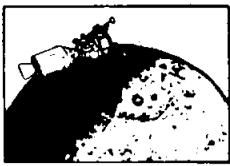


ROUNDUP

NASA MANNED SPACECRAFT CENTER

HOUSTON, TEXAS



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HUBSCHE MODCHEN — You will have to attend the Oktoberfest MSC Picnic October 10 Camp Manison to get the pitch on these HUSCHE MADCHEN (in real life they are MSC secretaries). L-R they are Mary Yarbrough, Gail Cannon, Jo Ann Sanchez, June Connye Lenczewski and Carol Robb. Also taking part, but not in photo are Jeannie Hulo, Jamve Flowers and Charlotte Ober.

Kraft, Lunney, Faget To Receive AIAA Awards

Christopher C. Kraft, Jr., MSC Deputy Director, will receive the Louis W. Hill Space Transportation Award from the American Institute of Aeronautics and Astronautics.

The award which will be presented during the AIAA's annual meeting October 19-22, 1970 in Houston is for Kraft's "outstanding management and leadership in directing the planning and operational control of all United States manned space flight missions from the first Mercury suborbital mission through the first Apollo lunar landing."

The award, consisting of a certificate of appreciation and an honorarium of \$5,000, will be presented to the MSC Deputy Director by Dr. Ronald Smelt, AIAA president. The presentation will be made at the President's Reception and Honors Banquet at 6 P.M., October 22 in the Astroworld Hotel.

Glyn S. Lunney, Chief Flight Director Office, will receive the AIAA Lawrence Sperry Award. The award which carries a \$500 honorarium is for his "outstanding performance as a flight direc-

tor during the Gemini and Apollo manned space flight missions; for exceptional leadership, professional skill and personal dedication which contributed to the success of this Nation's first manned lunar mission, and particularly during the flight of Apollo 13.

Dr. Maxime A. Faget, Director of Engineering and Development, will be presented the Spacecraft Design Award for his "outstanding leadership and technical ability which resulted in the conception and design of this nation's first manned spacecraft, the Mercury capsule system." Dr. Faget will receive a \$500 honorarium with the award.



CHRISTOPHER C. KRAFT, JR.

MSC Annual Picnic Features Oktoberfest at Mansion on Oct. 10

Karten für das jährliche MSC Picknick, das sogenannte Oktoberfest, sind jetzt zu verkaufen. Das Oktoberfest langt 1200 Uhr an, und lauft bis 1800 Uhr am Samstag, den 10. Oktober, an Camp Manison bei Friendswood.

Tickets are now on sale for the annual MSC employees picnic, "Oktoberfest", to be held from 12 noon to 6 p.m., Saturday October 10 at Camp Manison near Friendswood.

The price of admission (adults \$1.50, children 3 to 12 \$1 and children under 3 free) covers food, refreshments and entertainment. The main course will include barbeque beef and links, potato salad, ranch style beans, relishes and french bread, with soft drinks and adult beverages. And for those who need still more, there will be snow cones and popcorn. Chowhounds who may want seconds are advised to hold onto their plates.

The Jeannette Chase team of Houston will give a water ballet exhibition. There will also be a sky-diving and aerobatics show, hayrides, carnival rides, a treasure hunt, volleyball, softball and dancing.

Organizers of the picnic also promise "an exciting adult attraction featuring nine MSC secretaries". Further details are not available at Roundup press time.

There will be a prize for costumes which best carry out this year's theme, "Oktoberfest". The categories will be adults (man and woman) and children (boy and girl).

Persons interested in participating slow pitch softball should

form a team and contact Jack Streit, extension 4358. Volleyball fans should also work up a team and contact Dennis Doherty, extension 2741. Trophies will be awarded to the winning teams.

Picnic representatives will be selling tickets in a number of work areas. Tickets will also be on sale in buildings 2 and 45 from 4 to 5 p.m. beginning October 1.

ALOFT FOR 347 HOURS

Payload, Balloon Down In Canada Experiment Looks Good

The balloon borne scientific payload which crash landed in a Canadian field over last weekend suffered little if any damage.

Scientists at the NASA Manned Spacecraft Center said the payload "miraculously came through it in excellent condition." The 1,200 pound instrument package landed in a wheat field 20 miles west of Regina, Canada, after being separated from its 600-foot long balloon.

The balloon and scientific package drifted for more than 347 hours, covering a distance of about 4,800 miles — 1700 over the Pacific Ocean — following its launch from Minneapolis, Minn., on Sept. 4. The experiment was scheduled to be concluded 48 hours after launch however a faulty descent system kept the balloon aloft for more than two weeks.

The project, part of MSC's investigations of cosmic rays, is the Cosmic Ray Emulsion Plastic Experiment. The experiment consisted of 240 square feet of detectors housed in 20 by 12 foot package.

The detectors — plastic track, nuclear emulsion, and fast-film Cernekov — are designed to re-

cord the intensity and direction of transion primary cosmic rays in the upper atmosphere (130,000 feet altitude). The balloon and payload was launched by the Winzen Research Corp in cooperation with the National Center for Atmospheric Research (NCAR).

The payload was recovered from Canada by NASA, Winzen and NCAR scientists and taken to the University of California, Berkley where preliminary analysis is being conducted under the supervision of U of C Prof. Buford Price, co-investigator. It will be another 90 days before detailed analysis is completed.

Dr. Zack Osborne, MSC co-investigator, said "Although the payload hit hard, preliminary examination of the detectors indicates we were very lucky."

The balloon and its payload drifted west for several days after launch and then crossed over the Pacific Ocean where it drifted west for aout 750 miles. Westerly winds then caught the package and returned it to the states.

It crossed into Canada sometime Friday night and hit a

(Continued Page 4)

APOLLO 14 LUNAR EXPLOSION

Crew To Use 'Thumper' And Setup Grenades On Frau Mauro

During their exploration of the lunar hill country next February, the Apollo 14 astronauts will set off 21 small explosions on the surface and arm a mortar to launch four grenades after they leave.

Measurements of the resulting vibrations of the Moon, radioed to Earth, will give scientists new information on the shape, structure and thickness of the outer crust.

The Active Seismic Experiment, as it is called, will be set out by LM pilot Edgar D. Mitchell during the first of two four-to-five-hour ventures outside the LM with Mission Commander Alan B. Shepard, Jr., during their day-and-a-half on the Moon.

While Shepard deploys other scientific instruments and gathers rocks, Mitchell will lay out 310 feet of cable and stick three vibration detectors, called geophones, into the lunar soil at intervals of 150 feet. As he then walks back to a central recording and relay station, he will fire cartridges every 15 feet with a device called the "thumper."

The thumper is a tube about three and a half feet long with a hollow cylinder at the lower end. The upper section contains electronics for the firing mechanism and the cartridge barrel. In the cylinder is a plate that, when pressed against the Moon a

cartridge is fired, transmits the force of the explosion to the lunar surface. This creates seismic waves for dection by the geophones.

After firing the last of the cartridges, Mitchell will then set up and arm the boxlike, four-barrel mortar about 10 feet from the central station, aiming it away from the area where he and Shepard will be working later in their inspection of the landing site and sample-gathering expedition.

The mortar contains four high-explosive grenades that will be rocket-launched, on radio command from Earth, to denotate at ranges of 500 feet, 1,000 feet, 3,000 feet and 5,000 feet. The vibrations caused will also be picked up by the geophones, and their strength and speed through the Moon will provide additional information on its structure. Data will be obtained from as deep as 1,500 feet.

Such data could help in the search for water on the Moon. Some scientist think local concentrations of ice may lie buried near the lunar surface beneath the penetration of the Sun's heat during the two-week lunar day. If so, a seismic velocity survey might detcet them.

Oil companies use the same system on a larger scale in locating oil-bearing layers in the Earth.

Brazil Launches, By MSC To Study Radiation Belt

HOUSTON, TEXAS — Brazilian Space teams will launch two separate scientific payloads for the National Aeronautics and space administration from Natal, Brazil to evaluate the radiation environment over the South Atlantic. The launches are scheduled for September 25 and September 30.

The scientific experiments were developed by NASA and the University of California. Purpose of the two flights is to provide detailed scientific measurements of the charged particle environment in the South Atlantic Anomaly region, a region of trapped radiation located over the South Atlantic Ocean.

Scientists and engineers from two NASA centers—the Manned Spacecraft Center at Houston, Texas, and the Goddard Space Flight Center, Greenbelt, Maryland—and the University of California are working together on the projects.

NASA is being assisted in the launches by the Brazilian Air Force, the Brazilian National Space Commission and personnel at the Barreria de Inferno range near Natal, Brazil.

Launch vehicle for the two separate scientific probes is the Black Brant IV, a two-stage solid-propellant vehicle. Each payload will be boosted to an altitude of about 530 nautical miles above the South Atlantic.

The payloads and flight parameters are identical. Each payload weighs 110 pounds and the mission duration from launch to impact is 15½ minutes in duration.

The first flight, scheduled for launch between midnight and two a.m. on September 25 carries a Positive Ion Telescope (PIT), Integral Flux Spectrometer (IFS), and two magnetometers.

The Positive Ion Telescope, developed by the University of California, is designed to obtain data pertaining to protons trapped at low altitude.

Dr. George Low Comments On U.S.S.R. Lunar Probe

"The Soviet Union's reported success in obtaining lunar material, depositing it in a sealed container and launching it from the the Moon's surface on a return to Earth with the Luna 16 unmanned spacecraft is a major engineering and scientific achievement. We wish the Soviet Union and its scientists and engineers success in completing this exciting mission."

"The material collected by Luna 16 is from the Sea of Fertility, an area which has not yet been studied on the surface by manned or unmanned spacecraft."

Exploration of the Moon by manned and unmanned spacecraft is resulting in important discoveries concerning the origin of the laboratories on Earth as well as the personal on-site observations by United States astronauts and close-up photographs of the Moon's surface by both the U.S. and Soviet Union already are proving their value to the worldwide scientific community."

"We look forward to sharing in the information which will be developed by an analysis of the samples."

The Integral Flux Spectrometer (IFS), developed by scientists at the NASA Manned Spacecraft Center, is designed to gather detailed information relating to the distribution of charged particles in the anomaly.

The magnetometers—flight one carries two and three will be aboard the payload on flight two — are designed to determine the magnitude and direction of the magnetic fields at points along the 507 mile long trajectory.

Flight two, in addition to carrying a PIT and the magnetometers, will have the Corona Discharge Experiment (CDE). The CDE, developed by the NASA Goddard Space Flight Center, is intended to provide a representative pressure within the experiment hardware during flight.

Measurements within the Anomaly will begin when the rocket and payload reach 447,500 feet at 57 seconds into the flight. The experiments will transmit data to the ground stations at Barreria do Inferno range. Data will be collected on magnetic tapes for evaluation by NASA and university scientists.

The second stage and its payload is scheduled to land in the ocean 225 miles downrange from the launch site. It is not planned to recover either of the instrument packages.

MSC's Space Physics Division, of the Science and Applications Directorate, which designed and fabricated the experiment instrumentation, is directing the program. The Sounding Rocket Branch of NASA's Goddard Space Flight Center, Greenbelt, Maryland, is assisting in the launch and data recovery.

The Black Brant is manufactured by Bristol Aerospace Limited, Winnipeg, Canada. In addition to furnishing the rockets and related hardware, Bristol trained the Brazilian launch crews at Natal.

In-House Project Viewed By 15 Crew

The Apollo 15 lunar module and rover mockups for crew training were the object of close scrutiny by crewmen David R. Scott, Alfred M. Worden and James B. Irwin during a trainer readiness review in Building 5 at the Manned Spacecraft Center on September 15.

Apollo 15 Commander Scott and his crew will spend many hours training in these mockups between now and the scheduled launch of their lunar mission in July 1971.

The lunar rover vehicle was built by Boeing at the Marshall Space Flight Center, Huntsville, Alabama.

The LM-10 (MSC-12 mockup) was the product of a five-month in-house project here at MSC by a team of engineers headed by Ralph Foster of the Flight Crew Support Division, EVA Branch Mockup Section. Louie Richard, chief of the EVA Branch and Thomas Barrow head of the mockup Section commended Foster for the excellent job done in constructing the mockup at a considerable cost saving to the government.

Starting with a lunar module which was originally built by Grumman in 1963 as a flight-type production model, Foster, along with Joel Lissauer engineering the ascent stage changes, William R. Acres handling the loose stowage equipment engineering, tackled the task of converting the early model LM to the current or Apollo 15 configuration.

The team of engineers along with a group of Link contractor fabrication technicians in a five-month period turned out a much modified shiny detailed mockup of the vehicle the Apollo 15 crew is scheduled to land on the moon next year.

Major modifications to the original early configuration of the LM descent stowage bays were necessary. One of the bays was reworked so as to accommodate the lunar roving vehicle which will provide the Apollo 15 crew mobility on the lunar surface, another for the MESA (modular equipment stowage assembly) and still another for the ALSEP (Apollo Lunar Surface Experiments Package). In addition the latest configuration for the ladder and flight-type landing gear was added to the descent stage.

External geometry of the ascent stage required a considerable number of changes to conform to the configuration of the Apollo 15. In addition the Mockup Section designed and engineered the construction of a compact two-man instructor console station in the aft section of the ascent stage which normally is filled with electronic gear. This instructor station, just back of the crew as they stand at the LM control stations,

(Continued on page 4)



PRETTY LASS SUGGESTS — Penny Morian of the Manned Flight Awareness Office ponders her Fire Prevention Week Suggestion.

Fire Prevention Week at MSC To Highlight Contest, Inspections

MSC will observe Fire Prevention Week, October 4 to 10 with an active program that will include inspections by all supervisors of work areas under their jurisdiction, a fire prevention suggestion contest, and fire safety program for Center management.

Martin L. Raines, Safety Office Manager, called the supervisors' knowledge of his area the key to MSC's fire prevention effort.

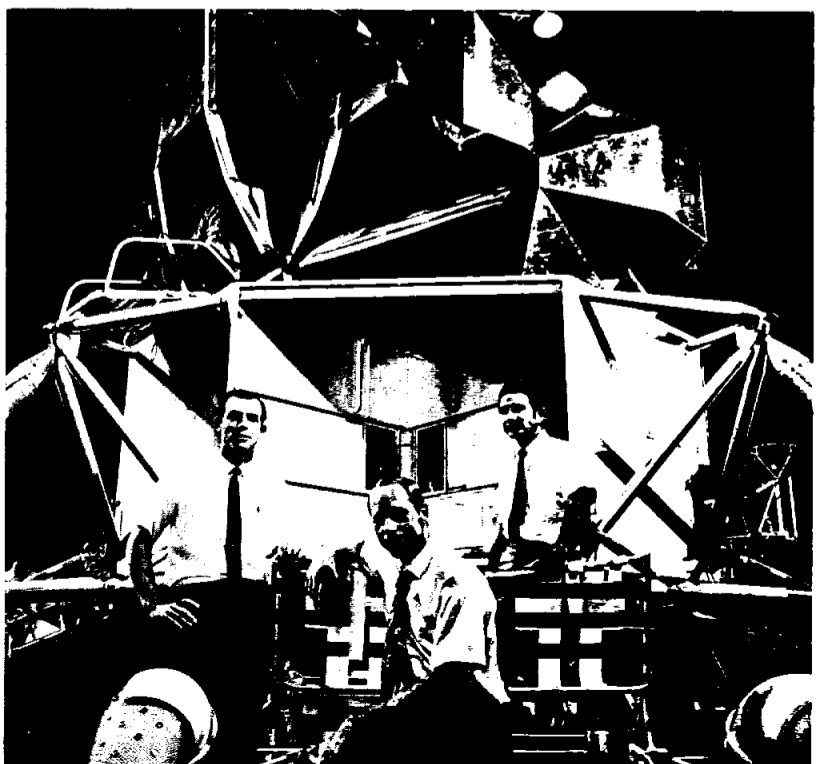
Supervisors are being supplied with forms to use as a checklist in minimizing hazards in their work areas. Potential fuel sources for a fire such as rubbish and scrap, large supplies of paper and formed materials, and flammable solvents, especially those in glass jars or ordinary tin cans will be prime targets of fire prevention inspectors. Inspectors are also asked to pay particular attention to potential ignition sources such as open flames and arcs, electrical equipment, and chemical reactants in their search for fire

MSC is also sponsoring an employee fire safety suggestion contest with first prize a trip to Cape Kennedy for the Apollo 14 launch. Ten portable fire extinguishers will be given away as second prizes. Suggestions should be sent to the Safety Office, code SA or delivered to room 750, building 45 by October 2.

Fire wardens and safety representatives were scheduled to meet at MSC September 24 in preparation for Fire Prevention Week.

The Week gets underway officially at MSC with a management seminar or fire risk management which will be conducted by NASA Safety Director Jerome Lederer at 10 a.m. on Monday October 5.

During the week safety representatives and fire wardens will pass out fire prevention ribbons to Center employees as a reminder for everyone to do his part in preventing fires.



The LM, 'Rover' and Apollo 15 Crew Scott, Irwin and Worden.

Roundup Swap-Shop

(Deadline for Swap-Shop classified ad is Thursday of the week preceding Roundup publication date. Ads are limited to MSC civil service employees and assigned military personnel. Maximum length is 15 words, including name, office code and home telephone number. Send ads in writing to Roundup Editor, AP3)

REAL ESTATE

Equity - Pasadena, 4 BR, 1 1/2 bath, 1 blk from schools, \$83/Mo pyt. Call 473-8658.

Equity, brick, 3 BR, 2 baths, 18'x16' FR, LR, DR, Built-in dishwasher, disposal, oven & range, A&H. Large patio & 24'x28' garage slab, lge lot, washer-dryer & refrigerator optional, might trade, 10 mi from MSC. Call 966-2337 after 5:30.

Two adjacent gulfview lots, one oversized, Terramar Beach, Galveston Island, utilities, below market. Call Lafferty 485-1997.

Bay area, 2-2-2 3/4 brick, A&H, fireplace, ash panelled, wooded, pier privileges. \$6500 equity, assume 6 1/4% at \$160/mo. Consider lease. Browne, 474-2720.

3-2-2, separate living & dining rms, lge den, 15x27 enclosed pool, many xtras, 2,081 sq ft, \$26,000. Call 932-3612.

For rent, efficiency apt w/garage, private entranc, one working female only, no smoking, everything furnished, \$85/mo. Call 534-6077 after 2 pm and weekends.

3-2-2 in Bayou Brae (League City), brick, fenced, central A/H, trees, carpet, \$124/Mo, 5 1/4% loan, equity \$3500. Owner, Stanton, 932-2982.

For rent 2 B/R studio duplex, central A/H, water paid, nice yard, adults only, no pets, Heflin, 932-3816 or 932-4488.

AUTOS

61 International Harvester Step Van, good cdt, \$375. Call 474-2457 or 645-3803 after 6 pm.

61 Corvair Monza, auto, radio, good cheap trans. \$150. Bullock, 488-1042.

64 Olds F-85 Deluxe 4 dr sedan, auto, air, pwr steering, \$500. Nieder, 643-4889 after 6 pm.

64 Valiant V-200, 4-dr sedan (V8) xln cdt. Morris, 591-2910.

65 Pontiac Tempest, custom for-dor, V-8, auto, air, vinyl int, one owner. Wiltz, 944-0451.

65 Catalina, 2-dr hardtop, beige w/ black vinyl top, auto, pwr, air, radio, \$1000. Taylor, 534-4142.

66 Chevelle, Malibu, 4-sp, positraction, A C P/S, 327 eng, radio. Below NADA wholesale \$950. White, 474-3992.

66 Corvette coupe, 427, 4-sp, positraction, air & pwr, \$2500. Wooley, 482-1354.

66 Corvette coupe, 327, air, 4-sp, AM-FM, new paint, recently rebuilt, low mileage, extras, near wholesale. Cox, 487-4190.

66 Bel Air Chev, radio, heater, air, all pwr \$850. 403 Peugeot, 63, radio, heater, runs good \$195. Watkins, 534-2437 (Dickinson).

67 VW, air, good cdt, Harris, 488-1003.

68 Firebird, 350 V-8, pwr, air, new tires & battery, 2600 mi. \$2000. Caro, 488-5271.

68 Chevy Fleetside pickup, LWB, V-8, air, deluxe camper cover, xln cdt, Dobson, 471-4191.

69 Plymouth GTX, auto, air, pwr steering & brakes, radio, stereo tape, in warranty. Mason, 945-6802 (Texas City).

69 VW, 2-dr sedan, standard 11000 mi, xln cdt, Gearhart, 488-3505.

69 Pontiac GTO, fully equipped, pwr, air, mags, new tires, auto, xln cdt, Elder, 946-9192.

70 Ambassador 360 SST sedan pwr, A/C, velour upholstery, low mileage, warranty, \$2995. Jacobsen, 487-0792.

65 Pontiac Bonneville, auto, air, pwr steering & brakes, electric windows, vinyl int, \$525. Harley, 877-1391.

67 GTO convertible, air, auto, pwr

steer & brakes, radio, maroon. Larsen, 488-2893.

69 Ranger, LWB, V8, A/C, 15000 miles, new F/G, belted tires, A-1, \$21,000. Maxwell, 482-1015.

67 Sunbeam Alpine, series V-red, wire wheel & new engine & tires. 10000 mi. remains on Chrysler warranty. Jones, 944-1321.

62 Chevrolet Bel Air, 4-dr sedan, auto, xln cdt, \$450. Moser, 877-3048. radio, heater, air, good cdt, \$700.

65 Mercury Comet, 4-dr sedan, Pete, 733-2245 after 5 pm.

67 Dodge Sportsman Camper, V8, auto trans, a/c, kitchen, awning, sleeps four. Rippey, 877-1859.

64 Valiant V-200, 4-dr sed V8, xln cdt, \$650. Morris, 591-2910.

66 Red Mustang, 6 cyl, air, radio and heater, \$600. Marlow, 946-3497.

SPORTS AND RECREATION

1969 Camping trailer, stove, ice box, sink, dinette, \$800. Sutton 474-4315.

14' Sunfish sailboat w/trailer, dacron sail, xln cdt, \$395. Wilson, 591-3886.

16' Thunderbird boat w/50 hp Evinrude engine plus boat eqpt on 4-wheel tandem trailer, \$895. Smith, 932-6629 after 5 pm.

Surfboard, Pacific design, 7'4", good cdt, \$100. Maloney, 482-7688.

Sailboat, 18' fiberglass rebel, aluminum mast, dacron sails, spinnaker, trailer, 1st class cdt, Waltz, 591-2172 evenings.

Fiberglass sailboat, 16' Rebel, new mast, sails, rigging-trailer, \$950. Brown, 946-2836.

Golf clubs, 8 irons, wedge, putter, 2 woods, bag and cart, good cdt, \$50. Harrington, 488-2914.

Shotgun, 12-ga, auto, Remington Model 11, xtra barrel, \$100. Johnson, 474-2422.

Deer rifle, like new, 300 Savage, lever action scope, fully equipped, \$150. Haines, 926-4333.

Fiberglass sailboat 13'9" Scorpion board boat, 15'3" Demon sloop w/ trailer. Ward, 591-2182.

Boat, 14' V Wood W/fiberglass bottom, 35 hp Johnson electric, life preservers, fire ex, new battery, trailer (big wheel) \$275 cash. Harrington, 488-2914.

19' Century pexx pleasure boat, top condition, 40 MPH w/280 HP Buick engine, four wheel trailer, like new. Hal Hunt, 877-1377.

Two bikes, convertible boy/girl, 20" \$15, 16", \$10. Aldrich, 482-1153. Schwinn boys bike, \$25. Fitzgerald, 488-4467.

Golf cart W/bag, 3 covers for woods, 13 shaft savers plus hood cover for bag, \$12. Sam, 488-0125

1970 Yamaha CTIB Enduro 175 cc buddy seat, pegs, bumper racks, helmet, \$645. McKinney, 944-5534.

MEC 600 Jr 12-ga shotgun shell re-loader, like new \$35. Dial, 941-1942. after 6 pm.

Motorcycle, Suzuki 50, step-thru model, 1970 with less than 300 mi. \$190. 1969 Ouchita 16-ft DSV boat W/trailer & older 7 hp motor recently overhauled, \$300. Donnell, 877-1746.

MISCELLANEOUS

Coffee set, Karastan oriental 6 1/2 x 9 rug, headboard/blanket rail dbl bed, wainut, 7 candle and one candle candlelabras, black wrought iron. Make offer. Critzos, 591-2771.

Child's playhouse, 4'x6', or use for storage, \$40. Child's spring horse, \$8. Brasseaux, 877-1719.

Trailer, utility, 2-wheel, enclosed, new tires & spare, 3/4 ton capacity/ Sofa & chair, Mediterranean. Fuller, 488-3985.

Singer sewing machine, portable, all attachments, xln cdt, \$65. Smith, 534-5462.

Two VW Dune buggy wheels, 8" rims, \$30. Four VW wheels with very good tires, \$80. McBryar, 534-5246.

Ski boots, Lange 8 1/2 med. reg. \$110, only \$49.99. Lewis, 591-3830.

Frostless refrigerator/freezer 13.2 cu ft, white, xln cdt, \$50. Fleming, 877-1193.

Sears regular 8 movies camera with electric eye and zoom lens. Regular 8 movie editor, \$30. Foster, 487-0155.

Rollerflex camera 3.5 Tessen lens, two flash cables and leather case, \$65. Lipovsky, 488-2293.

20" boy's bicycle, high handle bars, banana seat, \$15. Smith, 488-0343.

IBM selectric typewriter, cover & manual, xln cdt, \$200. Cannon 35 mm electric eye camera, case and tripod, \$40. Krisberg, 944-4319.

Wicker lounge in "fish" shape, conversation piece, \$15. Law, 944-7596.

Vinyl sofa, xln cdt, off white, zippered foam cushions, \$75. Thompson, 932-3653.

Divan W/new throw cover, perfect for beach house, \$30. Medium red human hair wig, new \$120, \$30. Detmore, 649-1488 after 5:30 pm.

Full membership in Sun Meadows Golf Club, \$100 total. Chambers, 482-7920.

Auto air conditioning unit, will fit all standard US cars, xln cdt, \$50. Merrifield, 591-2437.

Sony 252-D open reel tape deck, 4 mo old, like new, \$85. Musgrove, 488-3966.

Electric bass guitar, xln cdt, must sell, best offer. McCandless, 946-2711.

Baby swing \$5.00, antique typewriter \$50, RCA 23-in color TV, working but needs adjustment \$100. 1968 RCA portable TV \$45. Two 7:75x15 tires \$5.00 ea. Small portable electric paint spray outfit \$40. Rotary pwr mower, needs new head \$500. Ping Pong table \$15. Donnell, 877-1746.

Reel type lawn mower in xln cdt. Greenwell, 488-1034.

Ludwig snare drum w/case, stand, practice pad, marimba sticks, Franz metronome, \$70. Selmer alto saxophone w/case, new pads, lyre and stand, good cdt, Wilson, 591-3886.

HO Gauge train on landscaped board, \$50. Adams, 534-3243.

Laredo rain tire, new, sz 825x14, \$20. Apex vacuum cleaner upright, 3/4 hp, \$15. Sam, 488-0125.

Three Early American bar stools, one 4'x6' camper mattress. Call 472-8208.

20-Vol Collier's encyclopedia and 2-vol dictionary, \$50. Aldrich, 482-1153.

Color processing filters 2 1/4x2 1/4, and Heathkit color canoe 11x14. Basic necessary for color print processing. McCreary, 946-5285.

Bunde wood clarinet, good cdt, \$70. Stearns, 932-3683 after 4:30 pm. Aurelian Mink stole, blond, like new, \$150. Dial, 941-1942.

8' Sofa, modern, good cdt \$60. Girl's 20" bike, good cdt, \$10. Canin, 591-2856.

Scott 222C stereo amplifier, \$50. Eric FM tuner, \$10. Realistic speaker, \$15. England, 877-1713.

Baby swing-o-matic, like new, \$5. Johnson, 487-1441.

Full membership in Clear Lake Country Club, \$100 plus transfer fee. Moran, 488-4086.

Room & Board, single male, residential home close to NASA. Siegfried, 877-4314.

Vinyl sofa, xln cdt, must see to appreciate, \$75. Thompson, 932-3653.

Dyer, Cauley Cooner Winners MSC Golf

The MSC Golf Association held its seventh tournament of the year at the Houston Executive Club Sept. 12, on a rain drenched course and in a heavy rain. The conditions did not seem to work too much of a hardship on the scores, however. Max Engert had low gross with a 75.

Dave Dyer won the championship flight with a net 66, Bill Shropshire was second with 68, and Norm Cooper and Tom Henderson tied for third with 70's.

Ed Cauley won the first flight with a net 65, Jim Smith was second with 67, Charles Laird was third with 68, and Pete Smetek fourth with 70.

Morgan Cooner won the second flight with a net 71. Dick Hart was second with a 72, Bob Lacy was third with a 73, and Steve Gorman and Art Garrison tied for fourth with 75's. The next tournament will be at Hermann Park on October 17.

Eight at MSC To Attend IAF In Germany

Eight MSC people will present papers or chair sessions at the International Astronautical Federation annual meeting in Constance, Germany October 4-10.

They are Director of Medical Research and Operations Dr. Charles A. Berry, Director of Science and Applications Anthony J. Calio, Director of Engineering and Development Maxime A. Faget, Apollo Spacecraft Program manager James A. McDivitt, E&D Assistant Director for Electronic Systems Robert A. Gardner, William C. Bradford of the E&D staff office, MPADM Mathematicall Physics Branch chief James C. McPherson, and CSD Supporting Development Branch chief Matthew I. Radnofsky.

Four A&M/Arkansas tickets. Will trade for A&M/Tech or A&M/TCM tickets. Thompson, 932-3653.

25-gal or larger aquarium and associated equipment. Henderson, 471-4653.

Firm clean box spring and mattress. Fitzgerald, 488-4467.

Port-a-crib, windup swing, Price, 488-3685.

Used lapidary equipment. Erb, 877-1097.

Small aluminum or fiberglass boat, reel and small outboard motor. Schmitzer, 723-2179.

El Camino or Ranchero with V8 and air, will consider any in good cdt. Lindsay, 877-1141.

Cracked or leaky aquariums. Foster, 487-0155.

Attractive 3 BR house to rent or lease option in NASA area. \$225. mo. max. Bob LaMere, 944-8840.

Boys 16" Bicycle, good condition. Gallagher, 487-0149.

Awards Totaling \$830 Presented To 18 At MSC

Cash awards totaling \$830 were presented September 18 to 18 employees, winners of suggestion awards.

The presentations were made by the Awards and Cost Reduction Office of the Personnel Division. Recipients of the cash awards and their office code were:

Mildred G. Meade, AP, Bill L. Johnson, BH, Janis H. Mattix BM, Rod C. Puffer BM, Richard T. Hall, BN, Jack W. Seyl EB, Lewis O. Casey, EC, Frederick S. Dawn, EC, Maxwell W. Lippitt EC.

And William L. Gill, ED, Jay M. Lewallen ED, Leo G. Monford Jr., EE, Layton A. B. Klotz FS, Robert L. Band HA, Allivan F. Bray ND, Dwayne L. Forsythe ND, Hestle A. Johnston ND, and I. Edward Campagna TL.

American Legion To Host Bar-B-Q Sept. 26.

The American Legion, Post 554, 1650 Hwy 3 So., League City, Texas, invites you to attend their free Bar-B-Q and Dance on Saturday, Sept. 26, 1970.

'Longhorn' Films

The Clear Lake Texas Exes will show the National Champion University of Texas Longhorns game films this season. The showings will be in the Embassy Club of the Holiday Inn on NASA Road 1 at 5:30 pm on Wednesdays following the games. Admission is free and all interested area people are invited. The film schedule is as follows:

Sept. 30 Texas Tech, Oct. 7 UCLA, Oct 14 Oklahoma, Oct. 28 Rice, Nov. 1 SMU, Nov. 11 Baylor, Nov. 18 TCU, Dec. 2 A&M, Dec. 9 Arkansas.

Motorcycle helmet, large size. Greenwell, 488-1034.

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PETS

Baby gerbils, \$1 ea. Erb, 877-1097. AKC Miniature Schnauzer puppies, \$125. Marlow, 946-3497.

Boxer puppies, AKC registered, Crippen 471-2739.

WANTED

Lady's 26" Schwinn bike, royal blue, hdlight, basket, horn, \$45. Messenger, 471-1079.

Lease or lease-option on attractive 3-BR house in NASA area, \$225/mo maximum. LaMere, 944-8840.

Ride to MSC from Sharpstown, Maplewood or Meyerland centers, 8-4:30, Mon thru Fri, pay well. Mike, 774-5949.

Falcon, convertible or 2-dr hardtop, prefer 63-65 model. Hammack, 877-1657.

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SWEDEN IN '71

MSC Supervisor Wins Spot On U.S. Team For World Meet

Frank Parmenter whose boy-hood model airplane hobby turned into a fulltime career with NASA will represent America in the international model flying event scheduled to be held next summer in Sweden in 1971.

This is the third time he has won a berth on the U. S. team in a world meet. He was a U. S. team member in 1965 (Finland) and 1969 (Austria).

Parmenter, a Supervisory Production Controller for Technical Services Division, has been taken with making model aircraft since his childhood days. In fact his hobby was the reason for his joining the National Advisory Committee for Aeronautics, predecessor of the NASA.

"In 1941 the NACA obtained the names of model airplane builders from the national association and offered many of us jobs as model makers," Parmenter recalls. He joined NACA at Langley Field, Va. and nearly three decades later he is still associated with the same work.

Parmenter won his place on the nine member U. S. team at the annual U. S. Federation Aeronautique Internationale team selection meet at Albuquerque, New Mexico over Labor Day weekend. His entry was in the Wakefield

competition, a special class which limits the plane's wingspan to 297 square inches and its weight to eight ounces.

Parmenter built his rubber band-powered craft in his shop at his Friendswood home. Material cost represents about a \$10 investment. "But its priceless and irreplaceable. Its all that tender loving care which goes into it," he said.

He took three models to the Albuquerque meet. One crashed into a powerline on its fifth flight, a second was *lost* on its fifth flight and the third craft turned to be the point-getter for the NASA veteran.

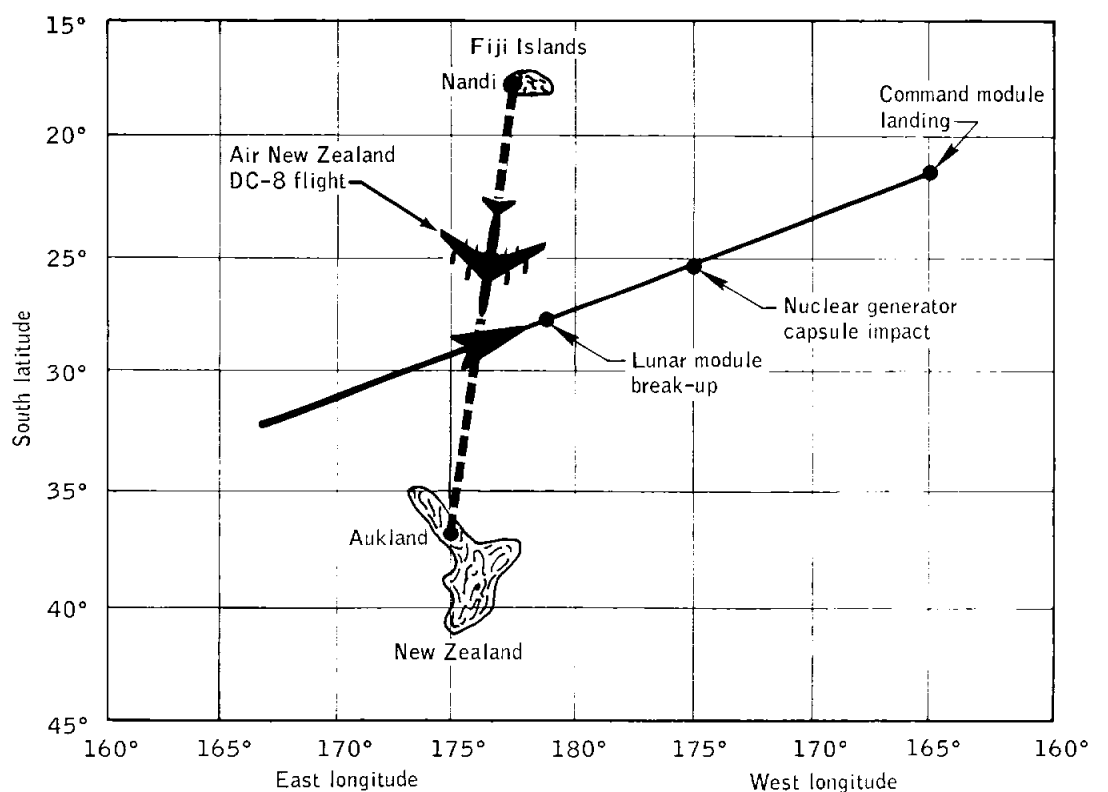
Parmenter was not the only MSC model planer in the U. S. meet. Dick Colonna of Apollo Spacecraft Program Office, Warren Gillespie of Engineering and Development, Fred Pearce of Science and Applications and George Xenakis of Guidance and Control, also competed.

Gillespie and Xenakis have represented the U. S. in previous world meets.

Commenting on his third international meet, Parmenter said "Its great, I'm looking forward to renewing friendships I made during the 1969 meet in Austria."



SOARING HIGH — Frank Parmenter of Technical Services Division with one of his winning model airplanes which recently won him a slot on the U.S. team for the world wide model in Sweden during the summer of 1971.



An unidentified airline passenger snapped these photographs, believed to show the Apollo 13 Service Module and Lunar Module entering Earth's atmosphere over the Pacific on April 18, 1970. The plane, an Air New Zealand DC-8, was mid-way between the Fiji Island of Nandi and Auckland, New Zealand when the photograph was taken.

Balloon Payload— MSC Outplacement Center Helps In Relocating Employees

(Continued From Page 1)

series of power lines the following morning where the balloon was separated from the payload. The balloon still containing a portion of its 20.8 million cubic feet of helium, drifted eastward and fell to a point near Brandon, Canada — about 100 miles north of Winnipeg.

In House Project

(Continued From page 2)

will literally permit the instructors to look over the shoulder of the astronauts during training exercises as well as monitor what is taking place on their consoles.

Other modifications included installations of the capability for pressurizing the astronauts space suits, plus equipment to enable the crew to use their water cooled garments in the LM while suited.

The MSC outplacement center has had considerable success in finding new jobs for employees affected by the current reduction in force.

Outplacement manager Stanley Goldstein said over 50 MSC employees have been placed so far, most of them in jobs with other Federal agencies. The Federal Aviation Agency (FAA) in Houston and the Department of Transportation in Boston, Mass., have hired the largest number of former MSC employees.

Other agencies who have hired displaced employees are the Department of Health Education and Welfare the Corps of Engineers (U.S. Army at Huntsville, Ala.), Goddard Space Flight Center, The Internal Revenue Service in Fort Worth, the U.S.

Customs Service at Eagle Pass and also Ellington Air Force Base.

An additional 15 people affected by the reduction in force at MSC plan to attend graduate schools. A number of others, mostly engineers and scientists, are considering offers from industry.

Thirty four companies have held interview at MSC. Altogether 110 employees have had about 300 interviews. Over 1,100 contacts (letters and phone calls) have been made by the MSC outplacement center and replies are still coming into the center.

A total of 155 employees are being released by this reduction in force.