

APOLLO HOMECOMING—Flight Controllers and NASA and MSC Officials gathered in the Mission Control Center to witness the recovery of the "Kitty Hawk" and its crew. On the screen to the right, Command Module Pilot Roosa, Commander Shepard, and Lunar Module Pilot Mitchell can be seen inside their Mobile Quarantine Facility on board the recovery ship USS New Orleans. The astronauts brought back with them approximately 100 pounds of lunar material from Fra Mauro.

Astronauts Land At Fra Mauro, Splashdown In The Pacific

Alan Shepard, Stuart Roosa, and Edgar Mitchell, the crew of Apollo 14, are safely back on the good Earth.

The command ship "Kitty Hawk" splashed into the Pacific on Tuesday, February 9 at 3:05 Central Standard Time (CST), nine days and two minutes after liftoff on January 31. Splashdown was right on target, 765 nautical miles south of American Samoa.

The crew entered a mobile quarantine facility (MQF) on-board the prime recovery ship, USS New Orleans, where they were examined by Crew Surgeon William R. Carpenter.

In Samoa, the astronauts transferred to a second MQF on-board an Air Force C-141 transport. They were to have landed at Ellington Air Force Base at 12:30 a.m. this morning.

Although not without some problems and a few anxious moments, the flight of Apollo 14 was in all aspects a successful moon landing mission.

Scientists have been particularly pleased with the results of experiments set up on the lunar surface. Dr. Gary Latham, principal investigator for the Passive Seismic Events, said at a press conference earlier this week, "I think my colleagues would agree that it's the best ALSEP to date. It has the fewest problems."

A number of scientists have exhibited similar pleasure with the apparent success of the Apollo Lunar Surface Experiments Package (ALSEP) established on the moon's surface by Alan Shepard and Ed Mitchell during their two periods of extravehicular activity (EVA).

Dr. Brian O'Brien, another principal investigator, expressed his appraisal of the Charge Particle Lunar Environment Experiment. "We are absolutely delighted with it. Just after it was switched on . . . we found the Apollo 14 experiment apparently immersed in a sea of low energy electrons that we associate with the comet like tail blown back by the solar wind."

The estimated 96 pounds of lunar material collected by the astronauts on their two geological traverses (moon walks) were to arrive in Houston at 4:30 p.m. on Thursday, February 11.

The liftoff of Apollo 14 on January 31 was delayed forty minutes as clouds rolled in and thunderstorms were sighted within five miles of Launch Complex 39 at Cape Kennedy. The hold in the countdown came at eight minutes prior to scheduled liftoff at 2:23 p.m. CST. Weather cleared, and Astronauts Shepard, Roosa, and Mitchell began their journey to the moon at 3:03 p.m. CST.

The first problem appeared at three hours into the flight. The crew, then over 10,000 miles from Earth, was unable to dock the Command Module (CM) "Kitty Hawk" with the Lunar Module (LM) "Antares." After an hour and forty-five minutes and on the sixth attempt at docking, a jubilant Roosa radioed to the flight controllers in the Mission Control Center, "We've had a hard dock!"

Although the cause of the problem with the docking probe was not determined after extensive testing of a replica here at

MSC and at North American Rockwell in California, a decision was made to go ahead with the lunar landing.

Should the two spacecraft not have been able to dock during lunar orbit rendezvous after LM ascent from the moon's surface, the astronauts would have donned their EVA suits and with the help of tether lines entered the command module from outside the craft.

On the third day of the astronauts' journey, one of the LM ascent batteries registered a slightly lower reading than normal. LM Pilot Ed Mitchell completed a lengthy and thorough checkout of the battery, and after additional testing at MSC, officials were satisfied that the battery would perform properly. The "go-ahead" for lunar landing was given.

Two hours before lunar touchdown, a signal in the LM's computer system actuated the abort command. It is believed the problem was caused by a faulty switch. Engineers devised a method to bypass the problem area, and the moment of anxiety passed.

Touchdown in the Fra Mauro area of the moon came at 3:18 a.m. CST on Friday, February 5. Command Alan Shepard descended the ladder of "Antares" at 8:54 a.m. Lunar Module Pilot Mitchell followed five minutes later. Command Module Pilot Roosa sighted the Apollo 14-landing vehicle while approaching his nineteenth revolution around the moon.

Roosa took pictures of the surface during one revolution with the Hycon camera and during two

(Continued on Page 4)

FY '72 Budget Forces Manpower Cutbacks

NASA's recommended budget for Fiscal Year 1972 has been set at \$3.271 billion, approximately the same level as the Fiscal Year 1971 appropriation. President Nixon sent his proposed FY 1972 budget to Congress on Jan. 29.

Dr. George Low, Acting Administrator of NASA, announced in his statement on the proposed budget that the NASA Civil Service work force will be reduced by 1500 positions by the end of FY 1972.

A reduced research and program management appropriation forced the 5 per cent reduction in force. Dr. Low noted, "This rep-

resents a substantial reduction, and brings the total NASA decrease in employment to 6,800 since July 1967."

In a January 29 letter to all MSC employees, Dr. Robert R. Gilruth, Director of MSC, stated, "MSC's share of this reduction has been determined to be 210 positions, from our present ceiling of 4,145, which includes 25 at the Mississippi Test Facility—Earth Resources Laboratory."

The date the RIF is to become effective has not yet been announced.

(Continued on page 3)

Rapp and Dunseith Are Selected For Top Government Awards

It was announced last week that Rita M. Rapp, an environmental physiologist in the Preventive Medicine Division, and Lynwood C. Dunseith, Assistant Director for Computation and Flight Support in the Flight Operations Directorate, have been named winners of two of the highest awards for Federal Government employees.

Miss Rapp, who is head of tests and integration activities for Skylab food systems, was chosen as a winner of the 1971 Federal Woman's Award. She is the first woman from the Manned Spacecraft Center to be selected for this award which is the highest honor for professional women in the Federal Government.

Mr. Dunseith was selected by the Arthur S. Flemming Awards Commission as a winner of the 1971 Flemming Award, given annually to ten outstanding young men in Federal Service.

Miss Rapp and Mr. Dunseith were both early members of the Space Task Group, forerunner of the Manned Spacecraft Center. Miss Rapp, during Project Mercury, was responsible for the design and implementation of biomedical experiments and she also designed and developed medical items for inflight medical kits.

In the Gemini Program, Miss Rapp was Technical Monitor and Coordinator for three im-

portant scientific experiments and also managed the effort to design and fabricate the inflight and survival medical kits and inflight exercisers.

During the Apollo Program, she has served as Subsystems Manager for the Apollo Food and Personal Hygiene Items. Her nomination states: "Her extraordinary contributions to the Apollo Program have resulted in considerable savings to the Government, significant advances in packaging design and flight food testing techniques, and improved food protection."

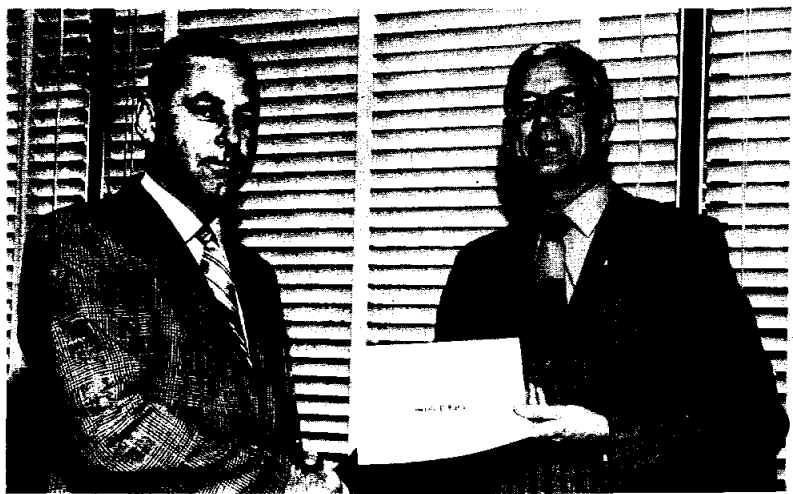
Mr. Dunseith worked on the development of the real-time support computer program for Project Mercury. Until December 1970, he had served for four years as head of the Flight Support Division.

In his nomination, Mr. Dunseith was cited for his outstanding management direction in establishing the Real Time Computer Complex (RTCC), vital in the operation of the Mission Control Center and to the support of Apollo missions. He was also cited for his exceptional leadership in the creation of a deep-space communications capability for Apollo 8, the first lunar orbital mission.

The Federal Woman's Award came into being in 1960 when Barbara Bates Gunderson, then a Civil Service Commissioner, (Continued on Page 2)



LLTV CRASH—One of MSC's two remaining lunar landing training vehicles (LLTV) crashed and burned on January 29 at Ellington Air Force Base. Pilot Stuart M. Present ejected from the trainer and parachuted to safety. The first LLTV was destroyed in a crash at Ellington in 1968. The pilot, Joseph S. Algranti, escaped serious injury. Loss of electrical power appears to have caused the recent crash. A board will be named to investigate the incident.



SUGGESTION AWARD WINNER—Gerald P. Katje (left) is shown as he accepts an award for his money-saving suggestion to develop an advanced radar system using available equipment and resources. Jack A. Kinzler, head of the MSC Suggestion Committee, presented the award.

Suggestors Win Money Awards

Gerald P. Katje of the Telemetry and Communications Systems Division, was recently presented with a check for \$1,245, the largest suggestion award given at the Manned Spacecraft Center during the past five years.

Katje proposed that the need for an advanced radar system for use in the Earth Resources Aircraft Program be met by acquiring excess equipment from the Surveyor Program to refurbish an existing system already owned by MSC.

MSC To Host Finance Officers

The National Aeronautics and Space Administration's sixth annual Financial Management Conference will be hosted by the Manned Spacecraft Center February 24 through 26.

This is a NASA-wide annual conference attended by Mr. H. Frank Hann, Director of Financial Management from Headquarters, and Financial Management officers from all NASA centers.

Dunseith, Rapp

(Continued from Page 1)

realized that there were in existence no high honors for professional women in government. Although women are technically eligible for the President's Award, the National Civil Service League Career Service Award, and the Rockefeller Career Service Award, Mrs. Gunderson noted that women were seldom nominated. Thus, the

FGAA To Meet

Ellsworth H. Morse, Jr., Director of the Office of Policy and General Studies, General Accounting Office, will be guest speaker at a February 18 meeting of the Houston chapter of the Federal Government Accountants Association (FGAA).

The meeting at Timmy Chan's Restaurant in Houston includes a social hour beginning at 6 p.m., dinner, and the address by Mr. Morse. For reservations, contact Evon Collins, x2638.

Checks in the amount of \$50 were also presented to George C. Franklin of Flight Crew Support Division and to Virginia L. Harrelson, Financial Management Division.

AFGE To Hear Griner Speak

National President of the American Federation of Government Employees (AFGE) John F. Griner will address members of MSC Local 2284 and their guests on the subject "AFGE, NASA, and the Reduction In Force."

Mr. Griner will be featured speaker at the AFGE dinner-dance on Friday, February 26 at the Astroworld Hotel.

Tickets are priced at \$7.00 per person and are available from officers or area representatives of the local chapter.

The conference will be held at the Sheraton Inn - Astroworld. Mr. Russell C. Connelly, Jr., Chief of the Financial Management Division at MSC, is responsible for all conference arrangements.

Federal Woman's Award was originated.

Six winners are chosen each year. Nominees are selected by their agencies on the basis of their contribution to major programs of importance to the government and the nation. Eligibility to receive the Federal Woman's Award is based on career service characterized by outstanding ability and achievement in an executive, professional, scientific, or technical positions.

Mr. Dunseith and his wife Janie will attend an Awards Dinner in Washington, D.C. on February 17. The Flemming Award will be presented to him at a luncheon on February 18.

Miss Rapp will travel to Washington for presentation of the Federal Woman's Award at a banquet on February 25.

Whitbeck, Taylor, and Piland Are Named To New Positions In Center Reorganization

A reorganization of Manned Spacecraft Center administrative, procurement, and technical support activities was announced earlier this week.

The Administration Directorate and the Program Control and Contracts Directorate have been abolished. The Procurement Division and Program Budget Division formerly assigned to the Program Control and Contracts Directorate, together with the Institutional Resources and Procurement Division, Personnel Division, Financial Management Division, the Management Analysis Office, and university programs responsibility have been organized

into a new Administration and Program Support Directorate. The Photographic Technology Division, Engineering Division, Technical Services Division, Logistics Division, and Management Services Division formerly a part of the Administration Directorate will form a new Center Operations Directorate.

Philip H. Whitbeck, formerly Director of Administration, was named as Director of the Administration and Program Support Directorate. Clinton L. Taylor, formerly Assistant Manager of the Skylab Program Office, was named Deputy Director of the new Directorate. Joseph V. Piland,

formerly Deputy Director of Administration, was named as Director of the Center Operations Directorate.

Mr. Whitbeck, joined the Manned Spacecraft Center in March 1961. Prior to his service with NASA, Whitbeck served with the Atomic Energy Commission.

Mr. Taylor has been with NASA since 1962 when he came to MSC.

Mr. Piland has been with NASA since its establishment and prior to that with its predecessor, the National Advisory Committee on Aeronautics.

Contractor Equal Employment Opportunity Office Is Formed; Functions And Objectives Explained

The Contractor Equal Opportunity Program Office (CEOP) has recently been established at the Manned Spacecraft Center. The broad responsibilities of this office are twofold. It will conduct reviews of all MSC contractors to assure compliance of equal employment opportunity (EEO), and it will promote the Minority Business Enterprise Program. This places directly with the Center the responsibility for stimulating further development of equal employment opportunity in communities surrounding the local installation. "Community focus" is one of the primary differences between the new

efforts of all MSC contractors in providing equal employment opportunity in this locality will be both visible and measurable.

The new CEOP Office provides to MSC contractors the advantage of full time on-site personnel who can give continuous assistance in achieving positive results through their Affirmative Action Programs.

The MSC office will also be "results oriented" in the Minority Business Enterprise Program. It will help identify potential minority contractors and assist in awarding contracts through the Section 8 (a) Program of the Small Business Ad-

portant ways to promote this effort is to develop a program that will increase the involvement of minority group contractors in the multi-billion dollar Federal procurement program." Within this framework MSC is part of a positive Government-wide effort to provide developing, disadvantaged firms the assistance required so they can become fully independent and attain a competitive position.

MSC has identified some suitable procurements in both the service industries and the construction field. Selected projects have already been placed with minority firms both directly and through the special authority of the SBA.

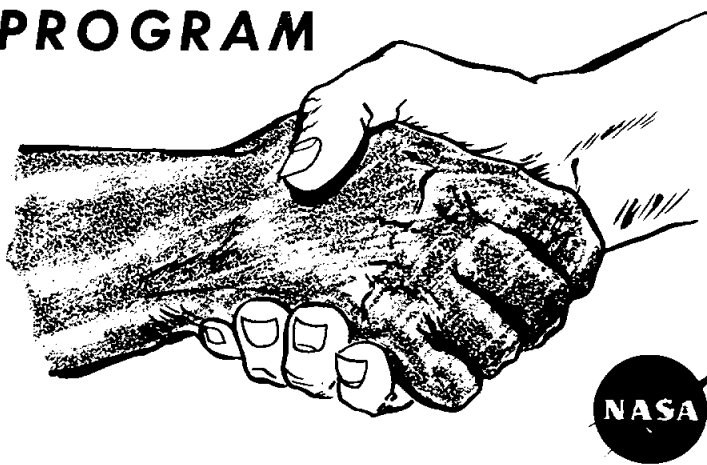
Mr. Garza noted that the success of MSC's participation in this program requires the continued personal support and involvement of all MSC managers who are necessary ingredients in assuring that a fair share of MSC procurement reaches minority business.

Astronomers To Discuss Trips

The MSC Astronomical Society will meet on Thursday, February 25 at 7:30 p.m. at the Philco Building in Clear Lake City.

The program will include a discussion of expeditions to Canada for the July 1972 total solar eclipse and to Africa for the 1973 eclipse.

EQUAL EMPLOYMENT OPPORTUNITY PROGRAM



MSC program and earlier assignments.

Mr. Carlos R. Garza, Chief of the Office, stated that MSC now has a new and quite different contract compliance job. Specifically, MSC has the responsibility for the equal employment compliance of all contractors and sub-contractors working for the Center on-site and within the Southeast Texas area.

The program has strong community orientation since these contractors draw most of their employees from local or regional labor markets. It is expected that progress made by the combined

administration (SBA) or through other procurement procedures.

President Nixon stated in reference to minority business enterprises, "One of the most im-

ROUNDUP

NASA MANNED SPACECRAFT CENTER HOUSTON TEXAS



The **Roundup** is an official publication of the National Aeronautics and Space Administration Manned Spacecraft Center, Houston, Texas, and is published every other Friday by the Public Affairs Office for MSC employees.

Editor Sydni Shollenberger

Staff Photographer.....A. "Pat" Patnesky

Roundup Swap-Shop

(Deadline for Swap-Shop classified ads is Thursday of the week preceding Roundup publication date. Ads are limited to MSC civil service employees and assigned military personnel. Maximum length is 20 words, including name, office code and home telephone number. Send ads, typed or legibly written, to Roundup Editor, AP3)

MISCELLANEOUS

Hardman console piano, one year old, maple, matching bench, perfect condition, fine tone, heartbroken must sell for \$950. Manny, 932-2908.
1970 outfit in good condition, 17-ft trihull, 120 HP outboard, accessories, and trailer, ready to operate, all for \$2295. Bland, 591-4580.
Dinettes set (6 chairs) \$45; single mattress, box springs, steel frame \$50; chair and ottoman \$20. Harnage, 481-2335.
Twin beds, good cdt, cost new \$150, sell for \$50. Regenburgh, 932-6646 after 5:30 pm.
Quarter horse with saddle, pad, blankets, breast strap, halter, and two sets of reins and bits, \$350. Scott, 932-3489.
VW radio in carton, \$35; Tape recorder in attache case w/amplifiers. Hall, 649-1683 after 4:30 pm.

Baby bed \$8, play pen \$6, stroller \$7, high chair \$3, car seat \$1, infant seat \$1, cradle \$1, table \$5, chairs \$2. Vincze, HUB-1040.
Clarinet Bb, Selmar soloist, professional caliber instrument. Used two years by high school band student, xln cdt, original cost \$285, sell for \$200. Rubenstein, 877-3268.
Craftsman 26" riding lawn mower, 15 months old, xln cdt, see page 1203, latest Sears catalog, new price \$292 plus freight. I ask only \$175. Fulbright, 944-8717.

1967 Kenmore electric dryer \$75; Kenmore washing machine \$30; 15 ft aluminum step-ladder \$10. Messer, 331-5111.
Bissell Carpet sweeper \$6; 145-lb weights and bar \$14; 2 pr boxing gloves (large) \$3; IBM electric typewriter \$130; typing table \$12; assorted sizes wooden picture frames \$2 each. Crawford, 427-5068 after 6 pm.
GE air conditioner, 1 1/2 ton, 22,000 BTU, like new, make offer. Frazier, 485-3521.
White sewing machine, desk model, attachments, good cdt, \$50. McCown, 471-0716.
Flute, Artly, good condition w/case, \$125 or best offer. Alford, HUB-3484.

14' fiberglass Lone Star boat w/35 horse super Seahorse motor, tilt trailer, \$650. Alford, HUB-3484.
Racing "Go Cart" Dual motor mounts, one 10 horse West Bend engine, \$175. Alford, HUB-3484.
Ouachita 14 ft. flatbottom fishing boat, \$60. Richardsor, 946-7587.

Guitar amplifier, 45 watts w/verb & tremolo, great for beginner. xln cdt, \$95. Fuzz unit \$20. Dell, 946-6431.
Curved pillowback sofa, 86" \$50 or best offer; baby bed, natural finish, foam water-proof mattress \$18; 16' ski sled catamaran boat hull, -7" beam, fiberglass over plywood, almost completed, carry up to 100 hp motor \$300; 14' plywood runabout w/trailer, needs some repair \$75. Moore, 488-2204.
17' Invader tri-hull, 1000SS Mercury 100 hp, plus Dilly trailer \$2150. Fox, 591-4460.

Go-cart, rebuilt, new clutch, chain, engine parts, ball-bearing wheels, 4 jet airplane 14-ply tires, \$90. Lipovsky, 877-4288.
Hungarian WW II automatic pistol, Frommer .32 caliber, firing pin removed, \$30. Ping-pong table, storable w/wheels, \$15. Lipovsky, 488-2293.
White Naughyde couch makes down to sleeper, \$25. Senter, 482-7835 after 5 pm.
Ward's Signature 15.5 cu ft refrig/freezer, six months old, olive green, auto ice maker, frostless. Harris, 483-3791.
Kenmore gas dryer, 1 1/2 yrs, xln cdt, \$100. Early American breakfast set, 6 chairs, good cdt, \$50. Browne, 932-5948.
1961 Coldsport refrigerator, 12 cu ft, in use now, \$60. Whittington, 488-4394.
17" Philco portable TV, UHF/VHF, black and white w/stand, good cdt, \$50. Clowdis, 471-2447.

Boat, 15'3" fiberglass sailboat w/trailer, sail area 116 sq ft, \$800. Ward, 591-2182.
Beautiful dining room suite \$250; oriental desk, soapstone inlaid figures, work of art, \$375; handcarved oriental chest, large \$250. Call 649-2569.
Beautiful antique wall clock, perfect cdt, 8-day, \$95. Call 649-2569.
Practice code oscillator (Heath HD-16) w/3 training records, xln cdt, \$15. Eggleston, 877-1261.

Radial belted tires (4), 1st line B. F. Goodrich, never mounted, 8.55-15, \$125. Oczkowski, 926-8994.
Outboard motor and tank, 1969 Sears, 7 1/2 hp, used very little, \$195. Richardson, 946-7587.

VEHICLES

70 Ambassador SST, 4-dr sedan, under warranty, xln cdt, assume loan. Jacobsen, 487-0792.
67 Ford Falcon-Futura, xln cdt, air, radio, std shift, economical, \$995. Deans, 488-4009.
69 Charger, 500 R/T, air, loaded, perfect, must sell, \$200 below book \$2795. Sanborn, 591-3049.

63 Olds 98, one owner car, xln cdt, all accessories, buying new car, \$350. Dornbach, 877-4198.

66 Buick Riviera Grand Sport, loaded except for vinyl top and tape deck, original owner. Hyams, 932-5028.

64 Valiant V-8 hardtop, auto shift, A/C, radio, heater, runs good, \$285. Zill, 932-4265.

64 Falcon 4-dr station wagon, V8, stick shift, air, radio, xln cdt. \$550. Schmitt, 534-5207.

Dunebuggy, completely rebuilt motor, Mark II, fiberglass body, guarantee, 4000 mi or 90 days, \$950. MacLeod, 488-2838.

67 Mercedes-Benz, 230, 4-dr sedan, 40,000 mi, auto trans, air, xln cdt, \$2500. Brooks, 591-2017.

64 Pontiac Star Chief, A/C, auto trans, clean. Lewis, 488-2801.

65 Fairlane 500, 4-dr, xln cdt, one owner, air, new vinyl interior, good tires, \$500. Norman, 877-2241.

19 1/2 Thunderbird Formula, 155 1/0, big wheel power trailer, was \$6,000, now \$3,950. Van Gilder, 453-6063.

1969 Corvette Stingray convertible, power, air, 4-speed, Dunham, 485-3084 after 5 pm.

60 Renault Dauphine, runs good, economical, good work car, \$125. Blevins, 488-0579.

69 Grand Prix, air, turbo-hydro, vinyl top, radio, power, mag wheels, new tires, C-D ignition, 21,000 mi. immaculate. Runner, 488-1694.

67 Chevrolet Impala wagon, air, power steering, brakes, xln cdt. Present, 591-3648.

70 Cougar XR-7 5600 mi 5 yr warranty, light blue/blue vinyl roof, P/S, A/T, A/C, disc brake. Pratt, 932-2600.

61 Chevrolet 1/2 ton pickup truck, sound body and good tires, must sell, asking \$350. Stephens, 481-0095.

65 Olds Vistacruiser, A/T, P/S, radio, A/C not working, runs good, \$750. Eruckson, 649-0396.

66 Chevrolet Capri, medium blue w/blue interior, all power, stereo. Pratt, 932-2600.

69 Honda 350 Scrambler, \$595. Richardson, 946-7587.
65 Honda CB 160, xln cdt, good tires, \$250. Viergeir, 591-4627.

Library Has New Books, RECON

A computerized system which enables a researcher to find quickly the information he needs in NASA's enormous collection of aerospace documents, is now in operation at MSC's Technical Library.

Called RECON (for REmote CONsole), the system allows the console operator to tap the store of information in the central computer at NASA's Scientific and Technical Information Facility at College Park, Maryland.

PETS
Toy collie, free, beautiful, female, loves children, needs good home. Rodman, 932-2897.
Full-blood poodle puppies, 6 wks old, 3 males, 1 female, \$60. Smith, 644-6356.

WANTED

Female roommate to share private home. Call 534-2793 Dickinson.

To form group to develop 225x100 corner lot, beach access, Padre Island, Corpus Christi, Hooper, 488-4120.

Table tennis set and gas fireplace log. Martin 944-3149.

Cheap, but serviceable girl's 16" bicycle. Sampson, 481-2716.

REAL ESTATE AND RENTALS

3,2,2 Spanish, equity. Kenney, 481-1885. Dickinson, 3-1-1, 100x312 lot, fenced, trees. Hector, 534-3352.

Pasadena, 5-2-2, 3 years old, central air and heat, built-ins, carpets, drapes, owner. Jacobsen, 487-0792.

Mobile home, 1969 Skyliner, furnished, air and central heat. Kennedy, 944-0224 after 6 pm.

Sunmeadow-Friendswood, wooded homesite in restricted golf-oriented community, all utilities installed \$6900. Lonsberry, 488-0627 after 5:30 pm.

The computer at College Park contains up-to-date bibliographic data on all the aerospace reports and journal articles that NASA's Office of Technology Utilization has collected, indexed, and stored. The scientific and technical documents even include some that predate the 1962 start of the NASA collection.

The RECON system was installed at MSC in April 1970. A number of problems kept the system from operating effectively at first, but it is working smoothly now, according to Albert Bradley, head of the Technical Library.

Computerized programs are not new to the library. For some time now, the circulation records have been stored in a computer. This use of the computer is advantageous both to the library staff, allowing greater efficiency in keeping records, and to the users, saving the time usually spent in filling out charge cards.

The Technical Library publishes a list of new books each month. Though many of the publications are of specialized interest, two recently obtained may be of general interest.

This Island Earth, a NASA Special Publication (SP-250), features 177 photographs of Earth taken by Apollo astronauts and from Nimbus, ESSA, Ranger, and Mariner spacecraft. Chapters include "The Restless Atmosphere" (weather systems), "The Waters of Earth," "The Lands of Earth," "The Hand of Man," and others.

A book with the unlikely title *The Bathroom* (A. Kira, Cornell University) is of particular interest to those who are designing personal hygiene facilities for Skylab and Space Station. The book describes new concepts in plumbing techniques.



HELP!—The MSC Mail Room may look this frantic at times. One cause of confusion is the failure of all employees to use proper mail codes. Please read and heed the following poetic advice.

The Mail Code

By
Homer Scott

The code on your mail is a guide;
Its purpose is direction for the message inside.
By It alone, mail is cased and sent out,
Carried by messenger assigned to the route.
There is no crystal ball along the way
That will make clear what the code should say.
Never use only the addressee's name,
Though it be a popular person or one of fame.
Like the arrow sure from a tight bow,

When the code is right, the mail will go;
But, selected at random by the sender,
The wrong code will always hinder.
Help the mail workers play well their part.
Using the proper code is a good start.
Getting personal mail at your place of abode,
Is a giant step of relief from the overload.
So for getting the mail on the road
For goodness sake, use the right code!

Zbanek Honored

Leo T. Zbanek, Deputy Chief of the Engineering Division within the Administration Directorate, was named Tuesday at the Federal Business Association Luncheon as one of eight finalists for the Civil Servant of the Year award.

Mr. Zbanek began his career with MSC in October 1961 as a special construction engineer consultant to the Director of the NASA Space Task Group. He was MSC's representative to the Army Corps of Engineers and as

FY 72 Budget

(Continued from Page 1)

Other areas where NASA is being forced to cut back include advanced research and technology, particularly in limitations imposed on work on the NERVA nuclear rocket engine, and in the area of tracking and data acquisition.

Dr. Low pointed out a number of positive aspects in the FY 1972 budget. He said, "For the past several years, we reported to you, each year, a further decrease in budget authority. This year we can report a clear halt in this trend."

The Apollo Program will be carried to completion with the four flights currently planned. Both Apollo 16 and 17 will be delayed so that scientific experiments planned for previously cancelled Apollos 18 and 19 will be fully prepared.

According to Dr. Low, Skylab, presently scheduled for launch in December 1972, may be delayed about four months.

Other ongoing programs for FY 1972 are the near-earth

such was responsible for assuring that designs and construction met the unique requirements for a manned space flight center. More recently he directed the construction management effort of the Lunar Receiving Laboratory.

science programs, including an Orbiting Solar Observatory in 1971; unmanned exploration of the planets, to include two Mars Orbiters in 1971; and the space applications programs, including two weather satellites and two advanced communications experiments.

The FY 1972 budget encompasses \$100 million for design and development of the space shuttle. Specifically, the money will be used for development of the shuttle engine and airframe design. MSC's portion of that sum has not yet been announced.

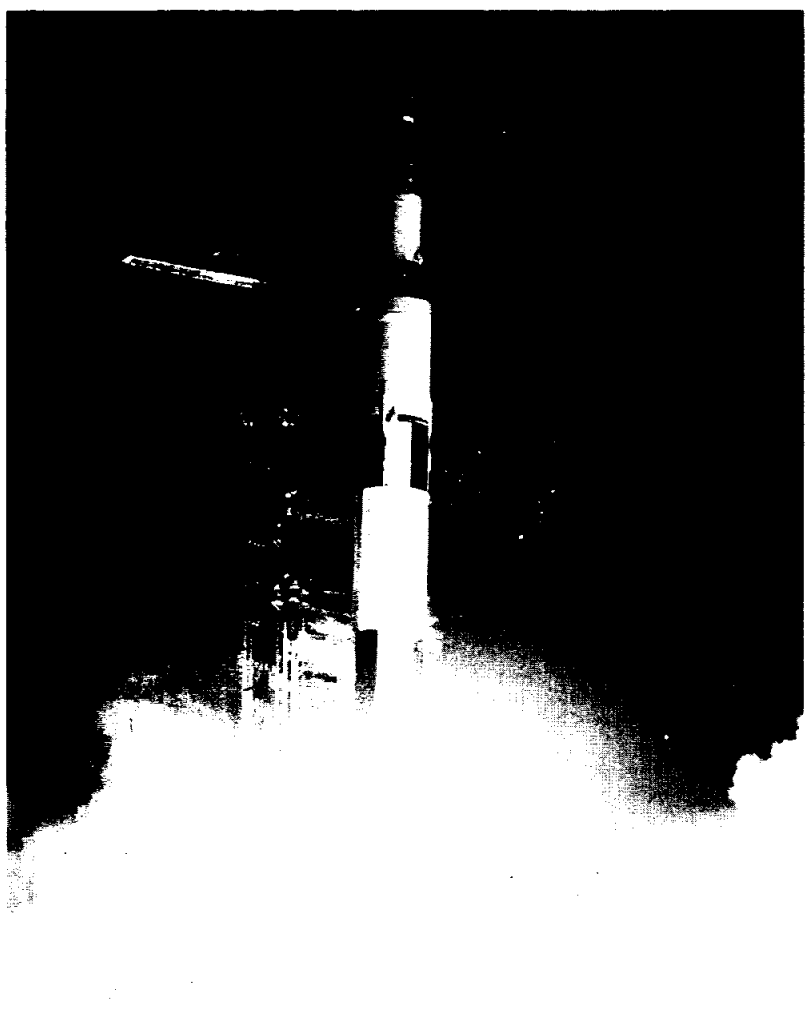
Over \$13 million has also been provided for work on the High Energy Astronomy Observatory (HEAO), a large unmanned spacecraft. It is hoped that through HEAO's observation of celestial rays and high energy particles, some of the puzzling questions about the universe will be answered.

Commenting on job declines within the aerospace industries, Dr. Low stated, "During FY 1972, we will halt the downward trend in aerospace industry employment on NASA programs. Although aerospace jobs will continue to decline in FY 1971, we expect employment to start increasing by the middle of FY 1972, with the end-of-year level being about equal to that at the beginning of the year."

1971 EAA Athletic Program

The EAA athletic schedule listed below indicates the activity, organizational meeting time, and period of competition. Included for the first time is a full calendar of activities for women. The proposed women's program is dependent upon interest.

Volleyball (men)	February	March-April
Volleyball (women)	March	April-May
Softball (men)	April	May-August
Softball (women)	May	June-August
Flag Football (men)	August	September-November
Powder Puff Football (women)	August	September-November
Basketball (men)	October	November-February
Basketball (women)	October	November-February



APOLLO 14 LIFTOFF—The 363-foot tall Apollo 14 space vehicle was launched from Pad A, Launch Complex 39, Kennedy Space Center at 4:03 p.m. Eastern Standard Time on January 31. Weather problems at the Cape delayed the liftoff which was originally scheduled for 3:23 p.m. EST.

An Eyewitness To History

By Phyllis Johnson

Note: Mrs. Johnson was one of ten MSC employees who were sent to Cape Kennedy as part of the Manned Space Flight Awareness Program. Here she recalls her memories of the weekend at the Cape and the launch of Apollo 14. Editor.

On Friday, we checked in at the headquarters office of Manned Space Flight Awareness in Cocoa Beach. We emerged from the office laden with agendas, time schedules, and badges to be used for our activities in the days to follow. There was a special badge for each activity, and, believe me, you got nowhere without exactly the right badge.

Saturday included a tour of all the facilities at the Cape and a reception at the Cape Colony Convention Center.

On the tour, we visited the Air Force Museum, the Kennedy Space Center Industrial Area, Launch Complexes 34 and 37, the Vehicle Assembly Building, and Launch Pad 39 from which Apollo 14 would lift off the next day.

As we passed a black and white lighthouse, our guide told us (in jest, I'm sure) that he understood many an eye had been trained on that lighthouse during launches, never to see it get off the ground!

The reception Saturday evening was great fun. I, like many others, managed to get a few autographs from guests such as actor Hugh O'Brian, cartoonist Johnny Hart, and a number of astronauts.

Sunday was the big day I had been waiting for. We traveled to

the launch site by bus, and with the traffic jams before and after launch, I was mighty happy not to have been in the drivers seat!

We were all concerned about the weather. When the sun broke through the clouds minutes before liftoff, that listening "big bird" (as everyone kept calling the Saturn V and Apollo 14 spacecraft) looked magnificent.

As the word "Ignition" came over the loudspeakers, cameras began whirring and clicking like mad. With clouds of flame shooting out, Apollo 14 climbed majestically into the sky. Seconds later, the tremendous shock wave overcame us. The ground, buildings, everything shook.

Watching that powerful and beautiful liftoff, I couldn't help feeling proud—proud of those three astronauts on their way to the moon, proud of the U.S. Manned Space Flight Program, proud to be a member of it, and, most of all, proud to be an American.

Lions Open Camp For Handicapped

Applications for a summer vacation full of fun for handicapped children in the Bay Area are now being accepted by members of the Bay Area Lions Club.

The Texas Lions Camp for Crippled Children at Kerrville will open its first two weeks session Sunday, June 6. Five sessions will be held for youngsters from seven through sixteen years of age.

The Camp is free to eligible

Tapes Used For Status Reports

During the last seven Apollo missions, beginning with Apollo 8, the dramatic first lunar orbital mission flown in December 1968, MSC's Public Affairs Office has provided recorded, hourly status reports.

The reports are taped into instruments called Code-a-phones. Individuals or radio stations, for which the messages are of great value, can then call a specific telephone number and receive up-to-date information on the mission. Radio stations can record directly from the code-a-phone message.

One code-a-phone was in use during the flight of Apollo 8. Since then four additional backup phones have been installed to handle the increased volume of calls. Over 9,000 calls were received during Apollo 11; over 10,000 during Apollo 12; over 11,000 in the course of Apollo 13; and the final tally of calls received for Apollo 14 is 13,900.

In addition to relaying information on technical aspects of the flights, code-a-phone broadcasters include excerpts of live air-to-ground communications and such fascinating tidbits as what the astronauts are enjoying for breakfast.

During the last days of the Apollo 14 mission, code-a-phone operators requested radio stations to write to the Public Affairs Office indicating their response to the taped messages. It is hoped that responses will determine the number of local radio stations using the code-a-phone service. There are between 7,000 and 8,000 local radio stations in the United States.

Bloodmobile Will Be At Center

The Blood Services of Houston mobile unit will visit the Manned Spacecraft Center on Thursday and Friday, February 18 and 19. The bloodmobile will be located in the Building 8 (Dispensary) parking lot and will be open from 8 a.m. to 3 p.m.

MSC employees have donated blood generously in past drives. The last campaign in October 1970 was conducted in cooperation with the Brook Army Medical Center. The one-day drive saw 271 employees contribute blood.

Those interested in participating in the MSC Blood Deposit Program should contact Lester Wynn, x6124, or Barbara Freeman, x3583.

blind, deaf, mute or crippled children. Transportation to and from the Camp is supplied by the local Lions.

For more detailed information, write to the Bay Area Lions Club, P. O. Box 58252, Houston 77058.



APOLLO 14 DOCKING PROBLEM STUDIED—A solution to the Apollo 14 docking problem is sought by this group of individuals using an Apollo docking mechanism in the Mission Control Center. Included in the picture are (l. to r.) John S. Llewellyn, Flight Control Division; MSC Director Dr. Robert R. Gilruth; George W. S. Abbey, Technical Assistant to the Director; and Astronaut John W. Young. They are analyzing how the Command Module docking probe engages the cone-shaped drogue of the Lunar Module. Although six attempts at docking were made before a successful "hard dock" was achieved early in the mission, the docking procedure during lunar orbit rendezvous was performed successfully on the first attempt.

Apollo 14 Crew Returns to Earth

(Continued from Page 1)

revolutions with a Hasselblad camera equipped with a 500 millimeter lens. It is hoped that pictures will show the moon's surface at two to three feet resolution. One of Roosa's prime photographic targets was in the vicinity of the crater Descartes, a potential future landing site.

Delayed in its start for a short time by voice communications problems, the first EVA lasted four and a half hours. After inspecting their lunar ladder and collecting a contingency soil sample, Mitchell and Shepard set about unloading the antenna and experiments stored in the bottom compartment of the LM.

Concentration during the first EVA was primarily on deployment of the ALSEP. Mitchell spent much of his time setting up a seismometer, similar to the one still operating on the Apollo 12 landing site.

After a rest period of less than six hours, the crew began their second moonwalk, this one a geological expedition. One of their objectives was to reach the rim of Cone Crater. A boulder field, difficult to navigate as they pulled and carried the MET toward the rim, impeded the astronauts' progress. Their heavy breathing and

rapid heart rates as they labored to reach the crater edge brought about the decision to cut the moonwalk short of one of its goals.

Just before reentering the Antares for the final time, Alan Shepard showed TV viewers back on Earth the handle of the lunar contingency sample collector with —of all things—a six-iron attached to one end. Then, to the delight of golfers around the world, he hit two golf balls which he had with him. Although neither ball reached Cone Crater and therefore could not be classified as a hole-in-one, it has been estimated that one ball went at least 600 yards.

Less than two hours after liftoff from the moon, the Antares and Kitty Hawk successfully completed rendezvous and docking.

Jimmy Warren Memorial League BOWLING STANDINGS

Achievers	56	32
Pin Pounders	50	38
Bit Pickers	48	40
Real Timers	48	40
Alley Oops	45	43
Hexes	44	44
Roadrunners	43	45
Strikers	42	36
Fabricators	40½	43½
Chokers	37½	50½
Mixers	36	48
Blitzers	34	54

Aero Club Needs Qualified Pilots

The MSC Aero Club, sponsored by the Employees Activities Association, is looking for new members, especially pilots who are qualified to fly the club's two retractable-gear Bonanzas.

In recent months, members who have resigned have not been replaced at a stable rate, and the club may be forced to sell a Bonanza.

All club aircraft are quartered

at Hobby Airport and are leased at the following hourly wet rates: Cessna 150, \$8; Cessna 172, \$10; K-model Bonanza, \$17; and P-model Bonanza, \$18.

To qualify in the Bonanza, a member must have at least 150 hours of total time and either 25 hours in retractable-type aircraft or 5 hours in Bonanzas.

The membership fee is \$50. For additional information call Howard Kyle, x2871; Jim McCoy, x2057; or John Boynton, x2856.