

# ASTP Countdown...

The eight Soviet Union cosmonauts in training for the Apollo/Soyuz Test Project (ASTP) arrived at JSC earlier this week and are currently undergoing a two-week training program with the American prime and backup crews.

The training programs include exercises in the Command and Docking Module simulators and mockups; joint language training; briefings on

experiments, contingencies, and mission rules and related activities. A press conference is scheduled with both crews at completion of training at JSC.

The crews will not visit Marshall Space Flight Center, Huntsville, Alabama, and the Michoud Assembly Facility New Orleans as planned.

The cosmonauts are scheduled to depart Houston in two groups on February 21 and 22.

# ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

HOUSTON, TEXAS



Vol. 14 No. 4

Friday, February 14, 1975

## REACT Ideas Being Reviewed

Many suggestions have been received through Project REACT (Reduce Every Agency Cost Today) during the past several weeks.

"Although some of these ideas have merit, many are too broad for consideration under REACT guidelines," stated Merv Hughes, Cost Reduction Officer. "The REACT concept is aimed at what each employee can personally do to accomplish savings in his/her area," he explained.

He said that ideas already submitted to BH4 are being reviewed and employees should receive reports soon.

He added that REACT is resulting in real team effort and with continued participation by individual employees, the Center will meet its cost-saving goal of \$9 million by July 31, 1975.

Ideas should be sent to BH4 on the cards available throughout the Center.

## Commission For Blind To Get Apollo Relief Maps

Numerous sightless persons will soon be able to gain an appreciation for what the moon is like because of Paul Richardson of the Structures and Mechanic's Division.

Richardson became aware that several of the vacuum-formed plastic Apollo landing site relief maps were available at JSC and immediately launched a campaign to convince the Agency to donate these maps to the Iowa Commission For the Blind. The Agency concurred with his suggestion and Richardson is planning to present the maps at the Commission's Annual Employer's Appreciation Dinner in Iowa on April 5.

The maps to be presented include one which was on the wall of Mission Control at the time of the Apollo 11 lunar landing, and one containing the Apollo 16 landing site, the Descartes Plains.

"I think this contribution is a commendable gesture on the part of our Agency, especially since the Iowa Commission is in the forefront for placing blind people in jobs all over the country," Richardson remarked. "This action indicates the 'public spirited' nature of NASA."

He says that blind people will attain ideas about the Moon's topography by feeling the indentations on the maps which represent different elevations of the moon's surface.

The maps were formed from lunar imagery obtained by Apollo crews. Employees in the Earth Observations Division entered this imagery into a stereoplotter and drew in the contours on flat pieces of paper. This data was presented to Topocom, the Defense Mapping Agency who used a computer to digitize the material and pre-

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APOLLO MAP—Paul Richardson, Structures and Mechanic is pictured with one of the Apollo landing site relief maps that he will present to the Iowa Commission For The Blind.



PLANS CONTINUE—A number of ASTP Working Group members and other key officials congregated recently to discuss project plans. All working group meetings at JSC are now completed.

## Little Girl's "Romping" Has Serious Purpose

The lively four-year old girl thought it was a "fun-thing" to romp about in what appeared to be a miniature spacesuit recently at JSC, but her romp had a serious purpose.

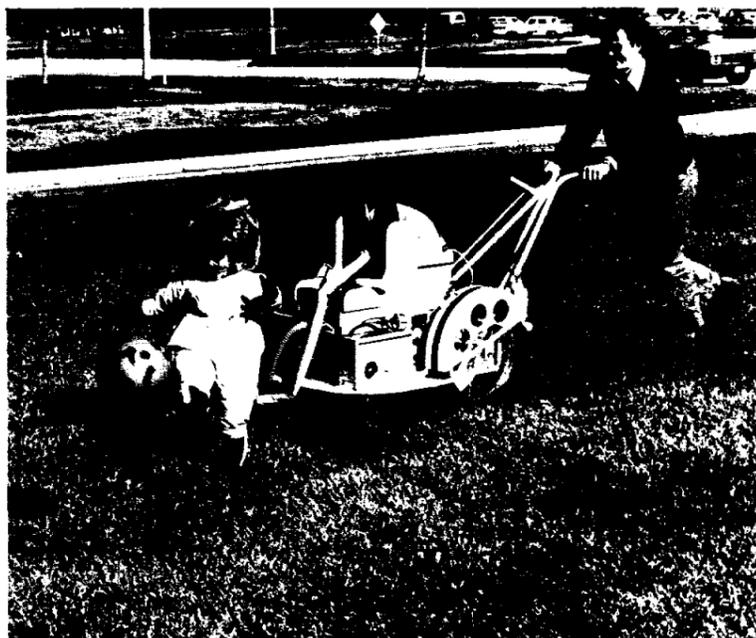
Engineers and physicians at the Center were using the healthy little girl to test a prototype of an isolation garment which may allow immunity-deficient children to leave their sterile habitats in homes and hospitals for a look at the outside world and for outdoor play that their illness had denied them. The garment would allow patients to carry a germ-free environment around with them for periods up to four hours. The system, designed and fabricated at the space center is part of a cooperative program initiated by a request from Dr. Sue Criswell of the Baylor College of Medicine.

Using commercially-available components where possible, the engineering team used a design

approach similar to the one used in developing astronauts' spacesuits. Filtered ventilation to the isolation garment is provided by battery-powered blowers on an accompanying pushcart through a 10-foot long umbilical.

Potential uses of the isolation garment are not limited to immunity-deficient children; patients with a plastic anemia or who are undergoing chemotherapy or organ transplant likewise could be freed from their

(Continued on page 4)



SPACESUIT FOR EARTH—Four-year-old Beth Sauer, daughter of a JSC Space Center engineer, serves as a test subject for a spacesuit-like garment which may allow patients with immunity deficiencies to venture from their sterile plastic rooms in homes and hospitals.

## Throughout NASA

All systems are operating normally on NASA's LANDSAT-2 Earth-survey spacecraft (Formerly called Earth Resources Technology Satellite B, ERTS-B) launched recently from the Western Test Range, Calif. Good data for pictures are being transmitted.

### SMS-2

The second Synchronous Meteorological Satellite SMS-B was launched from Cape Canaveral, Fla. last week. Renamed SMS-2 in orbit, the satellite will use telescope cameras to monitor the weather over the western half of the United States and Hawaii.

### New Position

R. Tenney Johnson, NASA General Counsel, has been

(Continued on page 3)

## Applications Available Now

The JSC Exchange Council has established March 15 as the deadline for submitting college scholarship applications for 1975.

Two scholarships, each with a maximum value of \$3000, will be awarded this year. The winners will receive \$300 per academic semester or \$200 per academic quarter; the maximum amount issued in one year will not exceed \$800.

Applicants may choose any accredited college and any course of study leading to a recognized degree. Currently, nine students are studying

under the Scholarship Program.

Criteria used in judging will include scholastic achievement, financial need, and school or community involvement. Applicants must be unmarried dependents of civil service employees with at least two years' employment at JSC as of January 1, 1975.

Application forms, student-sponsor agreement forms, and information eligibility may be obtained from Lois Ransdell, Chairman of the Scholarship Committee, Building 1, Room 821, Ext. 3629. Also, a JSC Announcement with additional details will be released soon.

## Employee Advances In Career Encourages Others To Do Same

Many JSC employees each year participate in training programs geared toward improving their skills, abilities, efficiency and effectiveness.

One of the persons respon-



BILLIE SCHMIDT

sible for initiating and coordinating a great number of those programs is Billie Schmidt, Employee Development Specialist. Her most recent projects include implementing the STEP (Speciality Training for Entry Professionals) and GO (Growth Opportunity) Programs which assist employees in "gaining new entryways into professional fields."

Schmidt is especially suited for her position since she was one of the first women at the Center to move from the secretarial ranks to an administrative position. She says she owes any success she has achieved to her supervisors who "were willing to rely on my judgement and who believed in me enough to allow me to grow and develop in my career."

"They included me in meetings when possible; they asked my opinion; they kept me informed on everything that concerned our offices; they explained their management philosophies to me; and encouraged me to fulfill my own inquisitiveness in the art of human relations," she added.

Schmidt came onboard here in 1962 as a secretary in the Apollo Spacecraft Office. In 1964, she became secretary to

the Director of Administration and in 1967 was selected Administrative Assistant and secretary to the Center's Deputy Director.

Her next move involved taking a downgrade, even though it was the beginning of her career as a professional. However, she says she realized the long-range benefits would be worth accepting the lower grade. Schmidt was assigned to the Training Branch, Personnel Division. She admits that even though she had experienced no doubt about making previous changes, the thought of moving into a professional field was another matter, "I was scared to death," she confessed, "I knew I was a good secretary, but I just didn't know what kind of anything else I could be."

Once again her supervisors enabled her "to step into a professional job, take stock of the job and myself, and be assured that I could handle the position."

Today, Billie is one of four senior specialists in the Employee Development Branch. Her success is due not only to the help of her supervisors, but also to the obvious charisma she possesses, as well as a determination to work to her fullest capacity in all endeavors.

"I am convinced that if I had not shown interest in advancing, I would have been left behind, while my contemporaries were moving ahead," she stated.

### Thanks!

*Special thanks go to all people in the JSC family who helped make the first blood drive of 1975 a success. To me JSC represents "people caring about each other."*

*Helon R. Crawford  
Co-Chairman, JSC Blood Bank*



WINNER CHOSEN—Steve Andrich of the Orbiter Engineering Office was the winner of the Name the Fingerprint Contest. He received a \$25 savings bond for his suggestion, "The Little Printz". Pictured in the photo L-R are Rachel Windham, EAA V.P. for Promotion, Jim McBride, EAA President, Andrich, and George Muinch, NASA Headquarters Director of the Low Cost Systems Office.

## EEO Counselor Says Listening Is The Key

Pantaleon Moreno is an Equal Employment Opportunity (EEO) Counselor who believes that listening is a key factor in helping employees solve problems,



PANTALEON MORENO

"It is essential that counselors obtain all pertinent facts so that the problems can be fully understood. This can be achieved primarily through listening," he remarked.

JSC's network of EEO counselors is frequently one of the best informal media for two-way

communication between managers and employees on sensitive, important and timely issues related to equal employment opportunity. The EEO counselor is the first stop for an employee who believes he has been discriminated against in some aspect of his job relationship because of race, color, religion, sex, age, or national origin. JSC has eleven counselors dedicated to resolving such individual employment problems quickly, informally and at grassroot levels.

Head of the Applications and Test Software Section, Software Development Branch, Moreno has been an EEO counselor for two years. He feels that all complaints warrant attention, no matter how insignificant they may seem to others. "I try to look into the problem as thoroughly as possible. After consolidating all the facts, the most important question is 'what does it take to satisfy this employee?' More often than not, the problem can be solved at the informal level," he said.

However, if a counselor cannot resolve a problem to the satisfaction of the employee, he advises the employee of his right to file a formal complaint. "It is the employee, not the counselor, who makes the decision regarding filing a formal complaint," Moreno said.

Final selection and appointment of EEO counselors is a management responsibility. Among many other qualifications, appointees must possess the ability to communicate with persons at different levels. They must also have a commitment to promote equal job opportunities for all persons.

Moreno emphasized the fact that all employees have access to the counseling program whether or not they are members of a particular minority group.

Moreno joined JSC in 1964. He received his B.A. in mathematics from Southwest Texas University. He resides in Houston with his wife Frances and their daughter Minerva.

## Innovative Secretary Gets Award

Shirley A. Newsom, Photographic Technology Division, was presented the February Outstanding Secretary Award for her "innovative and dedicated processing of the Skylab photographic data requests received by the Photographic Technology Division (PTD)."

Mrs. Newsom devised record systems, translated requests, provided status and answered nonstandard inquiries concern-

ing the Skylab data requests.

The data request system utilized for the Skylab Earth Resources Package (EREP) was quite different from the system normally utilized within PTD. Through this newly established system, Mrs. Newsom processed for over 150 recipients some 2,300 EREP photographic data requests from 117 rolls of film, providing 13 different types of film products.



SSHH, CAREFUL IT'S LOADED—Workmen of the Western Geophysical Company are shown laying lines prior to detonation of explosive charges in and around JSC this week. Seventy foot deep holes were drilled along a 3,500 foot line which crossed the southwest corner of the center west of the antennae test range. Charges of 10 pounds of 'hi-velocity' blasting gelatin were placed in the holes and were detonated Monday. The geophysical study was requested by the Exxon Company which has oil, gas and mineral rights reservations on the center. Officials of the exploration team said it will require about six months to analyze the data collected.

# 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

Editor: Janet Wrather      Photographer: A. "Pat" Patnesky

## Roundup-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.

### PETS

Healthy, young gerbils. \$1 ea. Harry Briggs. 333-2717.  
Miniature poodles, 2 bic males, AKC from show stock. \$150 ea. 644-7870.

### MISCELLANEOUS

10' x 16' Sears tent w/ canopy & frame bag, slips 3. 1k nw. \$115. Frank Ravet. 482-7140.  
Royal portable typewriter w/ case. Bullock. \$25. 488-1042.

Beautiful wooded lot in developd sect Elkins Lake. cons any reasonable offer. A. C. Bond. 334-2418.

IBM Selectric II typewriter, 1k nw. \$550. Bourland. 488-5580.

Adult swimming at night? Call Mary Jo Thibodaux. 644-9268, aft 6 p.m. 334-2441.

Color tv parts, incl various types of tubes, \$25 for all or will sell separately. 333-4696 aft 5.

Western saddle, no stirrups. \$35. 488-1890.  
5 gal aquarium setup. \$8. 20 gal aquarium setup. \$35. 55 gal aquarium w/ stand. \$75. 482-1179 aft 6.

Two back-to-back boat seats, red vinyl covered, gd cndn. \$30. Becker. X4346 or 944-5118.

Craftsman 41-piece standard (no. 4 to 1/2") tap and die set. nw cndn. \$30. Craftsman 41 piece metric (3mm to 12mm) tap and die set, nw cndn. \$30. Stubblefield. 334-1370.

### HOUSEHOLD ARTICLES

Custom 84" long draperies w/ antique satin covrd 96" wide cornice board, Xclent cond. neutral color. \$60. 482-7140.

White shag area rug w/ pad, 9' octag, \$50. Jones. 488-3208.

Stereo cabnt, contemp style w/ walnut fin, 72" x 18" d. x 29" ht, xint cond, High. 333-3254.

Refrig/frzr, Gen Elec, 9 cb ft, xint cond, beige. \$70. Friedrich Horz. 474-3470.

Carpet. 13x26, gold shag, clean, no damage. carpet and pad \$50. 488-3265.

Hoover portable apartment washing machine, gd cndn. \$40. 482-6977.

Early American sofa and end table, solid oak, dresser and vanity, two hanging lamps, Fisher KS-1 speaker, Also girls 26" bike, Teasdale. 481-6074.

### WANTED

Set of gd used golf clubs. Nelson. 483-2846, aft 5. 332-1979.

### LOST & FOUND

Found, some money on Friday, Jan. 24. call w/ approp. desc. of circumstances and amt. Lang 483-7441.

### VEHICLES

'68 Renault 10, 4-dr, radio, heater, A/C, 40 mpg, new motor overhaul. J.S. cooper, 482-1009, \$650.

'67 Chevy Impala, 2-dr hardtop, PS, PB, nw tires, battery, shocks, J.S. Cooper, 482-

1009, \$600.

'68 Volks. fstbk, 26 mpg, \$850; 69 Chevy Nova, A/C. \$1200. Ronald DuVal, 474-3416.

'71 Pontiac Catalina, 2-dr, automatic, A/C, 350 V8 eng. 39,000 miles, exceptly clean, \$1600. Wade Vance. 483-5293.

'68 Cutlass S. \$850. Don Lewis, 333-3830.

'72 Honda CL350, very clean, extras, adult owner, Thompson 332-2229.

'73 LTD Brougham, PS/PB, AM & FM stereo tape, pwr sts & windows, 15 mos. 28,000 mi. \$3750. Bailey Chaney, 488-0252.

'68 Chevy wagon, air power, automatic, gd cond. \$700. Arnold 481-2890.

'72 Pinto Runabout, \$2200, Simmie aft 6 p.m., 334-4143.

'65 Chev. Sta Wagon, PS/PB, A/C, Auto, \$200. R.P. Burt. 333-2117.

'68 Cutlass Supreme. \$850, Donald Lewis, 333-3830.

'73 Chev Impala, 4-dr., A/C, PS/PB, auto, \$3200, R.A. Donatto, 471-0654.

Airplane for rent IFR Bonanza, \$24/hr, 75 hr/yr min. Lewis, 488-3265.

'74 Mustang Hatchback AC, steel belted radials, 1w mi, 25 MPG, \$2900 firm, 481-2849. Bike, Schwinn Varsity, 10-spd, 27", many extras, li nw. \$100 482-7858.

'71 27' Aljo Camp trailer, fully self-contained, w/full bth, sep bdrm, gd cndn, \$2,400. 483-5007 or 442-2213 aft 5.

'70 Opel GT, yellow, gd paint, tires, 27 mpg, \$1500, 471-2586.

CREDIT UNION RE-POSSESSIONS:

'74 VW Beetle, AM-FM, std trans, 24K miles, orange paint, min bid \$1700.

'73 Super Beetle. AM-FM, 8 track, a/c, 35.7 K miles, std trans, orange, min bid \$1,350.

'72 Pontiac Grandville 4-dr ht, AM-FM, ps, pb, a/c gd tires, white, 68 K mi, min bid, \$1500.

'70 Maverick, 2-dr, 6 cyl, std trans, brown, 74 K mi, min bid, \$300.

For information, call Georgia Bennett, X2066.



NCMA AWARD—William R. Kelly, Special Assistant for Management in the Office of the Director, was awarded the President's Award by the National Contract Management Association (NCMA). This award is given to members who have signed three or more Contract Management personnel into membership in the NCMA.

## EAA Attractions

### Camera Club

A group of Center employees have announced that they will form a Camera Club at JSC. Joe Blanco has been appointed interim President and Dave Heath will serve as interim Vice-President. A proposed charter will be written and EAA sanction will be requested.

An organizational meeting will be held February 18 at the Gilruth Recreation Center, Room 215. Order of business will be election of permanent officers and adoption of the charter.

### Calculators

The EAA has arranged to purchase Texas Instrument Calculators at a substantial discount from retail prices. Included are the 1500, 2500, SR-10, SR-11, SR-20, SR-50m and the new SR-51. Employees may place orders at the Building 11 Exchange Store until February 21. Descriptive literature on each calculator and price is available at the store. The price list is also in the EAA Special Beacon distributed this week.

### Fruit

The EAA is obtaining a truck load of fresh Rio Grande Valley ruby red grapefruit and sweet oranges for JSC employees. Get your order blank and more details in the Special Beacon.

### Softball

Entries for the first 7-week season of the 1975 EAA Softball Program will be accepted by Doug Burns at the Rec Center from March 17 thru March 21.

## BLACK HISTORY WEEK

February 9-15, 1975

February 9-15 has been designated as Black History Week. It is most appropriate that we set aside this time to recognize the significant contributions made to this nation by our Black citizens.

Emphasis on these achievements places in timely perspective the pertinence of working together in an effective and harmonious manner, regardless of race, religion or national origin, for the general well-being of all our society.

In this spirit, I urge all NASA, Johnson Space Center employees to take note of the achievements having unique pertinence to the proud story of the Black population of this nation, and to keep in mind, throughout the year, the valuable message conveyed to us during observance of this week.

*Christopher C. Kraft, Jr.*  
Christopher C. Kraft, Jr.

## Low Cost Modular Spacecraft Unveiled

NASA's new compartmented spacecraft being considered for use aboard the Space Shuttle Orbiter was unveiled for members of the news media last week at Rockwell International Space Division's facility at Downey, Ca.

Called the Low Cost Modular Spacecraft (LCMS) this unique approach to future generation space systems would fit into the 15 by 60 foot payload bay of the Shuttle Orbiter. The LCMS, according to project engineers, would conceivably serve as a platform for as many as 14 separate satellites.

The LCSM consists of an instrument assembly and spacecraft assembly joined together on a transition ring. Scientific instruments or Earth Resources sensors can be attached to the LCMS for specific missions.

Developed by engineers of the NASA Goddard Space Flight Center, Greenbelt, Md., and Washington, D.C. area small manufacturers, the LCMS promises to be a very important and economical addition to the spacecraft fleet which will use the Space Shuttle when it

begins operational flights in the early 1980's.

If this concept is ultimately accepted, officials at the Goddard Space Flight Center, say projected savings could run into the hundred of millions of dollars over a period of 10 years in comparison with present methods of orbiting spacecraft that once launched, cannot be recovered. The Orbiter would be able to place the LCMS system into orbit, later service it and possibly return it to Earth for needed repairs. Frank J. Cepollina, who heads Goddard's Shuttle Office, described the LCMS system as the first road side maintenance in space.

Cepollina told newsmen on hand for the LCMS demonstration and Shuttle status report that the Orbiter can capture an orbiting satellite through use of the Orbiter manipulator arms, remove systems in the spacecraft, plug in new systems, adding life to the satellite. He estimated that a satellite could be serviced in this manner five times over a 10 year period.

Dr. Robert Wilson, Director  
(Continued on page 4)

## Throughout NASA

(Continued from Page 1)

named General Counsel of the Energy Research and Development Administration (ERDA) effective February 16.

### AMPS

The fourth meeting of the Atmospheric, Magnetospheric and Plasmas in Space (AMPS) Science Working Group was held recently at Marshall Space Flight Center. This group of 49 scientists from throughout the world was selected by NASA to define the AMPS payload requirements and to provide scientific guidance throughout the design phases.

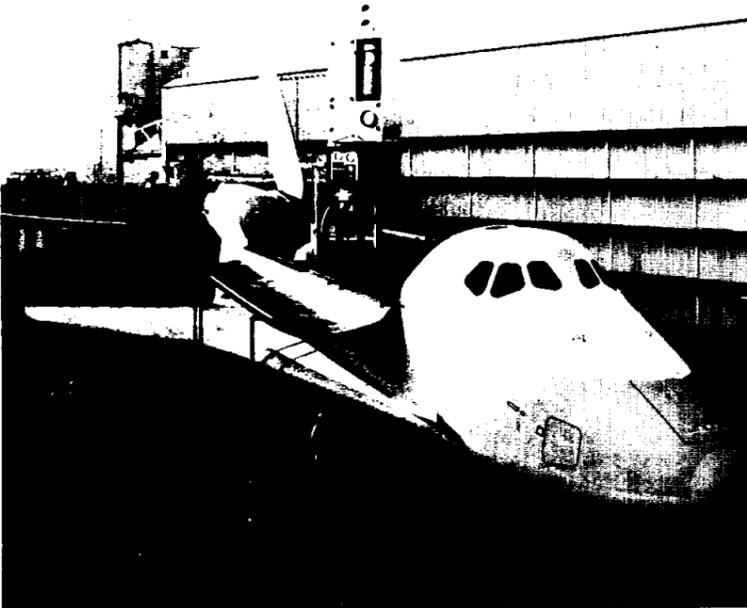
### Construction Progresses

The capability to produce External Tanks for the Space Shuttle moves nearer as modifications of and additions to the NASA-Michoud Assembly Facility at New Orleans progress. Two projects are in the final construction phase; a third will be completed this fall, and contracts for two more have been awarded. Five other projects are in the design phase.

### Joint Plan

NASA Administrator James C. Fletcher and Housing and Urban Development (HUD) Secretary James T. Lynn have sent to the President and Congress a joint plan for implementing the Solar and Cooling Demonstration Act of 1974.

NASA and HUD are lead agencies in the Federal government's \$60 million demonstration effort to prove the commercial feasibility of solar heating for homes and buildings by 1977 and of combined heating-cooling systems for those structures by 1979.



SATELLITE SIMULATION—Full scale model of the Low Cost Modular Spacecraft is put through its paces in the Space Shuttle orbiter mockup during demonstration for newsmen at Rockwell International's Space Division. The low cost spacecraft is under study by NASA Goddard Space Flight Center engineers for use aboard the orbiter when it becomes operational in the 1980's.

## Credit Union Has Come A Long Way Since '62 Inception

JSC Credit Union employees in Building 11 are anxiously awaiting the day they will be able to move into their new headquarters, located on the corner of Saturn and Gemini. If construction of the building remains on schedule, the "big

day" will take place in mid-April.

According to Peggy Giacoletto, Credit Union Manager, the new 10,800 square foot building will contain many added attractions including a night depository, drive-in windows, and

"much more space and privacy than our present facilities offer."

The credit union boasts over 10,000 members including JSC and contractor employees. These members take advantage of the many services offered by the credit union such as cashing checks, redeeming savings bonds, selling money orders and travelers checks, notarizing, making various types of loans, and operating a savings plan.

Operation of the Credit Union began in March, 1962 with 57 accounts for a total of \$5,332.81 in shares. At the end of May of the same year, the number of accounts had increased to 125 with over \$10,000 in savings, and 12 loans had been made totaling over \$5000.

Today, the credit union has over \$10 million out in loans (over 6,200 loans) and has about 10,000 member savings accounts totaling over \$12 million.

Since the Credit Union's inception, over 28 thousand loans have been made for a total of over \$36 million.

Obviously, a great deal of

work goes into operating a credit union. Performing a great portion of these duties are 20 full-time employees assigned to four departments including the loan, accounting, collection and cashier departments.

Also contributing to the functions of the credit union are a board of directors, a credit committee and a supervisory committee—all serving on a voluntary basis.

Employees on the board of directors are elected by members of the credit union to oversee policies which have been established by Federal law.

The credit committee meets every other day and is respon-

sible for approving or disapproving loan applications.

The supervisory committee continually audits the bookkeeping and operations of the credit union to make sure they are complying with laws and with good business practices.

The board of directors and the other committees will present reports at the Credit Union's annual meeting March 11, 1975, 7:30 p.m. in the Building 2 auditorium. Members will have an opportunity to ask questions and make suggestions concerning the credit union. Also an election will be held to fill upcoming board and committee vacancies.



**CUSTOMER SERVICES**—In the above photo, Cheryl Walker is in the process of cashing a check for an employee. This service is one of many provided by the Credit Union to its members.

## Lunar Science Conference Pending

The Sixth Annual Lunar Science Conference will be held at JSC March 17-21, 1975. Over 500 lunar and planetary scientists and principal investigators are expected to attend the five-day event.

This year's symposium will direct itself to six major topics: constraints on structure and composition of the deep interior; characteristics and movement of materials in the lunar regolith; characterization and evolution of the lunar crust; nature of impact processes and their effects on lunar materials; characterization and evolution of the mare basins; and the Moon as an interplanetary/interstellar probe. Summary sessions will be held for each of the six topics on March 21.

### Intern Spotlight



**RICH CAMPBELL**

Twenty-seven year-old Rich Campbell is an administrative intern in the Personnel Management Branch. Employed at JSC since September of last year, his work includes provision of operational personnel management services to the Space Environment Test Division and the Propulsion and Power Division.

These services cover placement, classification and wage administration, employee utilization, and advice to management and employees of the same two divisions.

Rich's free time is occupied by many hobbies including tennis, volleyball, camping, photography and basketball.

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## Purpose

(Continued from Page 1)

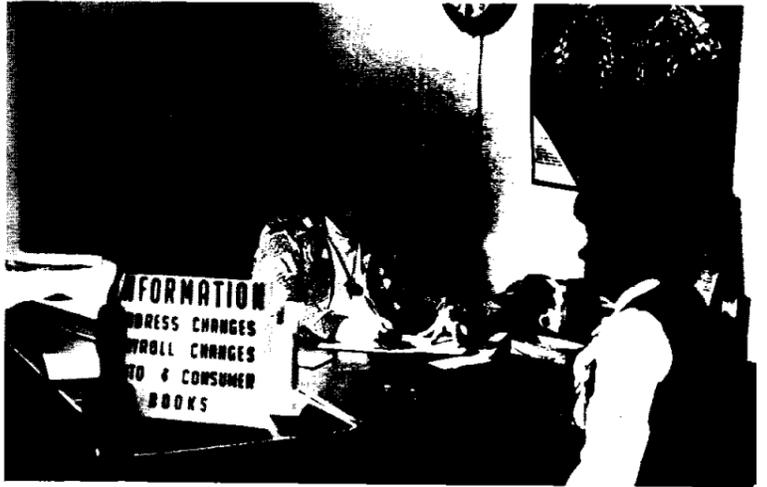
sterile plastic room for short periods.

The garment is made from a rubberized fabric similar to that used in liferafts and is fitted with an integral helmet of soft, transparent plastic. A fold-up tunnel attached to the back of the suit permits the patient to move from his sterile room into the suit without exposure to the outside atmosphere.

A modified lawnmower chassis serves as a carrier for the air blowers and batteries and has a seat for the patient. Two fans force air through a high-efficiency filter pack through the 10-foot air supply hose and into the suit. Rechargeable 12-volt aircraft batteries provide power to the fans, or the system can be connected to 110-volt AC housepower or driven by an automobile battery through the cigaret lighter.

Airflow entering the suit passes inside the top of the helmet and over the body for cooling, and exits at the ankles, under positive pressure.

Project engineer Fred Spross of the Bioengineering Systems Division estimates that most of the technology was already available from our space experience. The biggest factor was pulling it all together into a working system which was accomplished through the enthusiastic support of the Crew Systems Division, the Center Operations Directorate, and the Safety, Reliability, and Quality Assurance Directorate.



**INFORMATION DESK**—Mrs. Jennetta Sowders, Membership Officer at the Credit Union assists an employee at the Information Desk.

## Minority Business Reps To Attend Seminar

NASA and the Office of Minority Business Enterprise will co-sponsor a Technology Transfer Seminar at the Gilruth Recreation Center February 27.

Using the theme "Look To Us", the seminar will expose a group of minority businessmen

and women to the possible introduction of NASA space technology into their businesses.

The Seminar will be under the direction of James T. Dixon, Minority Business Specialist, NASA Headquarters.

## FEW Meeting

The next meeting of the Greater Houston Chapter of Federally Employed Women (FEW) will be held on February 19, 1975, at 5:30 p.m., at the VA Hospital (basement), 2002 Holcomb Blvd., Houston. All members are encouraged to attend. An election of officers will be held at this meeting.

## LULAC

The LULAC (League of United Latin American Citizens) NASA Area Council #660, which was recently organized, will have its regular meeting on Thursday, February 20, 1975, at 5:00 p.m. at the Gilruth Center, Room 215. Prospective members and visitors are welcome.

## Spacecraft

(Continued from page 3)

of Advanced Payload Analysis for NASA Headquarters, said a space shuttle benefit study has indicated that use of such a modular spacecraft system could save as much as \$100 million annually.

Fred W. Haise, Jr., technical assistant to the manager of the Space Shuttle Orbiter Project at JSC, presented an overall status of the Orbiter to the more than 40 newsmen who attended the conference at Downey. He told the newsmen that Orbiter hardware is moving on schedule at various sub-contractor facilities around the country and also said the R-I Orbiter assembly facility at Palmdale is nearing completion with the mid fuselage scheduled for delivery to Palmdale later next month.

## Maps

(Continued from Page 1)

pare it for the final plastic form. The Iowa Commission For the Blind in 1968 received a Certificate of Commendation from President Lyndon B. Johnson for their outstanding performance in finding employment for the blind and for their contributions in other rehabilitation efforts.

Richardson says he was placed at JSC by the Commission in 1972. He is now working in aerothermodynamics. He received his B.A. degree in mathematics from the University of Texas and his M.A. degree, also in math, from Iowa State.



**NEARING COMPLETION**—The Rockwell International facility at Palmdale, Ca, northeast of Los Angeles is scheduled for completion in the next several weeks. Delivery of the first major section of Space Shuttle orbiter is scheduled for later next month. The San Gabriel Mountains are in the distance. The facility is located on U. S. Air Force Plant 42 outside of Palmdale in the heart of the Antelope Valley.