

ASTP COMMANDERS—Pictured above are Cosmonaut Aleksey Leonov (I) and Astronaut Thomas Stafford. Leonov will be commander of the Soyuz spacecraft while Stafford will command the Apollo Spacecraft during the mission scheduled to take place in July, 1975.

# Skylab 3 Crew to Have More "Co-Travelers"

When Skylab III is launched from Cape Kennedy, Florida July 28, crewmembers Alan Bean, Dr. Owen Garriott and Jack Lousma will have a host of co-travelers which include an aquarium of fish, a pair of common household spiders, a swarm of vinegar gnats and a half dozen pocket mice.

These space passengers are part of the more than 60 experiments and scientific demonstrations scheduled to be performed during the 56-day Earth orbiting mission. The mice and vinegar gnats will ride inside a self contained living compartment in the service module, while the fish and spiders will be secure in the orbiting workshop.

The fish are added starters to the flight of Skylab III hav-

ing been added at the request of Science-Pilot Dr. Owen Garriot. There will be two "brackish water" minnows (3/4" in length) commonly called "munnichog minnow" which are found along the Atlantic and Gulf Coasts of the United States, plus 50 minnow eggs.

The objective of this experiment is to show what disorientation the fish will experience when exposed to weightlessness. Many fish have vestibular apparatuses quite similar to man and even though they live in an environment usually considered to resemble weightlessness, they do perceive a gravity vector.

A common theory is that the fish will swim with random orientation to the exterior of (Continued On Page 4)

## World-Wide Bicyclist Visits JSC

Ever thought of taking a world-tour—on a bicycle? That's exactly what 39-year-old Sakti Prosad Potader, municipal official from Calcutta India has been doing since February 1970.

Attempting to satisfy a lifelong desire to learn more about people in other countries, Sakti, a member of the Explorers Club of Calcutta, has pedalled approximately 42,000 miles since he started on his journey.

He arrived in Houston July 8 and came to JSC the following day. Sakti said it had been his dream to meet an astronaut.

"I have met many famous and important persons across the world, but it is my desire to meet an astronaut, especially one who has been to the moon," Sakti stated. "I do not intend to leave Houston until I have accomplished this goal."

When he met Apollo 17 astronaut Ronald Evans later that day, he said, "This is one of the happiest days of my life. I can't tell you how much this means to me."

He was also impressed with

scientist-astronaut Dr. Carl Henize who took him on a tour of the astronaut building.

Sakti says he was given a 5year leave of absence from his job so that he could take his (Continued on Page 4)

## Lunar Ball Tickets Available

Tickets for tonight's Lunar Landing Public Ball, one of the highlights of the City of Houston's 2nd Annual Lunar Landing Festival, are available at JSC through the Employees Activities Association.

The theme of the ball is a salute to the Apollo astronauts. Mayor Louie Welch will make a special presentation to the astronauts on behalf of the City of Houston. The presentation will be accepted by Apollo 17 Commander Eugene A. Cernan.

Another major event will be the coronation of JSC Lunar Landing Queen Sharon Boniface and the members of her court—

(Continued on Page 4)

## Soviet Group "On The Go" at JSC

The 10 Soviet Cosmonauts and other members of the delegation from the Soviet Union have been hard at work since their arrival at JSC July 9, 1973. The group came to JSC to begin preparation for the joint U.S.-Soviet space mission (ASTP) in 1975.

The delegation is headed by Professor Konstantin D. Bush-uyev, Apollo-Soyuz Test Project Technical Director for the Soviet Union. Delegation members include the prime and backup flight crews for the mission, the Mission Model and Operational Plans working group, cosmonaut training specialists, interpreters and administrative support personnel.

Prime Soviet crewmen are Cosmonauts Aleksey A. Leonov and Valeriy N. Kubasov. Leonov performed the world's first extravehicular activity during the Voskhod 2 flight, and Kubasov was a Soyuz 6 crewman.

The crew for the second Soyuz spacecraft which the Soviet Union will be prepared to launch if necessary consists of Cosmonauts Anatoliy V. Filipchenko and Nikolay N. Rudavishnikov. Filipchenko flew on Soyuz 7 and Rudavishnikov was a crewmember on Soyuz 10.

Backup crewmen are Cosmonauts Vladimir A. Dzhanibekov, Boris D. Andreyev, Yuriy V. Romanenko and Aleksandr S. Ivanchenkov.

The crews are accompanied by two veteran cosmonauts who attended ASTP meetings here last March, Major General Vladimir A. Shatalov and Dr. Aleksey S. Yeliseyev.

This was an initial familiariza-

tion visit for the crews, and specific mission training was not conducted. Activities consisted primarily of classroom lectures on the basic elements of the Apollo spacecraft, the Apollo life support and communications systems, the ASTP docking module and basic flight plan time lines.

Several members of the United State's ASTP flight crew will visit the Soviet Union this fall for familiarization of the Soyuz spacecraft.

Scheduled for launch July 15, 1975, the Apollo-Soyuz Test Project mission is designed to checkout in flight a compatible docking mechanism developed by both countries to provide an international space rescue capability. Soviet and American

(Continued on Page 3)

# ROUNDUP

NASA LYNDON B. JOHNSON SPACE CENTER

HOUSTON, TEXAS



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## 36 JSC Employees End Many Years of Federal Service

Between June 2 - 30, 36 JSC employees retired from the federal government, leaving behind many years of service.

Heading the list with 41 years of federal service was Leonard W. Loomis of Aircraft Operations. Next was Adam Cook of Public Affairs Office with 39 years. Kenneth J. Vogel of Program Support followed with 37 years, and Eugene J. Strauss retired with 36 years.

Retiring with 33 years of service were Wilbur H. Gray of the Engineering Division, Charles C. Nagle of Technical Services and Charles Tucker, also of Technical Services.

Franklin B. Owens of the Logistics Division left the government after 32 years of service. Leaving with 31 years behind them were J. Howard Allison of Technical Services, Ozro M. Covington of Flight Operations, John G. McClintock of Administration and Program Support and Donald F. Rathburn of Quality Assurance.

Six employees retired with 30 years each. They are Clifton Carr of Management Services, Patrick M. Gill of the Engineering Division, Margaret L. Hopkins of Engineering and Development, Thomas L. Johnston of Institutional Resources, Paul V. Lucas of Quality Assurance and Raymon E. Smith of Program Support.

Andre J. Meyer, Jr. of Structures and Mechanics and Elbert Prine of Technical Services each retired with 29 years while Alfred B. Eickmeier of Experiment Systems and Melvin R. Strait of The White Sands Test Facility left the federal government with 28 years each.

Leaving the government with 26 years of service was John J. Fairchild, Jr., of Control Systems Development.

Rene A. Berglund of Future Programs and Sarah W. Lopez of Program Operations retired with 25 years each. William H. Keathley of Spacecraft Design and Charles T. Townsend of Management Services each retired with 24 years of service.

Two persons, John M. Copeland of Financial Management and James H. O'Neil of Techni-

cal Services — retired with 21 years each, and leaving the government with 20-years of service each were Phillip T. Hamburger, Office of the Director, Victor P. Neshyba of the Space Shuttle Program Office and Carroll W. Ross of Technical Service.

Anne Walsh of Management Services retired with 18 years of service. Goldie B. Newell ended her government career with 16 years and Lecie A. Scott left the government after 10 years of service.



SKYLAB 3 CREW — These three men make up the crew for the Skylab 3 mission. They are Astronaut Alan L. Bean, foreground, commander; Scientist-Astronaut Owen K. Garriott, left, science pilot; and Astronaut Jack R. Lousma, pilot.



IN MDA—Pictured above in the MDA at JSC are Nikolay N. Rudavishnikov (right) and Aleksey A. Leonov, both of the Soviet Union. Leonov performed the world's first EVA during the Voskhod 2 flight.



CHECKING ADAPTER—Checking out the docking adapter for ASTP are (I-r), Leonov, Anatoliy V. Filipchenko, Sergey N. Maksimov and Alex Sementovsky (NAR).



SHUTTLE SIMULATOR — Yurity V. Romanenko (sitting) Vladmir A. Dzhanibekov, and David R. Scott (back right) discuss the Shuttle simulator.



AT THE "LEARNING TABLE"—Seated at the conference table above are (I-r) Leonov, Nikolay Rudavishnikov, Anatoli Filipchenko, Arkadiy Yeremin, Viktor Varshavskiy, Konstantin Samofal and Vladimir Shatalov.

## **Solar Energy Use Now Under Consideration**

The direct heating and cooling of buildings may well be the first large scale use of solar energy, according to a study by the National Science Foundation and NASA.

About twenty-five percent of our present energy consumption is used for this purpose, mostly from oil and gas.

The NSF-NASA Solar Energy Panel estimates that solar heating systems are now competitive with electric heating systems and, with the expected increases in the cost of fossil fuels and improved technology, will become competitive with oil and gas.

The addition of refrigeration systems would tend to make solar heating systems even more competitive. The panel estimated annual oil and gas savings on the order of \$3 to \$4 billion per year by the year 2000 if large scale use of solar energy for both heating and cooling purposes were realized.

Twenty buildings are now being heated with solar energy in the U.S.

None of the solar-heated homes have solar-powered air conditioning, and with the addition of air conditioning they could then be used nearly 12 months of the year.

Solar powered air conditioning will also help reduce summer peak-load requirements. In areas and buildings where solar energy is used, it is estimated that solar energy will supply an average of 75 percent of the buildings' thermal energy needs.

Solar energy can be used for heating and cooling of collectors with a black surface to absorb the sunlight. This surface is covered with one or several panes of glass which reduce re-radiation and convective heat losses. The collector is insulated on the sides and back to prevent conduction and convection losses.



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Water, air or some other fluid is passed through the collector and can reach temperatures from 140 degrees F to greater than 200 degrees F.

The thermal energy from the fluid is then stored in a heat storage container to provide energy for night time and inclement weather. The thermal storage can be in the sensible heat of water or rocks or in the latent heat-of-fusion of certain salts

Coupled to the heat storage system is a heating loop and a cooling loop. The heating loop takes heat from the thermal storage system to heat the building. The cooling loop takes heat from the thermal storage to operate an absorption or mechanical air conditioning system.

Also connected to the heat storage loop is an auxilliary heater. The purpose of this heater which uses conventional fuel is to supply thermal energy to either the heating or cooling system during periods of inclement weather.

The principal factor limiting the adoption of solar heating and cooling systems for buildings is the lack of well engineered, reasonably priced systems.

Key technology areas needing attention include lowcost, long life collectors, low cost, cooling systems, and system optimization.

NASA is working on the collector problem and is seeking means for increasing efficiency and reducing cost to one or two dollars per square foot.

In addition, a system optimization study is planned. Finally, as part of NASA's contribution to conserving energy in our own installations, consideration is being given to installing experimental collectors as an addon to an office building to be built at the Langley Research Center.

As a part of this study, the savings in energy cosumption possible from improved insulation and better operating practices will be determined.

This study will establish a basis for more widespread applications at other Centers and at the same time will provide a realistic test facility to guide the design of practical systems and to define operational problems.



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### **Board Determines Cause of 1972 Aircraft Accident**

An electrical malfunction causing loss of instruments in severe weather was the major factor in an aircraft accident May 10, 1972, involving Astronaut Charles Conrad, Jr., an investigation board has determined.

Conrad, a Navy captain, ejected safely from a T-38 jet aircraft over Bergstrom Air Force Base near Austin, Texas. The aircraft was destroyed.

Conrad was in the final phase of an approach to Ellington AFB near Houston when he was advised the field was below minimums.

He was then given radar vectors to William P. Hobby Airport in Houston, which was still open for landings.

At 800 feet altitude on his final approach to Hobby in darkness and in heavy rain and lightning, an electrical failure in the generator system caused the

## Lunar Rovers Seize Softball Championship

The NASA Lunar Rovers seized the 1973 Pasadena City Softball Championship July 2, winning three consecutive games to cap an underfeated season.

The Rovers defeated Allendale Baptist twice after beating Southmore Hospital Medi-Belles 19-0 in the tournament opener.

The Rovers will represent Pasadena in the Women's Slow Pitch State Tournament August 3-5. They are presently leading the 1973 EAA Women's Slow Pitch League at JSC with a 7-0 season record.

## Claybusters Wrap-Up 7-Week Skeet League

The "Claybusters" recently wrapped up a 7-week skeet league and presented awards to the top three teams.

Team Number 3 captured first place in the competition. Members of this team include Joe Fries, Welby Redwine, Warren Brasher, George Balthazer and Gil Good.

Second place went to Team Number 4. Shooting on this team were Gerald Anderson, Sam Hildreth, Tom Wise, Tom Sparks and Ray Webb.

Team Number 6 came in third. Members of this team are Carl Hohmann, Dave O'Brien, Don Smith, Derek Davis and Gordon Spencer.

The Most Improved Shooter award went to Ken Chandler. The highest average award went to Welby Redwine while Derek Davis received the Most Straights title. loss of cockpit lightning and partial loss of navigation instruments.

Conrad aborted the approach and attempted to climb above the weather. The generator was subsequently brought back on line, and he regained cockpit lightning.

Because of the electrical problem, Conrad requested radar to an airport operating under visual flight rules, and he was vectored toward Randolph AFB, San Antonio. When it became apparent that he did not have enough fuel to reach Randolph, he was directed toward Bergstrom AFB.

The aircraft ran out of fuel just after Captain Conrad reached Bergstrom, and he ejected at 3700 feet.

The investigation board determined that a printed circuit card was not adequately protected from moisture and likely was the cause of a short circuit and disconnect of the left generator during the approach to Hobby. The card is part of the voltage regulator and protection circuit that switches the electrical load to the opposite generator when one of them goes off line.

The board recommended that the routing of cooling air for electrical components be modified to exclude water when flying in rain. The implementation of this recommended modification is currently being evaluated.

The accident investigation board was chaired by NASA Astronaut Stuart A. Roosa.



CHAMPIONS—Pictured above are the Lunar Rovers who won the 1973 Pasadena City Championship in softball. Left to right, front row are Barbara Dalke, Dinky Warren, Irene Sanchez, and Marie Fullerton. Back row, left to right, are coach Dave Williams, Irene Clinkscales, Shirley Cortright, Jo Ann Birchett, Pat Brown, Gay Williams, and assistant coach Dr. Roger Youmans. Not pictured, Lorraine Erickson, Dana Murphy, Carol Haley, and Joanne Nelson.

#### Picnic Site Chosen; Plans Continue

Camp Mansion in Friendswood has been selected as the site of the JSC All Star Picnic, which will be held September 8, 1973.

The picnic committee is planning a variety of activities which should interest adults, teens and children.

Picnic committee chairman is Betty Cornett; co-chairman is Evon Collins. Sub-committees are headed by Charlie Hayes, information booth; Jim McBride, facilities; Karla Garnuch, prizes; Vic Ettredge, band; Dave Bell, food; and July Webster, tickets.

Carol Schrader, who is responsible for entertainment, is being assisted by Jim Rayl, Greg Hayes and Rita Rapp.

Also working with the committee are Mary Yarborough (dunking tank) and Lois Bradshaw (all-day bingo).

## Traveleers Expand Montego Bay Tour

The Traveleers tour to Montego Bay, Jamaica, has been expanded to seven days and six nights. Total cost based on double occupancy at the Heritage Beach Hotel will be \$215 per person.

The tour will depart from Houston Intercontinental Airport at 10:00 a.m. Wednesday, August 15 and will return to Houston Tuesday, August 21.

Originally, the tour was for club members only; however, civil service and contractor employees may join the tour on a space available basis. Persons interested in going on the tour should forward reservations to NASA/JSC Traveleers. P.O. Box 57324, Webster, Texas 77598. The tour is limited to 90 persons.

For more information contact Gerry Swanick, 481-2396 or Ron Rafuse, 332-1356.

#### Soviets—

periments.

(Continued From Page 1) crews will exchange visits in space and may conduct several joint scientific and technical ex-

## 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.

VEHICLES
71 Triumph Tiger, 650-cc, xint cndn, \$900

473-0860.
72 Honda CB 175 K6, xint cndn, 2 hel-

mets incl, \$450, 488-6737 aft 5 p.m.
72 Vega Kamback wan, auto console, air,

xint cndn, gd gas mi, \$2150, 534-3378, 59 VW, stripped for building Dune Buggy, some new parts, engine won't run, \$75 or trade for sm trailer, utility boat or motor cycle, 482-3100 aft 4:30, Underhill.

53 Chevrolet, 210 2-dr, 74,000 mi, \$125 or trade for 72 or 73 low mi Honda 500 750, 482-3100 aft 4:30.

71 Toyota Corolla 1600 Coupe, auto trans, radio, heater, whitewalls, tinted glass, reclining bucket seats, carpets nw paint, clean, \$200 below book value, 333-2412.

72 Ford camper special, loaded, 17,000 actual mi, sell or trade, Gillis, 422-8004.
71 Dunebuggy, gold metal flake, 1200 cc engine, top chrome reverse wheels, \$1100 or best offr, 333-3105.

67 Suzuki, 250 cc, runs well, body rough, Jeff, 488-1764.

71 Kawasaki, 8 Spd Trail Bike, clean, \$300, 482-3100.

67 Olds 88, pwr, air, auto, vinyl top, \$450, Ward, 488-4442.

72 Honda CT 70 H, \$150, Thompson, 332-2229.

72 Toyota Corolla 1600 Delux, air, auto, xint endn, 17,000 mi, \$1750, 483-5031, days, 944-0848 evenings.

67 Cutlass Supreme, 4-dr, pwr, air, gd cndn, white wi blc vinyl, \$830, 482-1635. 8ike, 24," 5-spd Sears Sting-Ray, \$25, Herman, 4436 aft 5, 481-2466.

72 Honda 450, CB-KS, under 2000 mi, crash bars, red, xInt cndn, \$950, 944-7042.
66 Chevy 3/4 ton custom camper p/u, fleetside, air, radio, pwr str, auto trans, 327 V-8, gd cndn, no rust, Stelly. 554-6635.
MISCELLANEOUS

Miranda Sensorex wi flash attachment, carrying case, \$125, Dianne, 483-3274 or 944-3243.

Set of chrome mag type wheels. 14x7 rims, oval slots, all hardware incl, li new, wholesale at \$120, will sell for \$80, York,

18 wooden softball bats, 15 used softballs canvas bag, \$15, Whittington, 488-4394.

Bell and Howell slide projector, \$20, Thompson, 332-2229.

#### WANTED

Good home for female Redtail fax, autdoor pet, nds long runway cage, 474-2757.

35mm Leica camera and accessories, with-IIIF or M series, W. M. Taub, 481-4142.

#### PETS

AKC registered Weimaraner puppies, champion stock, gd pet, bird dog, watch dog, large selection, Chauvin, 334-1486.
German shepard, female, placid disposition, nds gd home, 334-1446.

#### BOATS

Information on prices and condition of used Lidos for sale by owners, Hoover, 333-2392.

#### PROPERTY AND RENTALS

Beach cottage, air, on Gal Bay, \$80 wk, \$40/wkend, completely furnished except linens, use of boat ramp, Modissette 333-3217.
Bayhouse on 100x100 lot on Bolivar Peninsula, cmplty furnished, \$6000, 781-3822 x2428.

For lease, \$185/mo or sale, \$17,500. Fairmont Park, living room, large den, 3-11/2-2, 1400 sq ft, air, blt-in kithcen, recently recarpetyed, painted, 6-1/2% loan, Bullock, 482-6401.

Townhouse CLC, xint cncn, Jeff, 488-1764.
69 Mobile home, 12x60, 2 br, cntrl a/h,
1 owner, xint cndn, furn, \$3600, 644-6554

3-2 brick home on Bay 8 mi from JSC, \$165/mo, 554-3884.

70 Town and Country 14x64 mobile home, fully furnished/carpeted, 2 br, 11/2 baths, kitchen, centrl a/h, no equity, assume payments, 925-6008 or 925-6043.

Lease 3-2-2 in CLC, cul-de-sac, landscaped, fnced wi refrig, washer dryer available, 488-3409.

#### HOUSEHOLD ARTICLES

Full size Philco gas cloths dryer, nds repair, \$20, Samouce, 488-0406.

### 2 JSC Employees Save Man's Life

Two JSC employees, Axel Larsen (FC4) and Harley Weyer (FC2) recently prevented a man from drowning in Galveston Bay near Seabrook.

Larsen and Weyer said they were returning from an evening of sailing Sunday, July 8 when they heard cries for help. They sailed in the direction of the cries with a flashlight and were able to distinguish a man's head bobbing in the waves and currents.

When efforts to get a life pre- man was rescued from shore.

server to the man—Dale Taylor—failed, Larsen swam to him and kept him afloat while Meyer manuvered his sailboat around to pick them up.

While a rescue squad and local peace officers assisted Taylor on the ground, Larsen and Meyer sailed out in search of another man who had accompanied Taylor in an attempt to swim across the channel.

It was later learned that the man was rescued from shore.

# **CL Secretaries Association Announce Plans for Coming Year**

ter of National Secretaries Association (International) recently announced that plans for the coming year will include three dinner meetings and eight educational study sessions.

The secretary study sessions will cover such topics as office procedures, human relations, communications and business management. The first two study sessions will be conducted July 24 and August 28 by Fred Collier, personnel director of Joy Oil Tools. The classes will be held from 6:30 to 8:30 at the Space City Development Company, 16808 El Camino Real.

Cost for the eight classes is

The NASA Clear Lake Chapter of National Secretaries Association (International) recentexture extension 5473.

## Moonwalk Softball Games Pending

Sixteen teams will vie for championship in the Moonwalk Slow Pitch Softball Tournament which will be held at the NASA fields this weekend.

The tournament will begin Saturday, July 21 at 8:00 a.m. and continue until 9:00 p.m. The remaining teams will play from 10:00 a.m. until 5:00 p.m. Sunday July 22.

## More "Co-travelers"

(Continued From Page 1)

their aquarium. The aquarium consists of a compartmentalized polyethylene bag (6 by 6 in.) containing systhetic sea water. When the crew has time, the bag which is sealed inside a can, will be removed and placed in front of the onboard television camera, which will be able to show the disorientation of the swimming fish.

It is anticipated the fish eggs (each about one eighth inch in diameter) will hatch during the second week of flight. These "Mummichog Minnows" (Fundulus heteroclitus) are descendants of the minnows used in the Apollo lunar sample program at JSC and originally were caught off the costal city of Beaufort, North Carolina.

The pair of spiders, (both female) the common "cross spider," (Arenus diadmematus) will be housed in an enclosure onto which a motion picture and and still cameras will be attached to record the spider's attempts to build a web in the weightlessness environment. The spider enclosure will be launched with the Skylab III crew aboard the command module and later transferred to a special cage aboard the workshop.

The spider experiment (Education experiment No. 52) is one of more than 25 experiments selected for Skylab by NASA from more than 3,400 experiment proposals submitted by high school students throughout the nation. This experiment was submitted by 17 year old Judith S. Miles of Lexington, Massachusetts.

The pocket mice, known in scientific circles as Perognathus longimebris, and the vinegar gnat (Drosophilia), are part of the circadian rhythm studies S071 and S072 designed to determine if space flight will alter the daily physiological rhythms of mammals or the daily emerging cycle of the vinegar gnat. These particular mice are native to the deserts around Palm Springs, California.

The six pocket mice will be housed in a completely dark cage having a 15 degree centigrade (60 degree farenheit) temperature, relative humidity of 60 per cent and an atmosphere equivalent to sea level.

Principal investigator for this experiment (S071) Robert G. Linberg, Northrop Corporate Laboratories hopes to determine if in fact space flight imposes biorhythm restriction to man. The mice will be loaded aboard the service module prior to launch.

Prior to and during flight body temperature and activity level are automatically monitored to establish the natural period, phase and stability of the animals bio-rhythm. Similar monitoring will be performed on ground based mice during the mission.

The data gathered on the space mice will be automatically recorded and telemetered to Earth for interpretation.

The S072 vinegar gnat experiment which will be located in the service module is to determine if the daily emerging cycle of the gnat is altered during space flight. Extensive experiments have shown that even gnats in the pupal stage develop at different rates depending on temperature, they will not emerge from the pupae as adult gnats until some kind of internal signal is given off. The gnats will be divided into four groups with a synchronizing light used to initiate the pupae at different times.

Their growth will be monitored by photoelectric cells and this date will be telemetered to the ground.

Principal investigator for S072 is Dr. Collins Pittendrigh, Stanford University.

### Bicyclist—

(Continued From Page 1)

world-tour. When he returns to Calcutta sometime in 1975, he expects to have biked across 100 countries in 5 continents.

On the road, Sakti spends about 10 hours pedalling each day covering about 85 miles on his 3-speed bicycle. Sometimes wind and rain make it impossible to travel even at that slow pace.

He earns money by working odd jobs and giving lectures to social clubs and schools along his routes. He also depends on the hospitality of the Indian communities in the countries he visits.

Sakti left Calcutta in 1970 with only \$43 in his pocket. From there he rode to the Near East, Europe and most of Africa. He flew to Rio de Janeiro—bike and all-and toured 7 South American countries. He entered Mexico from Guatemala at Tapachula, then headed for the United States.

Why did he choose a bicycle for his venture? Sakti says cycling forces the rider to go slowly. "You get to appreciate the country and to know the people," he explained. "No one has been hostile, probably because I was traveling by bicycle."

Sakti said his knowledge of Hindi, English, Bengali and some French, Spanish and Arabic has helped him communicate.

Before returning home, Sakti plans to tour other parts of the United States as well as Canada, Asia and Australia—all on his \$50, 3-speed bicycle!



FISH ANYONE? — John Boyd observes a flight bag which is a replica of one that will be flown on SL3. The bag is sealed off so that there are two sections. The lower section will hold 50 fish eggs while the top section will hold two fingerlings.



AROUND-THE-WORLD-BICYCLIST—Satki Prosad Potader from Calcutta, India visited JSC during his week-long-stay in Houston. Sakti has been traveling around the world on a bicycle since February, 1970. In the top photo Sakti poses with Dr. Karl Henize, Scientist-Astronaut. In the bottom photo he stands beside his bike.



### **Lunar Landing Ball**

Mary Yarbrough, Dorothy Holloway, Marilyn Ross, Carol Brinkmann and Sharon Kemp.

The ball will feature Country and Western Music star Ray Price, the Ozzie Middleton Country and Western Band, dance music by Ed Gerlach's 20piece orchestra and entertain(Continued From Page 1)

ment by the Varsity Shop Quintet.

The ball, which will be held at the Albert Thomas Space Hall of Fame on Smith Street, will run from 9 p.m. to 1 a.m.

Tickets are available at both JSC cafeterias at \$3 per person and \$5 per couple.

### Aug 15 is Deadline For SL3 Covers

July 20, 1973

A Navy spokesman recently announced that August 15, 1973 is the deadline for receipt of covers by the Navy recovery forces for Skylab 3.

Each recovery force coordinator will accept no more than two covers per person for servicing.

The covers should be standard size with an inserted filler-Also, sufficient room should be alloted on the left side of the cover for the cachet.

Covers should arrive with the correct return postage and return address. Only U. S. postage may be used. Cash,money orders or checks may not be used in lieu of postage.

All covers should be sent to one of the addresses below.

Pacific: Skylab III Philatelic

Coordinator
Task Force 130
Navy Terminal Post
Office

FPO San Francisco Ca. 96610

Atlantic: Skylab III Philatelic Coordinator Task Force 140 Naval Air Station Norfolk, Va. 23511

# Security blanket.



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