ROUNDUP

NASA MANNED SPACECRAFT CENTER HOUSTON, TEXAS

VOL. 8, NO. 7 JANUARY 24, 1969

LUNAR LANDING CREW — The NASA announced the prime crew for Apollo XI on January 10, 1969 and astronauts (L-R) Edwin E. Aldrin, Neil A. Armstrong, and Michael Collins met the press and outlined their proposed mission. Armstrong (spacecraft commander), Aldrin (lunar module pilot) and Collins (command module pilot) are shown in front of the lunar module mockup at Bldg. 1.

APOLLO XI –

Flight Crew Named For Possible Lunar Landing

NASA named astronauts Neil A. Armstrong, Michael Collins, and Edwin E. Aldrin, Jr. to begin training as prime crewmen for the Apollo XI mission planned for July 1969.

Apollo XI is currently considered as the earliest possible mission in the Apollo Program to attempt a landing on the moon. It is possible, however, that either of the two preceding missions, Apollo XI and X, could demonstrate a need to fly an alternate mission on Apollo XI, thus moving the lunar landing to a later flight.

Armstrong will be Apollo XI commander; Collins will be command module pilot; and Aldrin will be lunar module pilot.

The backup crew will be James A. Lovell, Jr., William A. Anders, and Fred W. Haise. The flight crew support team includes John L. Swigert, Ronald E. Evans, and William R. Pogue.

If it is determined that Apollo XI is to be a lunar landing mission, Armstrong and Aldrin will man the lunar module when it descends to the lunar surface. Collins will remain in the command/service modules in orbit around the moon.

Armstrong and Aldrin were commander and command module pilot for the Apollo VIII backup crew. Armstrong was command pilot of the March 1966 Gemini VIII mission and Aldrin completed 5 hours and 30 minutes of EVA during the November 1966 flight of Gemini XII.

Collins was originally assigned as command module pilot of Apollo VIII but had to be withdrawn from flight status for surgery to remove a bone spur growth from his spine. During the July 1966 flight of Gemini X, Collins completed 89 minutes of EVA.

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Borman Takes New Post As Slayton's Deputy

Frank Borman, Commander of Apollo VIII, was named January 9 as Deputy Director of MSC Flight Crew Operations.

The promotion to the directorate level includes responsibilities for activities of the Astronaut Office, the Aircraft Operations Office, and the Flight Crew Support Division. Director of Flight Crew Operations is Donald K. Slayton.

"Frank has a tremendous background in engineering, flight test and as an instructor," Slayton said. "He will be of enormous help to us in assuring proper pilot training in the critical months ahead."

Prior to the historic Apollo VIII flight around the Moon in December, Borman performed a variety of special duties, including backup command pilot for the Gemini IV flight and a member of the Apollo 204 Review Board.

As command pilot of the history-making Gemini VII mission, launched on December 4, 1965, he participated in establishing a number of space "firsts" — among which are the longest manned space flight (330 hours and 35 minutes) and the first rendezvous of two manned maneuverable spacecraft as Gemini VII was joined in orbit by Gemini VI. He was selected as

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APOLLO VIII PERFORMANCE –

NASA'S Highest Awards Presented at MSC Ceremonies

An accumulation of individual and group achievement awards in support of the Apollo VIII flight was made January 13 at an MSC ceremony.

Twenty-three MSC employees are among the more than 100 civil service, military and industry management personnel that were recognized for Distinguished, Exceptional and Public Service.

Slated for group achievement recognition were personnel of the USS Yorktown; its air group; the Manned Spaceflight Network and the Office of Public Affairs. A Public Service Group Achievement Award was presented to the Apollo VIII Communications Network, an industry group.

Recipients of the NASA Distinguished Service Medal included a dozen of the agency's top management personnel including Dr. Robert R. Gilruth, Christopher C. Kraft, Jr., and George M. Low, all of MSC. The NASA DSM is the highest honorary award in the agency that can be conferred on an individual. It is given to those persons in the Federal Service who, by distinguished service, ability or courage, have personally made a contribution representing substantial progress to aeronautical or space exploration in the interest of the United States.

A similar honor — the NASA Public Service Award — is granted to any US citizen who is not an employee of the Federal Government but whose meritorious contributions have produced tangible results which measurably improve, expedite or clarify manufacturing techniques, scientific progress, work methods or other efforts related to the accomplishments of the mission of NASA.

MSC employees awarded the NASA Exceptional Service Medal included Donald D. Arabian, Clifford E. Charlesworth, Aaron Cohen, Lynwood C. Dunseith, Maxime A. Faget, Robert A. Gardiner, Wilbur H. Gray, Jerome B. Hammack, Richard S. Johnston, Kenneth S. Kleinknecht, Joseph N. Kotanchik, John P. Mayer, Owen E. Maynard, Warren J. North, Ralph S. Sawyer, Scott H. Simpkinson, Sigurd A. Sjoberg, Donald K. Slayton, Joseph G. Thibodaux, Jr., and Howard W. Tindall.

Also listed for honors were the 14 members of the Science Technology Advisory Committee. They received NASA Certificates of Appreciation.

Recipients of the Distinguished and Public Service Awards received a tiny gold lapel emblem, ribbon rosette, certificate and gold medal.

$3.5 Million Award To Bendix For Science Package

The NASA has signed a $3.5 million supplemental agreement with the Aerospace Systems Division of Bendix Corporation, Ann Arbor, Michigan for the fabrication and delivery of two scientific experiments which Apollo astronauts will place on the Moon's surface on the first lunar landing.

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NR Awarded Mods Design AAP Contract

NASA has awarded a contract to North American Rockwell Corporation Downey, California, for the preliminary design of modifications to the Apollo Block II command and service modules for use in long-duration Apollo Applications missions.

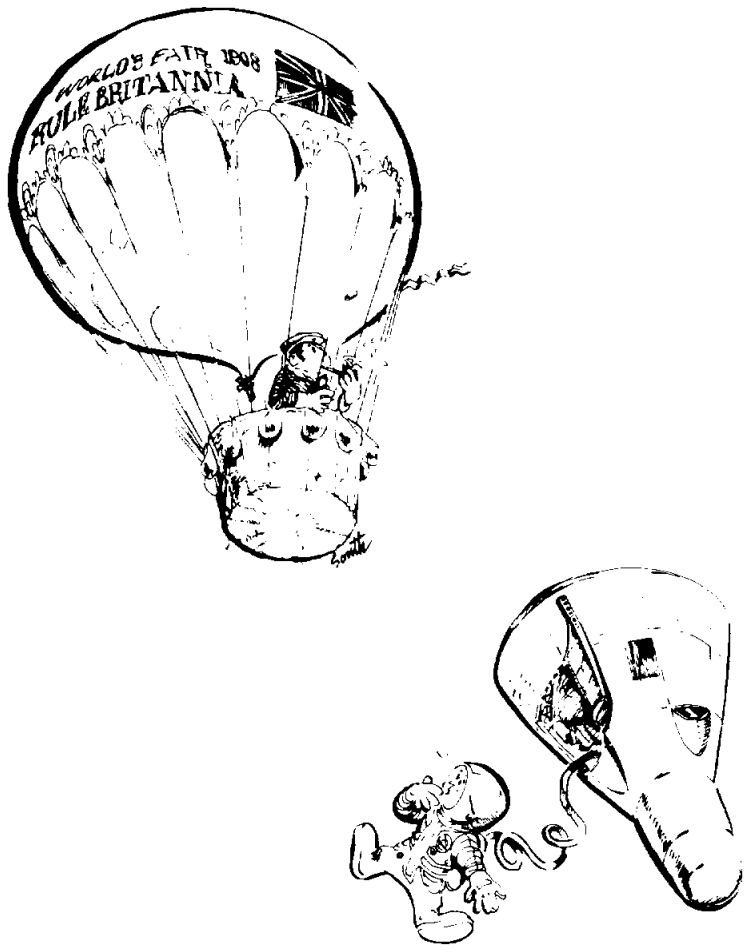
The six-month, cost-plus-fixed-fee contract is valued at about $7 million.

DSM TO DIRECTOR

FOR DISTINGUISHED SERVICE — Dr. Robert R. Gilruth, Director of MSC, accepts NASA's Distinguished Service Medal from Dr. Thomas O. Paine, acting administrator for NASA at ceremonies here on January 13. Dr. Gilruth was among 12 of NASA's top management to receive the DSM at a program in the Bldg 1 auditorium.

THE ASTRONUTS

(filched from TRW Systems Group)



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.

Director . . . . . Dr. Robert R. Gilruth
Public Affairs Officer . . . . . Paul Haney
Editor . . . . . Terry White
Staff Photographer . . . . . A. "Pat" Patnesky

'Twas a Great View, Mayor'

HIS HONOR—Houston Mayor Louie Welch was the recipient of a Texas flag and an enlarged photo of the Moon at the close of the "big city" welcome accorded Apollo VIII astronauts on January 13. Astronaut James Lovell is holding the photo and Mayor Welch holds the flag and Apollo VIII patch he received from the crew. The VIII crew—astronauts Frank Borman, Lovell and Bill Anders, were welcomed to town by a crowd estimated at more than 250,000. Texas Governor John Connally who also received a Texas flag from the crew is standing beside the Mayor.

MIT Receives $2.9 Million Award

The NASA has signed a supplemental agreement with the Division of Sponsored Research of Massachusetts Institute of Technology, Cambridge, Massachusetts, valued at $2,919,000 for the fabrication and delivery of 40 inertial reference integrating gyros (IRIG's) for the Apollo guidance and navigation system.

The agreement provides for a backup capability of IRIG's to support the Apollo program.

UofH Adds Course to Clear Lake Grad Center

The University of Houston has added a course in Operations Research to its list of spring semester course offerings at the Clear Lake Graduate Center. The course, IE 471, will be held from 7:30-9:00 a.m., on Tuesday and Thursday.

MSC Form 75's from MSC employees who wish to enroll for this course will be accepted by the Employee Development Branch through Wednesday, January 29. Employees may then sign up for the course at late registration, which will be held Friday, January 31, from 9:00-11:00 a.m., in the Public Information Office Briefing Room in Building 1.

Co-op of Month

DIAGNOSED & RESOLVED PROBLEMS—William H. Powell, Jr., of Applications Programming Section of Computation and Analysis Division "displayed an unusual high level of programming competence" in performing his assigned duties during the period of preparation for Apollo 8.

XI Crew Named

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Lovell was command module pilot of Apollo VIII which recently completed 10 revolutions of the moon. Lovell previously flew in the 330 hour and 35 minute Gemini VII flight of December 1965 and in the Gemini XII flight of November 1966.

Anders was lunar module pilot aboard Apollo VIII flight and served as backup pilot for Gemini XI.

Haise, one of the 19 astronauts selected in April 1966, served on the astronaut support team for Apollo VIII. Swigert, Evans, and Pogue were members of the Apollo VII astronaut support team.

Your Job in Focus

Reporting Line-of-Duty Injuries or Illness

In order to be eligible for benefits under the Federal Employees Compensation Act, a written report of any injuries or illnesses which are work related should normally be made within 48 hours. Cases of latent disability should be reported as soon as the employee is aware of the condition and has reason to believe it is job related. Failure to report job related injuries in a timely manner can jeopardize the employee's right to benefits under the Compensation Act.

For these reasons it is important that injuries sustained at work or illnesses which are job related be promptly reported to the Occupational Medicine Branch, Building 8. All injuries or disabilities should be reported regardless of how minor they may appear at the time. Occupational Medicine Branch personnel will assist the employee in preparing the official report of injury or illness. The employee's supervisor also should be notified as soon as possible in the event of the job related injury or illness.

Employees may not realize that there is no charge to leave for absence for the time required for examination, medical care, or hospitalization required *on the date of the injury*. However, absences from the Center on succeeding days due to this injury must be charged to available sick leave, annual leave, or approved leave-without-pay.

Advance of Sick Leave

Permanent employees may be advanced sick leave up to a maximum of 30 days in cases of serious disability or illness, and provided it is anticipated that employment will continue after the employee's recovery. The advance may be granted only if the employee has no accumulated sick leave to his credit, and it will then be charged against sick leave earned in following pay periods.

Requests for advance sick leave may be made to the immediate supervisor on MSC Form 2155 and must be supported by a medical certificate. Details regarding this application procedure and the conditions regarding advancement of sick leave may be found in MSCM 3000, Part 6.2.

Borman to Deputy

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an astronaut by NASA in September 1962.

Borman entered the Air Force after graduation from West Point and received his pilot training at Williams Air Force Base, Arizona.

From 1951 to 1956, he was assigned to various fighter squadrons in the United States and the Philippines. He became an instructor of thermodynamics and fluid mechanics at the Military Academy in 1957 and subsequently attended the USAF Aerospace Research Pilots School from which he graduated in 1960. He remained there as an instructor until 1962. He has accumulated over 5,500 hours flying time, including 4,500 hours in jet aircraft.

Awards to astronaut Borman including the NASA Exceptional Service Medal, Air Force Astronaut Wings, and Air Force Distinguished Flying Cross; recipient of the 1966 American Astronautical Flight Achievement Award and the 1966 Air Force Association David C. Schilling Flight Trophy; co-recipient of the 1966 Harmon International Aviation Trophy; and recipient of the California Institute of Technology Distinguished Alumni Service Award for 1966.

WAS MISSION DIRECTOR—

Schneider to Direct Apollo Applications

Apollo mission director William C. Schneider has been appointed director of Apollo Applications at NASA Headquarters.

Schneider, who succeeds the late Harold T. Luskin in the Apollo Applications post, assumed his new duties after the completion of the Apollo VIII lunar orbit mission. Luskin, who was an internationally known aerospace leader, died November 25.

Replacing Schneider will be George Hage, deputy director of the Apollo Program who will be acting mission director in addition to his present duties.

In his new post, Schneider will have overall responsibility for the Apollo Applications program. Apollo Applications is designed to make use of the hardware developed for the Apollo manned lunar landing program to carry out extensive and long-duration Earth orbital operations.

Flights in Apollo Applications are scheduled to begin in 1971. Missions include the establishment of the Saturn I workshop in Earth orbit and the later attachment to the workshop of the Apollo telescope mount. Three-man crews will occupy the workshop and operate the telescope system for periods of up to 56 days.

Schneider became Apollo mission director in July 1967. Prior to that he had been Apollo Applications mission director from January 1967. He was Gemini mission director for nine of the manned Gemini missions and also served as deputy director of the Gemini Program.

Roundup Swap-Shop

(Deadline for Swap-Shop classified ads is the Friday preceding *Round up* publication date. Ads received after the deadline will be run in the next following issue. 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 in writing to *Roundup* Editor, AP3. Ads will not be repeated unless requested.)

FOR SALE/RENT—REAL ESTATE

Brick house for sale by owner, carpeted, heat, air, dining room, 3 bdrms, fenced, trees, equity $1,500, $104 payments. Freeway Manor, exclnt cond, David Hogg 946-7995.

Fairmont Park-3-2-2 brick, central air/heat, fenced, dishwasher. $17,756. Equity, assume $13,174—consider lease $190. M. Ownes 483-3803.

Hillcreast Village, Alvin-Colonial House, three bedrooms, two baths, dble garage, 110x195 lot. Faye Roper 658-5514.

Freeway Manor—3 bdrm, living-dining room, air, carpet, fenced, 5¼% loan, $90 mo. equity. K. L. Byerly 944-4545.

League City-One acre lot, 300 foot frontage on FM 518, priced for quick sale. B. Sprague 932-4363.

FOR SALE/AUTOS

68 Impala sports sedan, full power, air, 327 engine, turbohydramatic, AM/FM, Paul-Weitz, 591-2071.

68 Ford LTD-4 dr, hardtop, V-8 automatic trans, vinyl top, AM/FM, air-power steering, 10,000 miles, $2,595. Bennie Oczkowski, WA 6-8994.

67 Pontiac Firebird, V-8, auto-trans, radio, air, power steering, 25,000 miles, $2095. B. Oczkowski, WA 6-8994.

67 Mustang, 289 V-8, limegold, hardtop, factory air, auto-trans, new tires, exclnt cond., $1,950. Bailey 877-4898.

66 Pontiac GTO, 2-dr HT, 389 V-8, 4-speed, air, red w/white Interior, exclnt cond, original owner. Paul M. Joyce, 932-5165, League City.

66 VW fastback, sun-roof, AM/FM, exlnt second car, $1,150. 649-4872 after 6 p.m.

65 Buick Riviera, silver, air, AM/FM, GS suspension, chrome steel wheels, exclnt mechanically, Tom McPherson 877-1630 after 6 p.m.

65 Chevy Impala SS, gd cond, 283 engine, radio, bucket seats, must sell. Best offer takes it. W. C. Lord 932-3972.

65 Mustang convt, white/white top, 289 V-8, air, radio, 3 spd syncho trans, new radial tires, $1,050. Worden 591-3769, Cobb 591-3516.

64 Pontiac Lemans V-8, factory air, standard shift, bucket seats, new battery, $900. George Huff, 474-3825.

64 VW, blue, sunroof, 33,000 miles, gd cond., $800. V. Brand, 591-2592.

63 Corvair Monza, bucket seats, factory air, like new tires, very gd cond., $525. Glenn Smith 591-4761.

63 Chevy II, 2-dr, 6-cyl, std shift, radio, air, white w/red interior, new brakes and water pump, recent tune-up. Good dependable transportation, $300. Ben Reina, 488-1326.

57 Ford Sedan-very good condition, 15,000 actual miles $350. J. Vincze 488-1040.

55 Porsche speedster, collector's item, '58 1600-S eng and trans, new clutch & valve job, $1,400. Paul Anderson, 932-5236, League City.

'29 Model A ford tudor, mechanically restored, runs good, call Nassau Bay 591-4269.

'67 Plymouth Barracuda fastback, V-8 autotrans, factory air, $1995. Bert Smith, 877-1111.

67 Chevy II Nova Sport Coupe, 6 cyl-194 engine, standard trans., clean and good cond. $800 ($140 under book). U. S. Clanton, 482-7187.

FOR SALE/MISCELLANEOUS

Complete dble-bed, good condition, priced to sell, call D. K. Ford, 944-3027.

French provincial bedroom suit, grey with gold trim, bed, 9-dwr dresser w/mirror, 2 end tables, desk and chair, box springs w/mattress & 1 lamp. Nassau Bay 591-4629.

Poodle puppy, tiny male toy, silver, AKC-perm shots, clipped, Barbara Williams 944-1524.

Irish Setter puppies, good bloodline, $50. Dickinson, 534-2771.

Free puppies, Spaniel & Labrador blood, beautiful, all colors & sizes. Born Oct. 30, John Monroe, 482-1061.

Two male miniature poodle puppies, 8 weeks old, $45 each. J. Raymer 471-4094.

Six week old seal-point Siamese kittens, house broken, 946-6814.

Poodle Grooming and care, by appointment only. Huvar 946-5565.

65 Honda 160 cc, 7000 miles $225, S. Sayers 591-2395.

62 New Moon 55x10 expando mobile home, 2 bdrm, furnished, automatic, washer, air, utility shed, $3,500. League City 932-4000.

Pickup truck top (short bed truck) $60. Haines, WA 6-4333.

Camp 'otel cartop camper, sleeps 4, diner outfit, loading-storing sling, exclnt cond, less than 1 year old $250. R. McComb, 488-2560.

63 Model 25 ft. Lyman w/188 HP inboard. Bottom recently repainted, R. Burt, 591-2117.

16" Lone Star aluminum boat (Commander) w/20 HO Merc. o/b and tilt trailer, $350. R. Burt, 591-2117.

Outboard Motor, British Seagull, 3 HP, long shaft $100. David Cree, 487-1158.

23 ft Chris Craft Cabin Cruiser, toilet, 2 bunks, glass bottom, trailer & flying bridge, exclnt cond, $1500, Ken Thoma GR 1-2976.

Deer rifle, Remington 308, 4x Tasco Scope, case, like new $100, G. Gentry, 488-0405.

Guitar amplifier, Fender vibrochamp. Volume bass, treble, and vibrato controls, 8-inch speaker, 2 jack outlets, same as new condition. $100 value, asking $45. W. Hull, 877-1324.

Two 20-inch Sears boy-girl bikes, $15 each. R. Burghduff, 488-3263.

23" B&W TV, RCA modern console w/UHF, xclnt cond., $75. C. E. Chassay, 487-2940.

Two B&W TV's, 16" portable $55; 19" Zenith portable w/stand $75. G. Corley, 944-0854.

66 Honda Cub, exclnt cond, make an offer A. J. Ligrani, 877-4405.

20-watt Lafayette Stereo 20 solid-state amplifier, good as new $20. A. J. Ligrani, 877-4405.

Hallicrafters model S-118 shortwave receiver, 185 KHZ to 31 MHZ 5 bands; Magnavox 19" portable B&W TV 23x14x12 w/fruit wood finish; Silvertone portable stereo phono w/stereo FM/AM, two swing out speakers, Nance 946-1732.

Like new 10" B&W portable TV, four months old, $70 or good offer. Goodrick, 522-9958.

Two tickets for February 1 evening performance of "St Joan" at new Alley Theater. Aisle seats, row 10, $7 for both. Myers, 591-4673.

Will give instructions in French or German, call 591-3382, Nassau Bay.

Learn to fly with Aero Club, Cessna 150 $7/hr wet; C-172 $9/hr and K-Bonanza $16/hr. Instructor $5/hr. Ward, 877-3187.

Girls, would you like a free Pennyrich Bra? If so call Ruby Berka, GR 2-1774 after 5 p.m.

Using Mary Kay cosmetics? If so, World of Beauty special thru Jan. 31, 25% off on all-make-up. Call Myra Shimek, 643-9308 after 5 p.m.

67 Honda, 50 cc, call W. H. Carter 932-2470.

Stationary pedaling exerciser-deluxe model, cost $69, sell for $30 or swap for 26" bicycle in good condition. Stephens 487-0095.

9mm Astra 600 auto pistol, NRA exclnt, original blue. Holdster, extra magazine and 25 rnds ammo-$55. Jim Townsend 591-2545.

Baby crib w/mattress, $20; cosko playpen (nylon mesh) $10; multi-purpose sporter exerciser (new) $20; Gallagher 487-0149.

Aerobatic airplane-reed clipper wing J3 cub-75 hpw, ceconite cover, wheel pants, sunburst paint, new license, std category, sharp. Grow 944-9152.

Walnut bookcase headbord for 39" bed. Like new. $10. L. Fehrenkamp, 944-2777.

WANTED

Fold-out camping trailer, must sleep six. G. B. Foster, 487-0155.

Tenor Banjo, call J. Johansen, 932-2039.

Replacement to take over contract for room near University of Texas (Austin) during Spring semester $45 per mo. Contact Eddie Osbourn, 900 W. 22nd St., Austin, Texas 78705 or call Mrs. Lerdon (MSC Personnel Office).

Couple who flew to NYC by American Airlines on afternoon Dec. 20, with five month old baby whose picture was taken by Dr. W. A. Burns, Director of Witte Memorial Museum, Contact 2135.

Need girl to share a 2-bdrm Villa Monterrey apt with 2 other girls, call 944-6920 after 5 p.m.

Want to join car pool from area north of Red Bluff rd and So of LaPorte Fwy, 8-4:30 p.m., M. Pettit, 472-1425.

LOST/FOUND

Lost—One gold earring, shape of rose. Lost between Bldg 16a parking lot (in front of 1 and 13). If found please contact Myra Shimek. 643-9308 after 5 p.m.

Lost—Dog, answers to "Brownie", dragging runner chain when strayed in League City. Kansas tag on collar. Childs Christmas present. Reward D. K. Robbins 932-5076 or 483-3041.

Found—stablizer & other parts of R/C Cessna 150. Explain and claim at 2802 Oak Drive, Dickinson, 534-3327. L. R. Westfall.

MSC Volley Ball Meeting Set For Feb. 11

A meeting will be held February 11 to discuss organization of the 1969 MSC employee volley ball league.

Team managers are invited to attend the session which begins at 5:15 p.m. in Rm 171 of Bldg 4. Further information may be obtained from D. L. Doherty, ext. 5261.

MSC Spanish Club Will Start Feb. 10

The Spanish Club of MSC is again planning to offer courses in conversational spanish at both the beginner and the intermediate levels. Classes will begin the week of Feb. 10 and run through the week of May 26.

For additional information call Norman Chaffee, ext. 4776.

$3.8 Million Awarded MSC Resource Work

Two separate contracts totaling $3.8 million for aircraft modifications and new equipment were awarded last week by the NASA for MSC's earth resources aircraft research program.

The first, which went to Greenville Division of LTV Electro Systems, Greenville, Texas, calls for extensive modifications to the center's C-130B aircraft. The $1.4 million award calls for completion of the repairs and modifications to the four engine aircraft within six months. When work is completed the C-130B will join other aircraft used in the MSC program.

A $2.4 million contract was awarded to the Aerospace Systems Division of Bendix Corporation for a multispectral scanner system for the aircraft program. The contract calls for the delivery of a multispectral scanner and data processing station.

The airborne scanner is an electronic imaging device which will study the identification of geological, oceanographical, hydrological and agricultural/forestry features by the energy they emit and reflect. The scanner will be capable of "seeing" 24 simultaneous channels of information in the ultraviolet-visible-infrared spectrum which will be processed and analysed in the ground data processing station, also to be supplied by Bendix.

Employees Invited To See Film on Weight Control

"A SONG FOR ARTHUR," a film to encourage viewers to undertake a safe and effective means of weight control—and succeed—will be shown on February 5, 1969, at 3:00 p.m., in the Auditorium, Bldg. 1.

The exercise physiologist from the Cardiopulmonary Laboratory, Phillip Thomas, will speak on physical fitness. All civil service and contract employees are invited to attend this Educational Health Program.

Lunney Briefs Coops On MSC Operations

Apollo flight director Glynn Lunney gave Cooperative Education students at MSC a briefing on the upcoming earth orbital mission scheduled for February 28.

Lunney briefed the students in the Mission Control Center and explained the operations of the center and the duties of the flight directors and the other personnel working during a manned mission.

Call Is Out For Future "Tenderfoots"

A new Boy Scout troop is being organized in the Clear Lake area under the sponsorship of the Gloria Dei Lutheran Church at 18220 Upper Bay Road in Nassau Bay.

Boys who are under 11 years of age with an interest in becoming a member of the Boy Scouts of America are invited to attend the meeting on January 28. Dads are also invited to attend.

Emphasis will be on camping. A call is also out for advance Scouts who are able to serve as troop leaders. For further information call Jim Townsend, Nassau Bay 591-2545.

Tennis Anyone?

An effort is being made to form a tennis group with emphasis on family participation.

Those interested are invited to attend a 'fun' tournament set for Jan. 25 at 12 noon at the Strawberry Tennis Center, Strawberry Rd., Pasadena. Call Herschel Jamison at ext. 6387.

Organizational Changes In AAP Announced at MSC

Organizational changes have been made in the Apollo Applications Program Office to more clearly define responsibilities for conduct of the program. The changes are the result of last September's definition of AAP transferring primary hardware development for the Airlock Module Telescope Mount to Marshall Space Flight Center.

The changes include:

—Redesignation of the Future Mission Projects Office into the Command and Service Module Project Office. Harold E. Gartrell continues to serve as Manager of this office with James C. Shows as deputy manager.

—Redesignation of the Orbital Workshop Project Office into the Orbital Assembly Project Office. Reginald M. Machell who served as deputy manager of the Future Missions Projects Office is designated manager of the Orbital Assembly Project Office.

—The Program Control Office is redesignated the Management Operations Office. Walter D. Wolhart who has been serving as deputy manager of this office is named manager and James B. Jackson is named deputy manager.

—The Systems Engineering Office is redesignated the Engineering Office. Homer W. Dotts continues to serve as manager with Charles K. Williams his deputy. The Test Operations Office is renamed the Manufacturing and Test Office with W. Harry Douglas continuing to serve as manager and Robert L. Blount named deputy manager.

—The Mission Operations Office is renamed Missions Office. Wyendell B. Evans remains as manager and Alfred A. Bishop continues as deputy manager.

Kenneth F. Hecht, formerly manager of Orbital Workshop Project Office, has been reassigned to the Biomedical Technology Division of the Medical Research and Operations Directorate where he will serve as Assistant Chief for Engineering.

Home-town Welcome for Apollo VIII

THOUSANDS ON HAND—More than 2,000 Houstonians were on hand to welcome the Apollo VIII crew following their historic lunar orbit flight. The crew was given a warm Texas-style welcome when their Airforce jet set down at Ellington Air Force in the wee-hours of December 29. The crew, headed by spacecraft commander Frank Borman (center in left photo), LM pilot William Anders (left) and command module pilot James Lovell (right) accepted the greetings of the throng (center photo) which included top MSC management, scores of fellow astronauts, MSC employees and numerous small fry. Crew autographs were in demand as evidenced by LM pilot Anders shown giving his autograph while a bright-eyed lass peers through car window (extreme right).

Science Package

(continued from page 1)

The experiments which replace the more complex Apollo Lunar Surface Experiment Package (ALSEP) include a passive seismometer and a laser ranging retro-reflector.

The passive seismometer is a self-contained 100-pound seismic station with its own earth-moon communications link. This experiment is designed to provide data on the internal activity of the moon. Dr. Gary Latham of Columbia University's Lamont Geological Observatory, Palisades, N.Y. is principal investigator.

The laser ranging retro-reflector is a wholly passive experiment consisting of an array of precision optical reflectors which serve as a target for earth-based laser systems. Data obtained will improve the measurement of earth-moon distance and the fluctuation of the earth's direct measurements from different continents. Dr. Carroll C. Alley of the University of Maryland, College Park, Maryland is principal investigator.

A third experiment—the Solar Wind Composition Experiment is being provided, developed and funded by the Swiss Government. This experiment which is designed to entrap the noble gases will be carried aboard the Lunar Module and be placed on the lunar surface and retrieved by the astronauts.

The agreement with Bendix calls for the fabrication, integration and testing of one flight unit of passive seismometer, laser range reflective experiment, central status station for data transmission to earth and a solar power array and isotope heaters.

Aero Club Shows Sanderson Film

A free demonstration film on the Sanderson Private Pilot Ground School Course will be presented at the Aero Club Meeting, Monday, January 27, 1969, at 5:15 pm in Bldg. 2, Room 517. MSC and Contractor employees and their families are invited to attend.

Foster to Speak At ISA Meeting

Norman G. Foster, Assistant Chief of Projects, Earth Resources Division, S & AD, will address the January 29th meeting of the Apollo Section, ISA. Foster's subject will be NASA's Earth Resources Program.

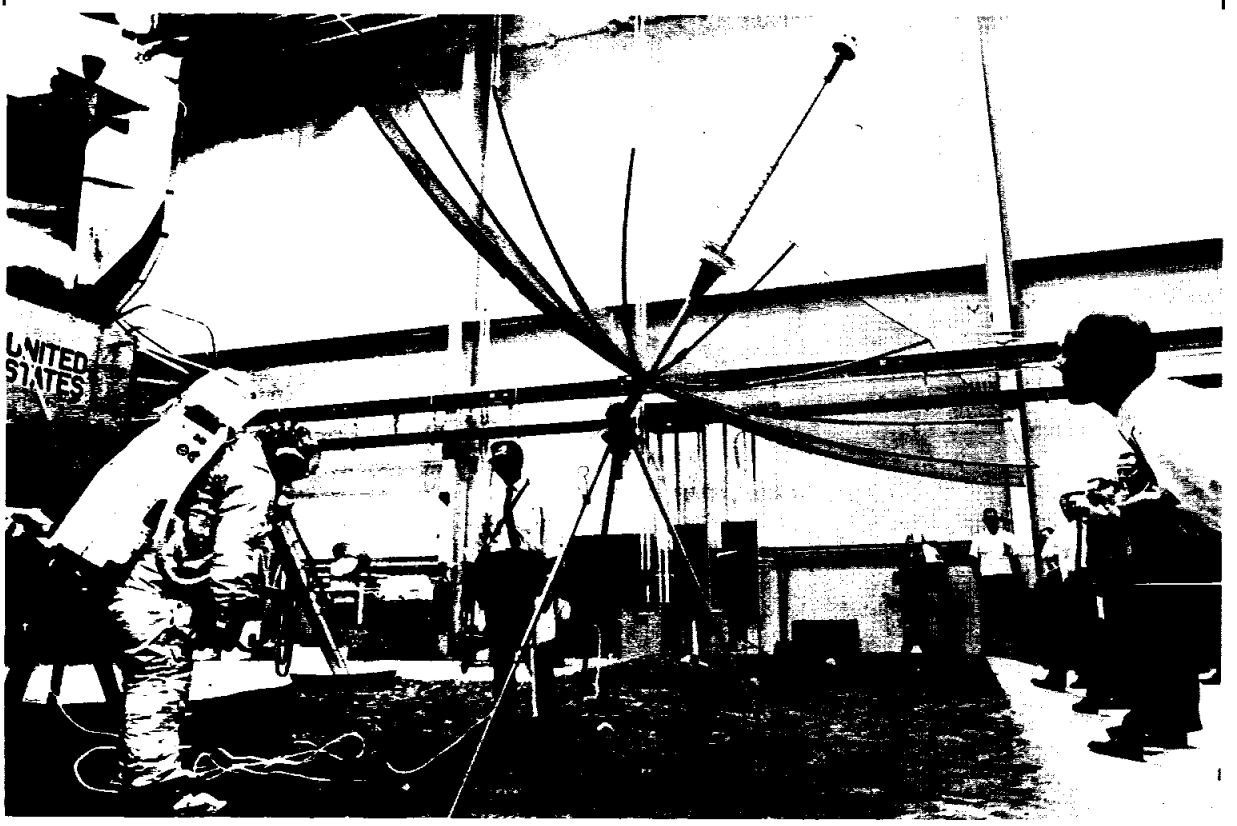
The meeting will be at the Ramada Inn starting with a social hour at 5:30 P.M., dinner at 6:15 P.M. and the program at 7:00 P.M.

Foster has been with NASA since 1962. His talk will explore various aspects of the Earth Resources Program, a program established to study the feasibility of using remote sensors to locate and inventory the planet's natural resources.
For reservations or information, call HU 3-3173.

Ice Skaters

It's time for the EAA Youth Ice Skating Party!! There will be thrills and spills on Saturday, February 1, 1969, at the Winterland Ice Skating Rink. For information please contact Martha Caballero, extension 2421.

EASEP DEPLOYMENT



PAY ATTENTION 'BUZZ'—Apollo XI lunar module pilot Edwin E. 'Buzz' Aldrin, Jr (right) watches intently as fellow-astronaut Don Lind goes through a simulation of deploying the Early Apollo Science Experiment Package (EASEP). The simulation took place in Bldg 9 on January 21.

Low-Cost Spacecraft Module Scheduled For In-House Tests

An experimental, low-cost spacecraft module which could provide the technology base for future space station design is being readied for testing at Manned Spacecraft Center. The vehicle, called a Subsystem Test Bed (STB), represents a module of a building-block spacecraft currently under study by NASA as one approach to a space station for the mid-1970's following the Apollo Applications Program (AAP).

Dr. Maxime A. Faget, Director of Engineering and Development described the STB development as an exploratory effort aimed at reducing the current high cost of spacecraft through conservative design with associated reduction of expensive testing and certification paperwork.

To evaluate such cost reductions, said Faget, it was necessary to build a prototype spacecraft structure which could meet flight requirements and to subject it to realistic testing to assure that the STB is representative of an actual manned spacecraft.

Mission Operations Modules or MOM's similar to the STB could be linked up in orbit or on earth to form a space station, with the same basic structure serving as subsystems module, crew quarters, experiment carrier, or resupply carrier. Or single modules could be flown as complete spacecraft equipped to do a specific job at minimum cost.

The STB structure was designed and fabricated by the Martin-Marietta Corporation, Denver under a NASA Supporting Development contract for $315,000. Hatches, windows, trusses and other auxiliary equipment are being fabricated by small contractors primarily located in the Houston area.

Dr. Faget pointed out that through the Supporting Development Program long-lead developments can be achieved with a relatively small investment in manpower and funds. In addition, he said, problems can be overcome and changes can be made without the high cost resulting from delays to a flight program.

The STB is a cylindrical structure 15 feet in diameter and nine feet high. It is constructed with a removable top and side wall assembly like a cake lid, to provide easy access for subsystem installation, checkout and servicing. And it has numerous reinforced "hardpoints" and feedthru ports for flexible arrangement of external subsystems and equipment.

As a crew module, the STB is designed to maintain sea-level atmosphere and pressure, if desired, for long missions and increased safety. A "crack stopper" grid in the walls and safety valves would protect against catastophic rupture in case of accidental overpressure.

As an experiment module, flat bulkheads with exceptional rigidity can support a group of finely aligned scientific experiments. Up to 16 large experiment windows or ports can be included in each of the two bulkheads, plus experiment windows in the hatches to permit docking with and servicing a large telescope.

Emanuel Schnitzer, Chief of the STB Project Office at MSC, said the vehicle design would be verified through a series of in-house tests at MSC to be conducted beginning this spring on a "fill-in" basis between Apollo and AAP ground tests.

Tests in MSC's Space Environmental Simulation Laboratory will evaluate the STB low-heat-leak design for unconstrained operation in any orbit or attitude. Cabin air circulation tests are aimed at reducing excessive air conditioning power requirements and minimizing moisture condensation. Other unmanned tests will verify the STB structural integrity to help certify the vehicle for follow-on manned testing with advanced, integrated subsystems.

Among the subsystems being considered for testing are a long-duration environmental control and life support system and an on-board checkout system for in-flight maintenance.