team Receives EEO Awards

In recognition of their significant contributions to the JSC Equal Opportunity (EEO) Program, the Center's Minority and Female Recruiting Team and advisors were recently awarded EEO Certificates by JSC Director Dr. Christopher C. Kraft, Jr.

Baley Davis, JSC's Regional Coordinator for Minority and Female Recruiting, said the team has been "extremely cooperative and has worked well together."

## Initial Shuttle Flights Will Land in California

Dr. James C. Fletcher, NASA Administrator, has announced that the first few Space Shuttle development flights will return from space to NASA's Flight Research Center, Edwards, California.

In a talk before the Antelope Valley Board of Trade, Lancaster, California, Dr. Fletcher stated: "We plan to make the first horizontal flight tests of the Shuttle Orbiter, launched from a 747 aircraft, at NASA's Flight Research Center at Edwards (Air Force Base). In addition, we plan to use Edwards as a secondary landing site for operational Shuttle flights when weather or other considerations make it desirable."

He continued: "We also plan to land the first few Shuttle orbital test flights at Edwards for the added safety margins and good weather conditions during these initial flights. To have the Orbi-

ter return to Antelope Valley for a landing after the first flight in space is quite appropriate."

The Space Shuttle to be assembled in Palmdale, California, will be a reusable space vehicle designed for a wide variety of space missions in earth orbit. Its primary launch and landing site will be the Kennedy Space Center, Florida.

Plans now call for horizontal flight tests of the Shuttle in 1977 and earth orbital flight tests in 1979. When fully operational in 1980, the Shuttle will be able to retrieve satellites from earth orbit; to repair and redeploy them; or bring them back to earth for refurbishment and reuse. It can also be used to carry out missions in which scientists and technicians conduct experiments in earth orbit or service automated satellites already in orbit.

## Bob Casey To Speak At Gilruth Center

Congressman Bob Casey will be guest speaker at the annual joint meeting of the National Contract Management Association (NCMA) and the Federal Government Accountants Association (FGAA). The luncheon meeting will be held at the Gilruth Recreation Center Tuesday, October 29 at 11:30 a.m.

Congressman Casey, a senior member of the House Appropriations Committee, is expected to explain the recently enacted Congressional Budget and Impoundment Control Act of 1974. This act will result in substantial reorientation of Congress' budgetary functions.

The purposes of the act are to give Congress better control over Federal expenditures, to establish national budget priorities, to provide a system of impoundment control, and to provide for the dissemination of information to Congress from the executive branch.

Tickets for the luncheon may be purchased for \$3 from Luis Ramirez, 488-1270; Rex Ritz, X-5007; Tony Riggan, X-2141; Henry Fancher, X-4426; and Jack Stanley, X-4694.



**EEO AWARDS**—The Minority and Female Recruiting Team recently received Equal Employment Opportunity (EEO) awards in recognition of their significant contributions to the JSC EEO Program. Dr. Kraft presented certificates to each team member and advisor. Personnel Officer Jack Lister also attended the ceremony. From left to right seated are Pantaleon Moreno, Bobby Kyle, Freddie Jones, Billy Hervy, Leo Villarreal. Left to right standing are Joe Fuller (advisor), Ben McGhee, George Kelly, Dr. Kraft, Manuel Rodriguez, Baley Davis, Lister, and Vernon Shields. Also receiving an award was Chief Equal Opportunity Office Joseph Atkinson, team advisor, not pictured.

Manuel Rodriguez, Crew Systems Division; Pantaleon Moreno, Spacecraft Software Division; Billy Hervy, Earth Observations Division; Baley Davis, Personnel Office and Special Advisors; Joseph Atkinson, Chief Equal Employment Opportunity, and Joseph Fuller, Resources Management Office.

Established earlier this year, the primary objectives of the NASA Minority and Female Professional Recruitment Program are "to mobilize activities which will assure increased hiring of minority and female professionals throughout NASA, and to undertake related activities essential to developing a sustained and improved Equal Opportunity Recruitment Program."

With this mandate as a guideline, JSC's EEO recruiting team was directly responsible for the addition of 27 minority professional employees and 12 female professionals to the Center's staff.

Recruiting methods utilized included interviewing students at colleges and universities primarily in Texas, Louisiana, and New Mexico; attending Professional, Sorority, and Fraternity Conventions; and participating in Career Day Conferences at colleges, universities and high schools.

NASA recruiters have the authority to make tentative offers to candidates for entry level scientific and engineering vacancies. (Entry level is defined as GS-5 or GS-7 for employees with Bache-

*(Continued on Page 4)*

## Employee's Career Reflection

The list of significant medical contributions that trail Dr. Carolyn Huntoon, Head of the Endocrine Laboratory in JSC's Life Sciences Directorate, indicate a lengthy, productive career. Yet these outstanding achievements have been accomplished in an unusually short time period, considering the complex scientific and technical environment from which they have evolved.

Dr. Huntoon received her B.S. degree in biology from Northwestern Louisiana State College and her Medical Technology certificate from Ochsner Foundation Hospital School of Technology, New Orleans, Louisiana.

She was employed in 1962 by the University of Texas M.D. Anderson Hospital as a Medical Technologist, then as a Special Technologist.

She continued to work as a Special Technologist while attending graduate school at Baylor College of Medicine. She also headed a laboratory effort, under a NASA contract, to develop a procedure for determining urinary aldosterone concentration.

Because of her training and experience in clinical endocrinology, Dr. Huntoon subsequently was assigned to the JSC Clinical Laboratories as a National Research Council Postdoctoral Research Associate. In this capacity, she established, and operated an endocrine laboratory. In 1970, she became head of the JSC Endocrine Laboratory and performed an in-depth investigation of the unknown biochemical and endocrinological phenomena generated by initial missions to the circumlunar environment and to the lunar surface.

Her selection of sensitive endocrinological parameters enabled mission planners to proceed with confidence in subjecting

Apollo crew members to lunar missions of increased complexity.

For the long-duration Skylab missions, Dr. Huntoon formulated a sophisticated experiment—Biossay of Body Fluid—to test her hypothesis on the biochemical adaptation of man to weightless flight. She was appointed Principal Investigator for this experiment and was the responsible scientific manager from its inception through its design, implementation and interpretation.

Presently, Dr. Huntoon is involved in furthering biomedical knowledge for the Apollo-Soyuz Test Project. She was selected to attend the joint meetings in the United States and in Russia to exchange biomedical data with Soviet Space doctors.

Recently, Dr. Huntoon was awarded the National Civil Service League's Career Service Award for Special Achievement. She has also received the JSC Superior Achievement Award for outstanding leadership and technical direction of research programs which have contributed to an understanding of the physiological effects of space flight.

### Skylab Symposium

Robert A. Parker, Chief of the Astronaut Office, Science and Applications, will deliver a paper on "Planning and Management of Science Programs on Skylab" at a symposium to be held in Huntsville November 30-December 1.

The three-day symposium on Skylab results is being hosted by the American Geophysical Union and the American Institute of Aeronautics and Astronautics.

Numerous Skylab Principal Investigators, NASA scientists and contractor scientists are scheduled to give papers at the symposium to be held at the Carriage Inn in Huntsville.

## Neal Selected "Boss Of Year"

James Neal, Director of Procurement at JSC was selected "Boss of the Year" by the NASA Clear Lake Chapter of the National Secretaries Association (NSA). The selection took place

her supervisor's participation in civic, church and professional activities, and awards received. She also states personal reasons she feels her particular supervisor should receive the title.

Virginia Thompson, Neal's secretary, said she felt he would be a "great Boss of the Year" because of his genuine desire to see secretaries reach their true professional growth.

"He has encouraged me to continue my education. He has also attended NSA meetings and has assisted the NSA Clear Lake Chapter by encouraging the training of secretaries through . . . educational meetings and seminars," she said.

As Boss of the Year, Neal will continue to promote the objective of NSA which is the elevation of the secretary through continuing education and professional development.

**Take stock in America.  
Buy U.S. Savings Bonds.**



DR. CAROLYN HUNTOON

**"A word to the wise is enough"**

*Benjamin Franklin*

## Student Attends ASME Conf.

A University of Houston Co-op student employed at JSC was one of eight students invited to attend the American Society of Mechanical Engineers (ASME) fall Design Technical Conference held in New York City earlier this month.

Ken Nichols placed second in the design project competition with his presentation of "A Concept for a Fixed Orientation Ambulating Vehicle." A six-year project, Ken designed a robot with its own computer and power and drive systems. The robot can move in any direction, retaining its directional orientation; it has a small memory to assist in deciding which direction it should move after encountering an obstruction.

Ken also placed second with a presentation at the ASME Region Ten paper competition

held in New Orleans last March. He designed a foot-powered wheel chair which allows cerebral palsy patients with some lower extremity mobility to move about. The wheel chair, the result of a design course of the University of Houston, has been improved and is now being used by a Moody State School student in Galveston.

Ken is completing his last 14 semester hours needed for graduation. He is employed in JSC's Propulsion and Power Division, Auxilliary Propulsion and Pyrotechnics Branch, Reaction Control Division.



## Improper Lifting May Turn A 'Good Back Bad'

The following article was reprinted from "Spaceport News."

"Bad backs" are a common ailment. One of the fastest ways to turn a good back into a bad back is to lift heavy objects improperly. Many people suffer for years with painful back injuries because they are not aware of a few simple lifting rules.

Lifting a 20 pound weight can

exert either a 20 pound strain on your lower back or a 200 pound strain, depending on how you lift the weight.

The difference can be easily seen when you think of the human body as a system of levers made of bone, cables made of tendons and motors made of muscle.

The backbone is joined to the

bony structure at the hip level. As a lever it swings up and down by pivoting on the hip joints. The body's largest muscle—the one we sit on—supplies the power to lift the backbone. This muscle is anchored in the inner thigh and pushes down from the back at the top of the hip bones. This transfers the total load to the feet.

Picture your spine as a lever resting on a fulcrum (your feet and hips). If you multiply the distance between the weight you are lifting and the fulcrum (your feet) times the weight of the object and divide this distance from the fulcrum to the point where the strain is applied (your lower back), you have the pounds of strain applied to your back. (See Figure 1.)

Therefore, lifting a 20 pound weight while standing 30 inches from the object with the major point of strain only three inches from the base of your feet, will exert a 200 pound strain on the lower back.

By simply moving closer to the object to be lifted and by keeping your back almost erect, the lever action is changed to your advantage. Lifting the same 20 pound weight while standing 10 inches from the object and keeping the back erect so the distance from the feet to the point of greatest strain is 10 inches, the strain on the lower back is only 20 pounds. (See Figure 2.)

By doing this you are protecting the weakest point of your back and at the same time using the stronger leg bones and muscles to lift the weight safely.

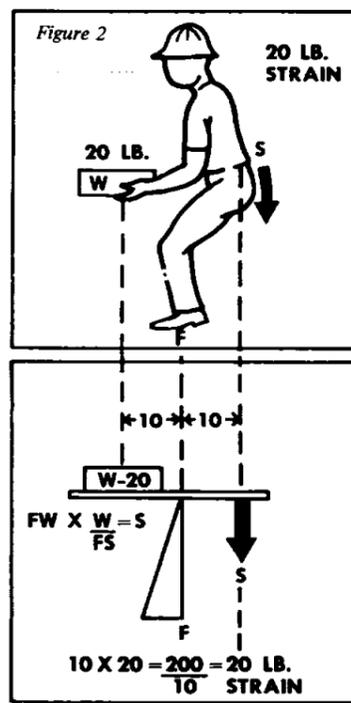
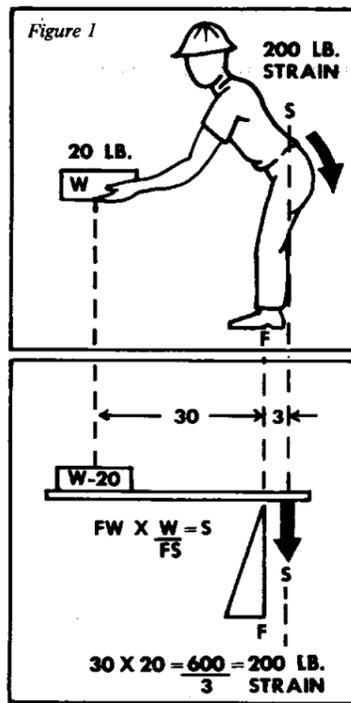
Remember when you have a heavy object to lift:

—Stay close. Never reach out with a heavy load.

—Do not twist the body while lifting. To turn the body move around with the feet.

—Never pull or jerk the load suddenly.

**Take stock in America.  
Buy U.S. Savings Bonds.**



## ASTP Experiments (Continued From Page 1)

to distinguish radiations emitted by the gas from radiations emitted by celestial objects, it has been difficult to observe the interstellar gas.

A neutral helium filter placed in front of the helium glow detector will discriminate between interstellar helium and natural helium present in the Earth's upper atmosphere.

Principal Investigator for the experiment is Prof. C.S. Bowyer of the Space Science Laboratory at the University of California at Berkeley.

Bowyer is also the PI on a related experiment which uses an extreme UV (Ultraviolet) telescope and which will survey the

sky looking for extreme UV stellar sources.

Co-investigator for the experiment is Dr. P. Oaresce of the same laboratory.

## Meeting Notice

There will be a joint meeting of the Society of Photographic Scientists and Engineers and the Optical Society of America on Monday, November 4 at 7:30 p.m. at the Lunar Science Institute on NASA Road One.

The Speaker will be Dr. Richard Wilmarth who will discuss "Skylab Explores the Earth." The public is invited to attend the meeting free of charge.



JAMES NEAL

at the Chapter's Fifth Annual Executive Dinner Meeting held recently at the Holiday Inn, NASA Road 1.

Candidates for "Boss of the Year" are nominated by NSA chapter members. Each secretary submitting a nomination presents information concerning

## October's "Outstanding Secretary" Chosen

Eleanor Johnson of the Management Systems Office, Space Shuttle Program, recently was designated "Outstanding Secretary" for October.

The excellent performance that gained Eleanor this honor is part of a continuing pattern of conscientious, high-quality secretarial support that she has been developing over the past 10 years at JSC.

She has a thorough understanding of NASA procedures and of the special requirements

of program correspondence; consequently, she is quick to recognize and correct errors before submitting work for signature. Because of her alertness, she is often approached by junior secretaries for guidance in reviewing draft materials.

During the Apollo Program, Eleanor operated MTST (Magnetic Tape Selectric Typewriter) word-processing equipment and has since served as a consultant in the development and implementation of plans for a word-

processing center in the Management Systems Office.

Her assignments also include preparing a monthly status report which identifies Directives authorized by the Shuttle Program Manager. In addition, she devises and coordinates a weekly calendar of events and meetings for JSC Shuttle Managers as well as personnel at NASA Headquarters, Marshall Spaceflight Center and Kennedy Space Center. This calendar notifies interested personnel of important Shuttle meetings and permits officials to schedule other meetings without conflict.

Her duties require Eleanor to interface frequently with JSC contractors, Headquarters personnel and employees from other NASA Centers. She always handles these contacts in an efficient, courteous and helpful manner which reflects favorably on the Shuttle Program Office as well as on JSC.

James Jackson, Jr. Management Systems Office Manager remarked, "Because of her superior secretarial skills, and her conscientious and dedicated service to NASA, Eleanor is a worthy recipient of the "Outstanding Secretary Award."

As for Eleanor, "I couldn't be more pleased," she says.



OUTSTANDING SECRETARY—JSC Director Dr. Christopher C. Kraft recently presented the Outstanding Secretary of the Month Award to Eleanor Johnson of the Management Systems Office, Space Shuttle Program. Eleanor has been employed at JSC ten years.

## Round-Up Swap-Shop

Swap Shop advertising is available to JSC and on-site contractor personnel. Articles or services must be offered as advertised, without regard to race, religion, sex or national origin. Ads should be 20 words or less, including home telephone number. Name and office code must accompany, but need not be included in ad copy. Typed or printed copy must be received (AP3 Attn: Roundup) by Thursday of the week before publication.

### PROPERTY & RENTALS

Seabrook rent house, 1000 sq ft. carptd. \$16,000. Horton, 334-2360.  
2 lots near school Bay pt. offer. Horton, 334-2360.  
9.6 acres across NASA 1 fr Flintlock, priced to sell. Horton, 334-2360.  
Highland bayou, hirise house, scrnd in dwnstrs, 2 1/2 lots, 250 ft water front, \$21,000, X3091, Betty.  
Swan lagoon, 3-2-2, den, frplce, sell or trd for waterfrt prop, 488-1081.

### HOUSEHOLD ARTICLES

Electric dryer, gd cond, 488-1514.  
Lg rectang dinette tbl, 6 chrs, vy gd cond, 481-4773.  
Window A/cond., 110 volt, 1 1/4 ton, xclnt cond, 3 yr warranty, 481-4773.  
6-dwr stud desk, \$35; antique white 2-shelf bkcase, \$15; 944-2373.  
Hoover Delx uprt vacuum ctnr, \$35., 534-4603.  
4 trad. dining chrs, perf cond, 3 strl bk, 1 cpt chr, fabric cov, \$135 set, 488-4372 or 483-2634. Brenton.  
Hoover waxer/shampooer, \$15, old collegiate cornet \$15, Knight stereo amp, \$10, Verby, 946-3907.

### WANTED ADS

Ski pants, sz 12, 333-3425, aft 5.  
Stereos headst w/vol cntrl, 481-3900.  
Amat. higan TH3/TH4 blue slimline traps (10R & 15R), DAHMS, 488-0156.  
One or two members for carpool from gen area of North Shepard and North 610 Loop to JSC Bldg. # 419 or other close by building; 7:30-4, Alexander, 483-5130.

### MISCELLANEOUS ADS

Swan 175, 75 meter transceiver w/ pow sply, \$75, 481-3900.  
Camper cover, short whl base, wide bed, lined, gd cond, aft. 4 p.m., 487-0371.  
Unroyal Zeta 40M w/w sti-bltd rad tires, JR78-15; w W1 60,000 miles, \$40 ea.; 1 w/ 25,000 miles, \$15; 534-4603.  
Elec. stm rollers, used once, \$10, Pat Henson, 734-5728 alt. 6.  
Stereos w/ AM/FM rad, air susp, spkrs, Gerrard turn table, X2681.  
Chromega color 4 x 5 enlgr, washer, timer, power supply; first \$500, Horton 334-2360.  
Amana microwave oven, new, mod MR-2, \$300., 554-3884.  
Colt single action army pistol 357, new, \$200., 554-3884.  
Darkroom liner, EZC-69, time-o-lite, nw, \$20; photo print dryer, mod. #110, w/ roller, the:mo contrld, color/BW, nw, \$30; 2 print easels, 1 adj spiratone 11" x 14", \$10; 1 4-in-1 Vivatar 8" x 10" max, \$5, new; Kodak 5 1/2" dkrrm lt, nw, w/OC & #10 circ. filters, \$10., Bell R/T mticycle helmet, size 7 1/2; w/ flip-up visor, nw, \$30, 534-4603.  
73 World Book Encyclopedia, xInt cndn, \$200, Kilbourn, 482-7879.  
2 UH vs Memphis State Football tickets Nov. 16, Astrodome, \$12, 331-3976 alt 5.  
SR-10 slide rule calculator w/ battery charger, carrying case, and instruction manuel, prft cndn, \$50 Moose, 333-4576.  
Metal detector, \$25, radiation counter, \$15, Wilkes, 1-925-3654.  
Ham rig Central Electronics 100V exciter, Drake 2A and Hallicrafters S-85 receivers, 3 element triband beam, an xtal mike, \$300, Wilkes, 1-925-3654.  
2 Curtain rods Sears Best Dual Draw Traverse, 50" to 90" extension, ivory color, \$5 ea, Bauch, 483-5987, 333-3382 alt 5.

### VEHICLES

1971 Chrysler NYorker, 4 dr, sed, vinyl top, A/C, AM-FM radio, new tires, low mileage \$2300, or bst offer, Satterfield X2872.  
1973 Harley-Davidson, SX350, 1w mileage, xclnt cond, \$650, aft. 5 p.m. 485-4995.  
Schwinn Pixie w/trng wheels, \$20., 472-7478.  
Car mini-bike, 4H engine, auto. clutch, xclnt cond, 488-1514.  
74 Honda, 2400 mi, w/ floorboards, custom seat, lug rack and cycle guard alarm, Bernie, X3691 or 334-4298, \$1400.

Trail bike, Gemini Boss 80 modified for dirt track, gd cndn, \$165, 472-4545.  
TravelMate tent trailer, sleeps 8, heater, \$650, Black x5595 or 482-1635.  
12x50 mobile home in Ft Lauderdale, ac, heat, patio, cmptly furnished, on ocean access waterway, 334-5052.  
55 T-Bird, soft top, gd cndn, sacrifice at \$1500 cash, Luke, 559-2325 aft 6.  
68 Plymouth, 4-dr Sedan, prft, cndn, only 7,641 actual miles, always garaged, all xtras, 488-4005 aft 5.

## JSC Employees To Get Medals

Four JSC employees Tuesday will receive Distinguished Service and Exceptional Service Medals in Washington at the 1974 Annual NASA Awards Ceremony. NASA Administrator Dr. James C. Fletcher will make the presentations at 3:30 p.m. CST in the Department of Health, Education and Welfare Auditorium in the north building.

Receiving the NASA Distinguished Service Medal will be Director of Safety, Reliability and Quality Assurance Martin L. Raines. NASA Exceptional Service Medals will go to Personnel Officer Jack Lister, Technical Planning Office Chief Joseph P. Lofrus, Jr., and Assistant Chief Counsel for Procurement Matters Henry W. Flagg, Jr.

## Dance Club Classes

The JSC Dance Club now boasting a total membership of 45 couples, will sponsor a beginner's dance class starting November 13, providing sufficient interest is indicated.

Bring your partner for a free introductory hour and registration at 8:30 p.m. November 6 in Room 204 at the Gilruth Recreation Center.

The course includes 10 lessons of ballroom dancing each Wednesday night from 8:15-9:45. The cost is \$35 per couple.

Present classes will continue to meet at the regular time. For information, contact Ruby Laird, Ext 3361.



SHUTTLE SEPARATION TESTS—Aerodynamic tests investigating the interaction between the manned shuttle orbiter and its large external fuel tank during jettison have been completed at Air Force Systems Command's Arnold Engineering Development Center (AEDC). The tests were conducted at six to eight times the speed of sound (Mach 6 and 8) using one-hundredth scale models and the center's new computer-controlled model support system. The computer not only records the forces acting upon the model but, while that data is being analyzed, moves the model to the next pre-selected test point. Data are produced in printed form within seconds, giving engineers essentially realtime information on test progress. The studies were done for NASA by personnel of ARO, Inc., AEDC's operating contractor. The support system was also designed and constructed by the constructing firm. ARO craftsman Charlie Helton is shown with the models.

## EAA Attractions

### CHRISTMAS DANCE

The JSC-EAA Christmas Dinner Dance will be held December 6 in the Gilruth Recreation Center beginning at 6:30 p.m..

Free cocktails will be served all evening, a prime rib dinner will be served and dancing will take place from 9:00 p.m. until 1:00 a.m. The Dappeldangers and the Jerry Vann Band will provide the music. Dress for the occasion is semi-formal.

Tickets are \$10 per person and will be on sale November 4 in the Building 11 Exchange Store. Store hours are 10 a.m.-2 p.m.

### ANOTHER FAILURE

A survey of the JSC pecan orchard has revealed the worst crop failure on record; it is difficult to find even one pecan! Hopefully, conditions next year will be just right for a good crop.

### ELECTION TIME

November 5 is election day for EAA Executive Board members. The voting will take place at the fourth meeting of the General Assembly. All General Assembly members—representatives and alternates—are eligible to run for positions which include president, secretary, vice-president, Athletics, and vice-president, Clubs.

The General Assembly election will be December 3. An election announcement with names of election supervisors and nominating forms will be mailed to all employees the first week in November.

### SOFTBALL

Women's League—League champions; Blazers, team members, Sandie Campbell, Ann Codianne, Barbara Hirsch, Mary Kubena, Marcia Mangiaracina, Jean Norris, Linda O'Brien, Linda Pierson, Reita Smith, Ms. Streidl, Karhy Tamer, Judy Ware, Carolyn Waund, and Barbara Wills.

Runners up, Friendswood, team members, Pat McCafferty, Judy Schultz, Becky Beauchamp, Betty McNeely, LaMoine Humphreys, Eunice Bourgeois, Marilyn Hughes, Rhonda McCoy, Marie Fullerton, Caroline Henize, Jalna Westerfield, Janie Stroup, Connie Stabino, Pat Brown, and Jan Hughes.

Men's Tuesday Night League, first place, Blazers; second place, Marvels and Hombres, third place Wizzards.

The top eight teams from the three men's league will enter a championship tournament November 1, 1974 and November 2, 1974 at the Gilruth Recreation Facility.

### TICKET CORNER

Astroworld, last sales today, adults 4.25, children 3.75.

Six Flags, closes Dec. 1, adults \$5.60, children \$4.70.

Lion Country Safari, year round, free Safari cards good for 10 percent discount.

Sea Arama, year round, adults \$3, children \$2.

ABC Theatres, \$1 coupon good for admission to any ABC Interstate Theatre.

Dean Goss Dinner Theatre, \$15 coupon for 2 (\$20. reg).

Aeros Hockey, season opens tomorrow night, \$4.40 gift certificate (\$5.50 seat).

Disney Magic Kingdom Club, free.

JSC Christmas Dinner Dance, available Nov. 4, \$10 per person.

### TABLE TENNIS

Don't forget the Semi-Annual Open Table Tennis Tournament sponsored by the JSC Table Tennis Club on Saturday, November 16 from 10:00 a.m. to 4 p.m. at the Gilruth Recreation Center.

The tournament will be double elimination with a consolation bracket for players losing in their first two matches.

Trophies will be awarded in both brackets. Only 32 entries will be accepted, so call Steve Jacobs, X-3561 now to enter. Fee is \$1.

### TENNIS

Gid and Betty Weber took top honors in the Men's and Women's Singles of the First Annual JSC Tennis Classic.

Other winners include, Men's "A" Bracket, Dan McFarlin, second place, Charles Spencer, consolation; Men's "B" Bracket, Bob Haxelmeyer, first place, Jim Bone, second, Ed Fendell, Consolation; Women's Bracket, Wanda Voss, second, Consolation, Jeanne Weber.



**SWING YOUR PARTNER**—Astronaut-physician Dr. Story Musgrave sits blindfolded in a swing chair as part of the electronystagmography medical demonstration during the Spacelab life sciences simulation October 1-8 at JSC. Dr. Dennis R. Morrison, right, adjusts the data-gathering equipment for the demonstration which measures eyeball motions induced by side motions of the swing chair. The demonstration measured the effects of motion upon the human vestibular, or inner ear system.

## Job Fair For The Handicapped Held During NETH Week

The week of October 6 through 12 was designated as National Employ The Handicapped (NETH) Week. NETH week is an annual observance designed to focus attention upon and provide recognition for the achievements of handicapped workers. It also serves as a reminder to all employers that handicapped individuals have much to offer in the way of extra motivation and dedication above and beyond their job skills. In many instances, their performance sets a high example for all to follow.

In support of NETH week Miss Shirley Price, Special Employment Program Coordinator of JSC's Employee Development Branch, participated with some 70 or more employers in the 2nd Annual Job Fair for the Handicapped. The two day, Job Fair, held October 8-9, was officially opened by Mayor Hofheinz at the

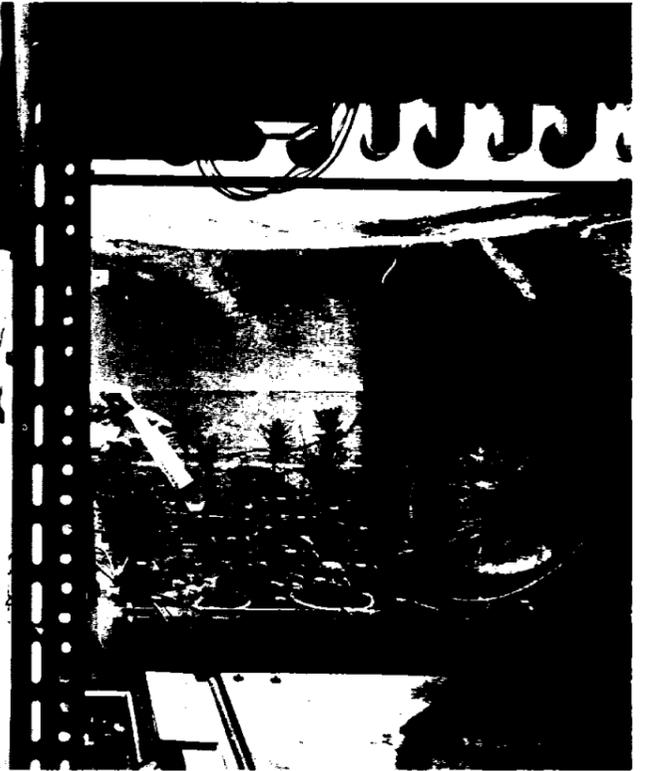
St. Paul's United Methodist Church Youth Building. The purpose of the event was to provide the opportunity for handicapped individuals, who were seeking employment, to be interviewed and possibly placed by employers from private industry and federal agencies. It gave employers an insight on the great number of handicapped individuals with highly qualified, marketable skills and potentials who would be an asset to their companies and agencies. The Job Fair also encouraged many employers to establish training programs that would include handicapped employees.



**VIRUS HUNTER**—Dr. Dennis R. Morrison prepares a viral culture for microscopic observation during the Spacelab life sciences payload simulation.



**MINIATURE TREE FARM**—Dr. Story Musgrave injects nutrients into root systems of pine seedlings as part of a pine lignification demonstration aimed toward gathering data on plant growth in the absence of gravity. The demonstration took place during the Spacelab life sciences simulation.



**PULMONARY FUNCTION**—Dr. Story Musgrave uses Spacelab mockup equipment to monitor human respiratory functions and measure such factors as lung-capacity, flow rates and ventilation dynamics.

## Awards

(Continued From Page 1)

lors degrees; GS-9 for Masters degrees; and GS-12 for PH.D's.)

Firm offers depend on the applicants' meeting Civil Service and NASA requirements.

Candidates are requested to submit a form 171 to the JSC Personnel Management Branch, Attention: Baley Davis, AH7 or call Davis at X-2921.

"The Minority and Female Recruiting Team has accomplished a great deal in supplementing the JSC EEO program," Baley remarked, "However, there is much that remains to be done to make

NASA the model employer that it deserves to be."

Buy U.S. Savings Bonds through the Payroll Savings Plan. You'll keep on good terms with yourself when it comes to saving.



**Take stock in America.**

## ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

HOUSTON, TEXAS

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

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