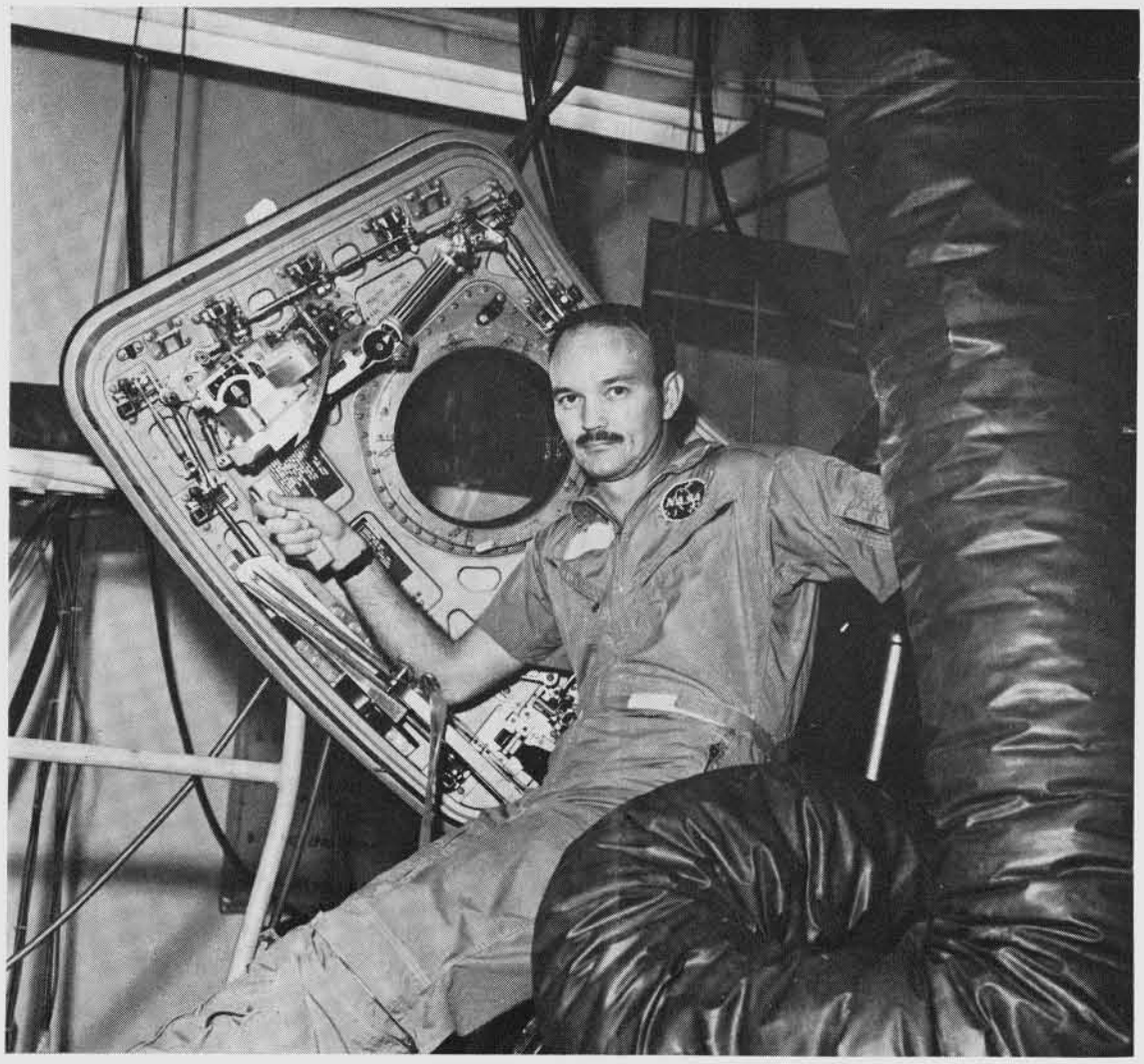
North American Rockwell
News

Space Division Skywriter
Downey, California Volume 29 Number 32 August 15, 1969

Apollo 11 Module Comes Back to Downey Home



LRL VISIT — Apollo 11 Command Module Pilot Mike Collins visited the CM in NASA's Lunar Receiving Laboratory, Houston, before he, Neil Armstrong and Ed Aldrin were released from quarantine Sunday. The spacecraft will be on display this weekend for employees and families.

Columbia on Display Saturday, Sunday for Employees, Families

The historic Apollo 11 Command Module has returned to Downey and will be on display this weekend for employees and their families.

The spacecraft will be on display in Bldg. 247 from 6-9 p.m. today and 9-5 p.m. tomorrow and Sunday. Parking will be available in Lot 18, southeast corner of Imperial Hwy. and Bellflower Blvd. Visitors will procede afoot through Gate 45B.

Since splashdown July 24, the craft, code-named "Columbia," was taken aboard the U.S.S. *Hornet* prime recovery

(Continued on Page 2, Column 3)

WORDS OF THANKS

When the Apollo 11 command module hatch was opened for the first time at the Manned Spacecraft Center Lunar Receiving Laboratory in Houston, a NASA official turned to assisting SD employees with a smile.

Inside the command module crew compartment, on a panel just to the left of the sextant, there was the following handwritten note:

"Spacecraft 107, alias Apollo 11, alias Columbia . . . the best ship to come down the line. God Bless Her.

/s/ Mike Collins, C.M.P.

Highland Named SD Coordinator

Robert Highland, former supervisor, Saturn S-II Engineering, has been named coordinator between the division and North American Rockwell Training and Services (NARTRANS).

Highland, who has been with the company eight years, will serve as a point of contract developing for division personnel desiring to make use of NARTRANS capabilities.

SCIENCE SEMINARS

The following seminars will be held at the Science Center this month:

Seminar: "Ferromagnetic Resonance in Thin Films," Aug. 22, 10:30 a.m.

Seminar: "Thermodynamic and Transport Properties of Solid Electrolytes," Aug. 29, 10:30 a.m.

BERGEN ANNOUNCES SHIFTS FOR MYERS, GREER, OTHERS

President William B. Bergen this week announced shifts in assignments for Dale D. Myers and Robert E. Greer, to strengthen the division's new business posture.

Myers, formerly vice president and general manager, Apollo CSM Programs, is now vice president and program manager, Space Shuttle Program.

Greer, formerly vice president and program manager, Saturn S-II, becomes vice president and general manager, Space Station Program.

In other moves, George W. Jeffs, program vice president, Apollo CSM Program, now fills the position of vice president CSM Programs, and, Harold Raiklen, formerly S-II chief engineer, becomes S-II program vice president.

The Apollo organizational change combines the Apollo Applications, Apollo Lunar Exploration Mission (ALEM) and the basic CSM effort.

In July, NASA awarded the division one of two $2.9-million parallel study contracts to design and plan a space station which could reach flight status by the mid-1970s. Logistics systems to re-supply expendables and rotate crews of both the Space Station and, later, the Space Base, are included in the study.

Modified existing spacecraft designs will be considered as initial logistics systems for the early phases of the Space Station Program in the event advanced space shuttle does not become available sufficiently early, NASA said.

Myers joined the company in 1943 as an aeronautical engineer and was project aerodynamicist on several airplane programs. Beginning in 1957, he led the team that designed, built and delivered more than 500 Hound Dog missiles for the Air

(Continued on Page 2, Column 1)

Space Division Employees Asked by Astronauts To Name Apollo 12

The Apollo 12 astronauts have asked Space Division employees to help them select the code name for the division-built command and service modules that will take them to and from the moon in their lunar landing mission planned for mid-November.

In a letter sent to division personnel this week, astronauts Charles Conrad, Richard Gordon and Alan Bean pointed out that "you have earned the right to aid us in making our selection through the invaluable contributions you have made to the lunar landing program. Your work at Space Division on both the spacecraft and the Saturn S-II stage has been outstanding," he concluded.

The program is limited to Space Division personnel. Employees at Grumman, who build the lunar module, are being requested to aid the Apollo 12 crew in the selection of the code name for the LM.

The person submitting the name chosen and his or her spouse will be the guests of the crew for the launch.

With the letter from the astronauts, employees received a card on which to submit the code name of their choice. A copy of the form appears on Page Four of this issue of the *News*.

Along with submitting a code

(Continued on Page 4, Column 3)

Lipjanec Likes To Walk, Not Run, on Mountains

One would have to say that Paul Lipjanec likes to walk.

Lipjanec, senior management systems analyst, Research, Engineering and Test, has walked, or hiked more than 500 miles in the past two and a half years, much of that mileage up and down the slopes of mountains.

Nearly three years ago, Lipjanec stopped being a scoutmaster and took over as adviser for Mountaineering Explorer Post 400X in South Gate.

Walking blends two of Lipjanec's interests—mountaineering and conservation. He and the nine teen-age boys in the Explorer Post have climbed "just about every mountain worth scaling in Southern California. In September, we're going to climb Mt. Whitney, highest peak in the continental United States."

Bucking a trend, Lipjanec does not favor jogging—at least for himself.

LABOR DAY

Monday, Sept. 1, Labor Day, will be observed as a holiday. Regular work shifts will be in effect on Tuesday, Sept. 2.

Only employees needed for special assignments will work on Sept. 1. Those required to work will be so notified by their supervisors.

Employees will receive eight hours' pay for Labor Day in accordance with existing policy.

EXECUTIVE GREETINGS — In photo at left, Vice President Spiro Agnew is greeted by J. L. Atwood, North American Rockwell president and chief executive officer, as former arrived for astronaut ceremonies in Los Angeles. Partly hidden by Atwood is NR Executive Vice President Robert Anderson. Right photo, Defense Secretary Melvin Laird shakes hands with W. F. Rockwell, Jr. NR chairman of the board, as Los Angeles Mayor Sam Yorty exchanges pleasantries at center. Photo was taken at airport.

DRIVERS OF MONTH — J. E. Adams, left, manager, Distribution and Traffic, congratulates June winners of Driver-of-the-Month Awards. Winners, from left were: O. E. Kirby, chauffeur; Phil Burks, in-plant material handling, second shift, and M. E. Rommereide, who works for in-plant material handling, 1st shift.

Bergen Announces Shifts . . .

(Continued from Page 1, Column 2)

Force Strategic Air Command. In 1964, he became vice president and program manager for Apollo, a post he held until last February, when he became vice president and general manager, CSM Programs.

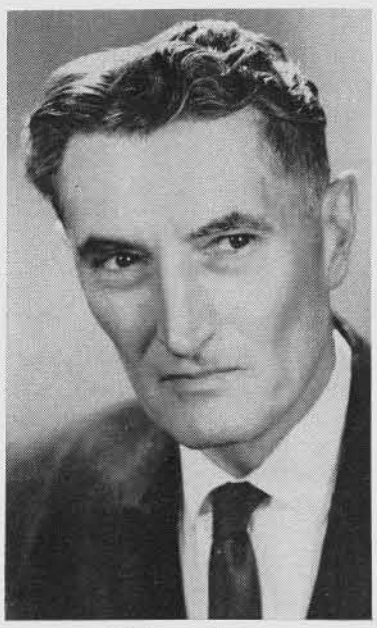
Greer, a retired Air Force major general, joined the company in July, 1965, after having directed several key Air Force space programs. A 1939 graduate of the U.S. Military Academy at West Point, Greer's military career included several Pentagon and overseas assignments. At one time he was director of Special Projects in the Office of the Secretary of the Air Force. He is a rated command pilot with more than 3,500 flying hours.

Jeffs began his career with the company in 1947 as a member of the Aerophysics Laboratory in the Los Angeles Division. From 1962 to 1964, he was vice president and program manager for the division's Paraglider spacecraft recovery system. He joined the Apollo Program in 1966 and served as assistant program manager and chief program engineer before assuming the post as program vice president, Apollo CSM Program.

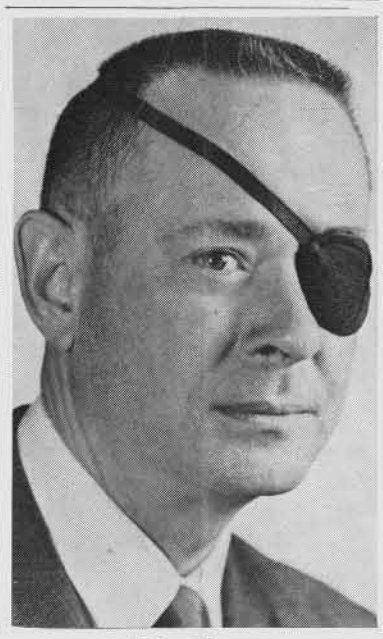
Raiklen joined the company in February, 1949, also at the Los Angeles Division. He had served in the Air Force from 1939-1945. He received his BS degree (1947) and his MS degree (1949) from the Massachusetts Institute of Technology. At the Los Angeles Division he worked on the B-70 program, and the F-100, F-107, F-108, F-86 series and the B-45 airplanes. Raiklen came to the Space Division in December, 1965, as assistant chief engineer for the Saturn S-II. He became chief engineer last August.

*** COST REDUCTION**

*** BE CREATIVE**



Robert Greer



Dale Myers

Harold Raiklen

George Jeffs

SPACE HISTORY IN MAKING

Noted Names on Rolls of Men for Lunar Missions

Much of the history of America's space program is reflected in the announcement by NASA last week of the prime crews for the Apollo 13 and Apollo 14 missions.

Prime crew members for Apollo 13 are astronauts James A. Lovell, Jr., commander; Thomas K. Mattingly, II, command module pilot and Fred W. Haise, Jr., lunar module pilot.

For Apollo 14, prime crewmen are astronauts Alan B. Shepard, Jr., commander; Stuart A. Roosa, command module pilot, and Edgar D. Mitchell, lunar module pilot.

The crew for Apollo 12, named earlier, is composed of Charles "Pete" Conrad, commander; Richard Gordon, command module pilot and Alan Bean, lunar module pilot.

All three missions will include lunar landings and exploration. Landing site No. 7 in the Ocean of Storms was selected by NASA for Apollo 12. Landing sites for Apollo's 13 and 14 are expected to be chosen this fall.

Prime consideration in site selection will be to meet scientific objectives within operational capabilities, NASA's Manned Spacecraft Center, Houston, said.

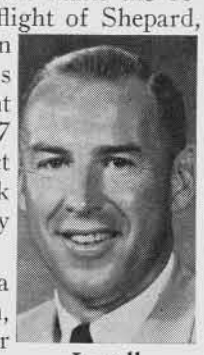
Apollo Lunar Surface Experiment Packages (ALSEP) will be deployed on the Apollo's 13 and 14 missions, extending the distribution of scientific devices on the moon's surface.

For each of the three missions there will be two periods of extra-vehicular activity (EVA). In each case the commander and lunar module pilot are expected to be afoot on the lunar surface between five and six hours compared with the slightly more than 2½ hours of EVA activity by Neil Armstrong and Edwin Aldrin during the Apollo 11 mission.

Lovell, a Navy captain, will be making his fourth space mission. He has already spent more time in space than any other human being. Previous missions include Gemini's 7 and 12, and Apollo 8. He will be the first person to have flown on two Apollo missions.

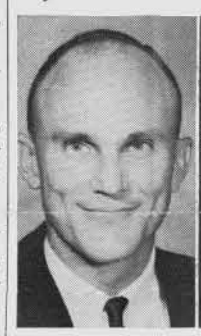
For Mattingly, 33, a Navy lieutenant commander, and Haise, 35, a civilian, Apollo 13 will be the first space flight.

Apollo 14 will mark the return to space flight of Shepard, first American in space. His suborbital flight in Freedom 7 during Project Mercury, took place on May 5, 1961.

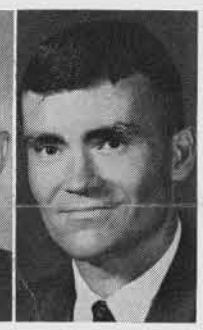


Lovell

Shepard, a Navy captain, will be 46 four days after the scheduled launch of Apollo 12 and thus, the oldest astronaut on flight status.

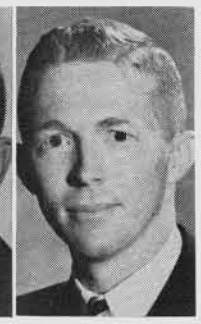


Mattingly



Haise

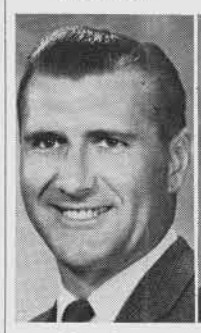
Shepard



Roosa

Mitchell

Conrad



Gordon

Bean

Roosa, 35, an Air Force major, and Mitchell, 38, a Navy commander will be making their first space flights.

Apollo 11 Home . . .

(Continued from Page 1, Column 4)

ship, to Hawaii where division teams performed "safing" operations.

The command module was then flown to Houston.

Quarantine for both the astronauts and the spacecraft ended Sunday. The Apollo 11 astronauts, Neil Armstrong, commander; Mike Collins, command module pilot, and Edwin Aldrin, lunar module pilot, were reunitel briefly with their families and preparations were begun to ship the command module to Downey.

Wednesday was quite a day for the astronauts. In the morning, they were given a ticker-tape parade in Manhattan; in the afternoon, a heroes welcome in Chicago celebrated their epic lunar landing mission. Ceremonies Wednesday culminated in an official White House State Dinner at Los Angeles' Century Plaza Hotel. The banquet, believed to be the first State Dinner held outside Washington, D. C., was attended by President Richard Nixon and hundreds of dignitaries.

Division teams who assisted MSC personnel in sterilization procedures at the LRL included Charles McKim, Gary Mortensen, W. G. Schmidt, Jr., Wilfred Anderson, Lino Salazar, Dennis Tucker, Bill Nasse, P. R. McCarley, Albert Backman, Ben Bolger and Charles Wilson. Also assisting at the LRL in Houston were Harry Peck and Al Manire, both of the NASA Resident Apollo Spacecraft Program Office, Downey.

Roelands Named Safety Manager

Don Roelands, former manager of Reliability and System Integration for the Saturn S-II, has been appointed manager of Safety.

In making the announcement, Joseph P. McNamara, executive vice president, said that Roelands "will report to the vice president, Research, Engineering and Test, but will be responsible for providing direction and coordination for all Space Division safety activities."

Senate Thanks Apollo Workers

A resolution introduced by Senate Leaders Mike Mansfield and Everett M. Dirksen has been passed by the Senate, expressing gratitude of the American people to those associated with the Apollo Program. The resolution reads:

"Resolved: That the Senate of the United States commends the magnificent effort of the men and women throughout the United States and the world at large, in government, industry, and education, whose contributions were so vitally necessary to the success of these achievements.

"Be it further resolved: That the Senate of the United States expresses its gratitude on behalf of itself and of all the American people for the dedication, courage and effort of all associated with the Apollo Program and the Apollo 11 mission."

North American Rockwell News

J. S. Elliott
Editor, *Skywriter*
Judy R. Brown
Assistant Editor
Space Division
Jack Kearney

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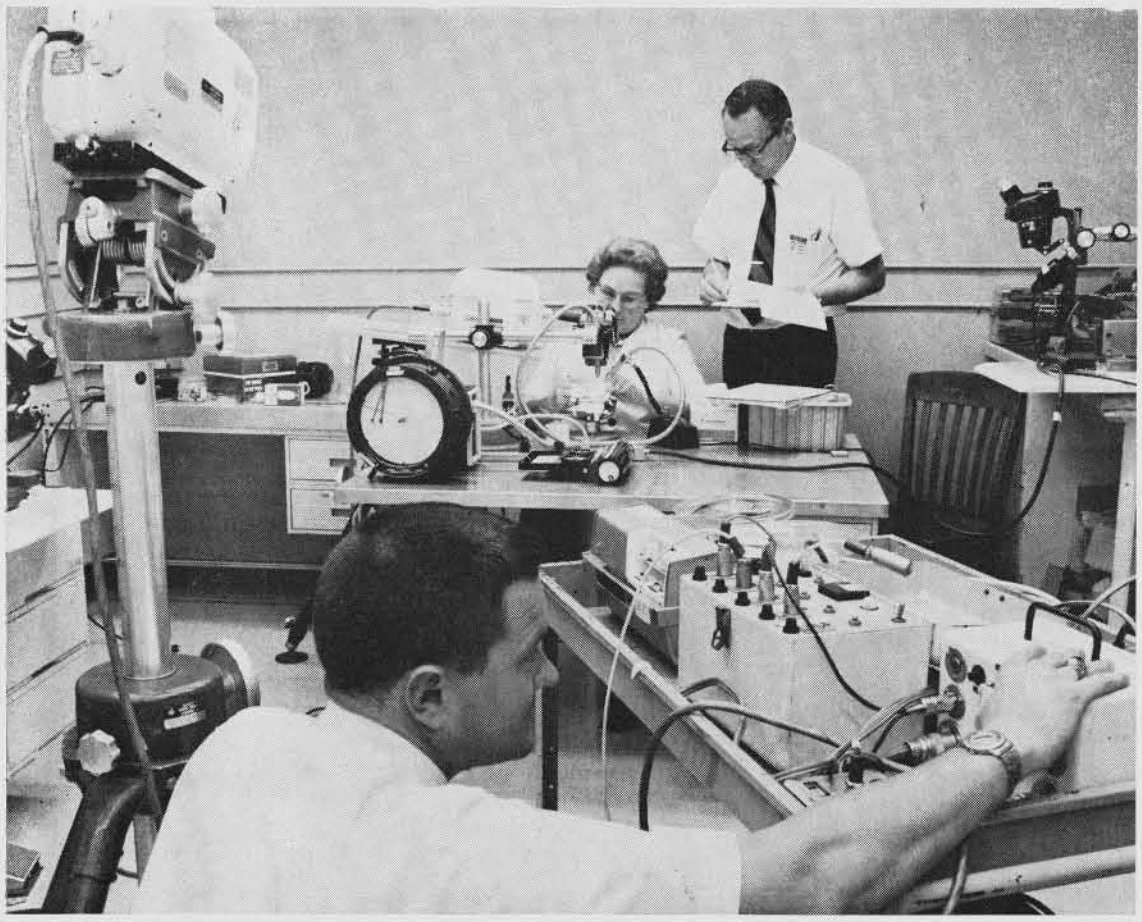
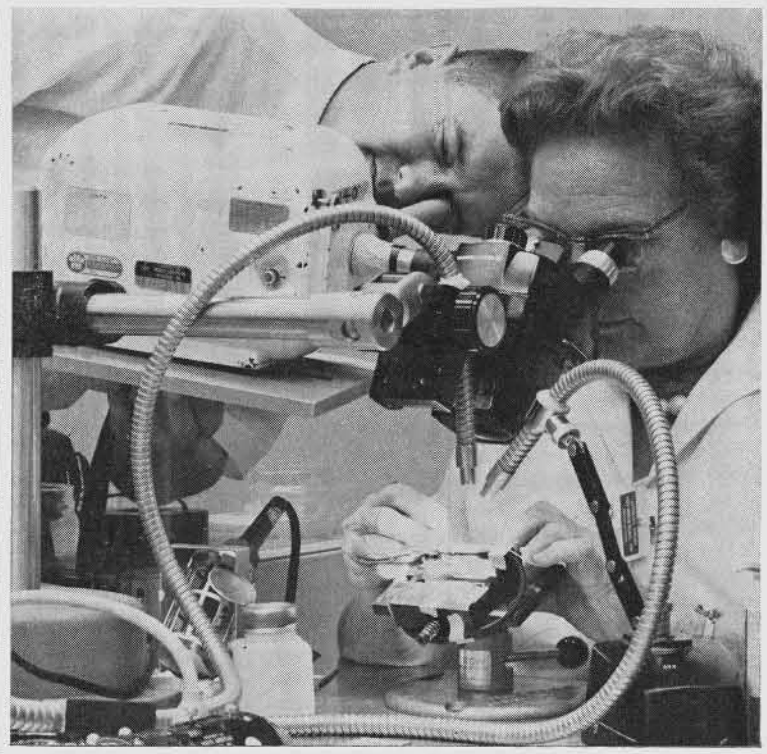
Technical Bookshelf

TECHNIQUES OF SYSTEM ENGINEERING, by Stanley M. Shinners, McGraw-Hill Book Company, $14.00 — 1967.

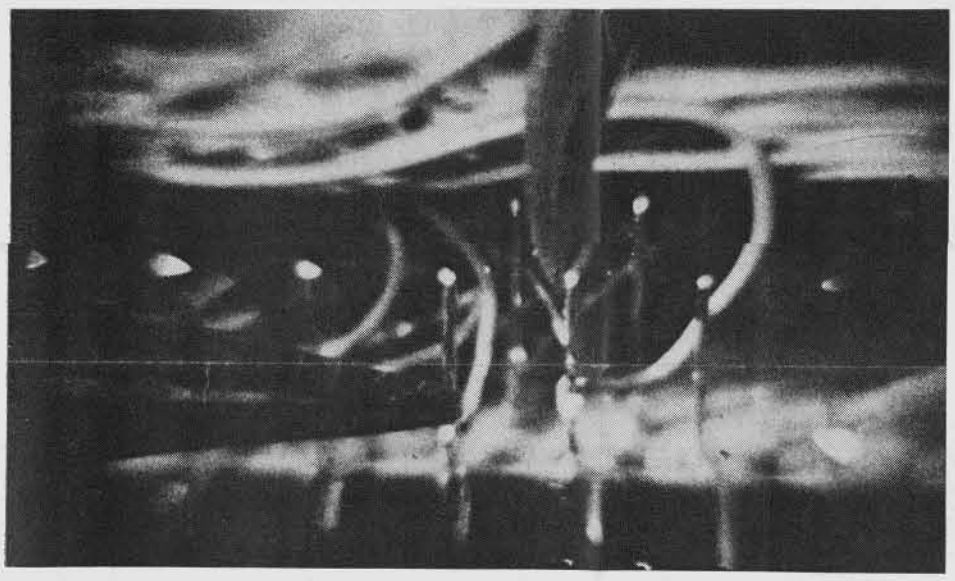
Here is the most complete and up-to-date work available on system engineering today. Covering more topics than any other book of its kind, the book is analytical in approach and emphasizes system theory and proctical applications in a clear and unified manner. State-of-the-art techniques are illustrated with current and planned applications in the commercial and military fields. The first seven chapters discuss system engineering theory as related to performance . . . reliability . . . schedule . . . cost . . . maintainability . . . optimization . . . testing . . . and the man-machine interface. These principles are then applied to the design of systems in the fields of transportation . . . command and control . . . fluidics . . . space . . . and instrumentation tracking radars.

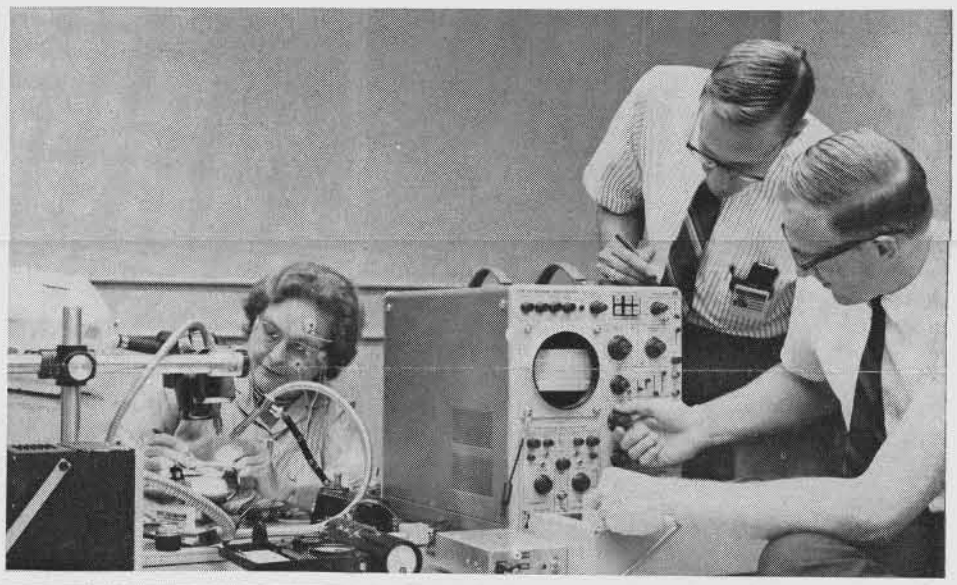
STUDY OF EYE MOVEMENTS BEING ADVANCED AT AUTONETICS



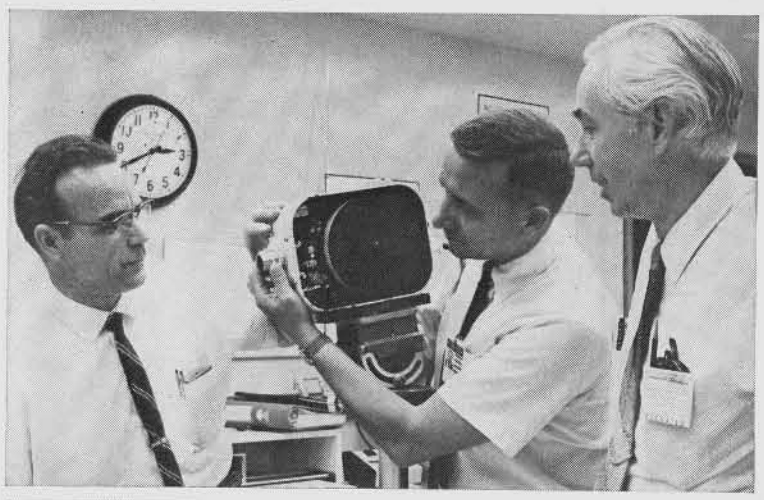


MICROSCOPIC PHOTOGRAPHY — Jerry Theaker, technical photographer, left, foreground, synchronizes equipment for filming the micro assembly. Beulah Abbott, Dept. 324, sets up assembly under microscope, as Howard Maples, manufacturing engineer, Autonetics Dept. 33, takes notes. Above, Theaker bore-sights movie camera to align it with Beulah's microscope.

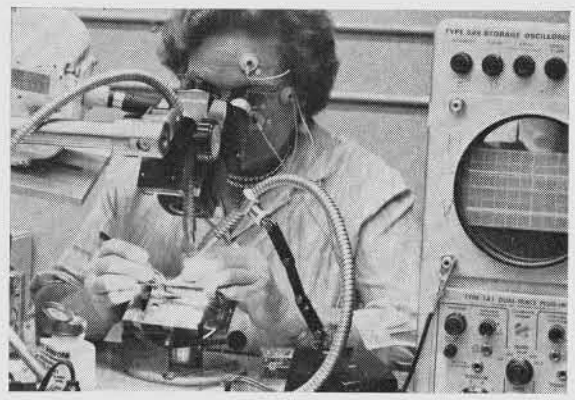




ELECTRO-OCULAROGRAPHY — Above right, Prof. Don B. Chaffin, Univ. of Michigan, right, Dan Clark, Autonetics AIM Program, set oscilloscope to monitor eye movements of assembler Beulah Abbott. Closeup, above, is greatly magnified view through microscope as she solders wires to connector.



MAGNIFICATION TECHNOLOGY — Above left, Jim Reasman of Autonetics, center, explains lens setting of high-speed camera to R. J. Zimmerman, left, of Sylvania and W. C. Thompson of TRW. At left, Dan O. Clark, left, takes data as Dr. Walton M. Hancock, University of Michigan, demonstrates eye-hand coordination board, with Jim Reasman observing. Above, W. C. Thompson and Clark analyze movie of microscopic operation. Electrodes wired to assembler Beulah Abbott, right, record her eye movements in the oscilloscope at right.



HEALEY-ARCS VS. TIGERS — Len Tinnan, right, vice president, Apollo Applications, congratulates John Healey, vice president, Manufacturing and Facilities, following the Healey-Arcs' victory, 3-0, over the Tinnan Tigers last week at Rec Center.

CAPACITY CROWD—Some 150 highly vocal partisans jammed Rec Center stands, saw the Healey-Arcs score all runs in a wild third inning. Winning pitcher, Ted Lei, collected a single during the seven-inning game. Losing pitcher, Wayne Horning, rapped out the only extra-base hit, a double, held victors to one hit, a pinch-hitting single by Joe Cuzzupoli. Tinnan's Tigers got four hits.

Classified Ads

FOR SALE

AUTOS

'55 Chev. Coupe, no eng./trans., 714-893-1644.
'56 Chev., 283 w/4 barrel, 879-6915.
'65 Impala, 2 dr., $1175, 941-0972.
'67 Chev. Caprice, $2200, 927-1093.
'62 Dodge Pickup-Util. Box, $600, 863-7594.
'66 Ford Fairlane, G.T. 390, 863-5627.
'65 Mustang, V-8, $975, 714-828-3008.
'56 T-Bird, 431-4127.
'62 Tempest, 4-cyl. auto. $300, 862-6247.
'57 VW, $275. 596-0645.

MOTORCYCLES

'68 Honda 350 cc Scrambler, 862-2053.

MISCELLANEOUS

'53 Silverstreak 22' trailer, 633-3624.
Stingray bicycle, 421-2935.
Youth wheelchair, $100, 714-826-4502.
4 8:25x14 tires, new $40, 428-6534.
Piano Accordion, Rivoli, ½ price, TO 9-3821.
Chrome Osterizer w/Maly Attach. 714-547-8116.
6'8"x5' Glass Sliding Ext. Dr. & Screen, EL 5-1769.
'58 Triumph Engine & Trans, 714-893-1644.
VC 375 Radio Transmitter, $100, 869-3971.
Silverstreak Trailer, 22 ft., 633-3624.
Polaroid #230, $40, 721-6536.
2 new 11-L-15 Tires, 682-4674.
Golf Clubs, full set, 920-2786.
Elec. Cement Mixer, $70, 213/943-2574.
Script Manual Typewriter, $75, 714/879-6319.

FOR SALE

MISCELLANEOUS

Mower, $30, FR 2-5049.
Camper for '59 Ranchero, 714/630-0352.
Amplifier & Speakers, $325, GA 3-3661.
10 speed bike, 892-9834.
35mm Cannon Camera, 892-9834.
DOXA Skin Diving watch, 714/636-3536.
8 M/M Bolex, 714/636-3536.
16' Terry Trailer, 429-5568.
Piano Accord, Rivoli, TO 9-3821.
Elec. guitar, $100, DA 9-0647.
Yashika 8 string guitar, 438-2327.
Bari Sax, Gold Plated, $300, 714/JE 7-3845.

HOMES

3 bdrm & Guesthouse, 2¾ ba., 925-6825.
4 bdrm, pool, Canoga Park, 340-5863.

BOATS

18' Unfinished boat, $350, UN 3-9476.
Venture 21 Sailboat, fully equipped, 714-528-9723.

PETS

1 yr. Beagle w/shots & papers, 423-2016.
6 wks. old Chihuahua pups, 692-4382.

RIDE WANTED/OFFERED

Wanted, Bellflower to S.B., 7:30-4:00, 866-5648.

FOR RENT

3 bdrm, den, Norwalk, 863-0547.
Ocean Ft. apart., furn., 492-3674.
Furn. cabin, Tahoe,, weekly, 965-2344.
Vac. hse. Mountains, $50 wk., 632-4133.
2 bdrm Duplex, $130, 862-6051.
3 bdrm cabin, Tahoe, 965-2344.
Cabin, Big Bear, Sleeps 7, 598-4144.
2 br Duplex Furnished. S.B., 431-0559.
Vac. Trailer, Sleeps 5, 370-5136.
Fam. Vac. Mammoth Lakes, 714/846-3533.

JOBS WANTED

Childcare, Days, L.B., References, 426-8051.
Child Care — Lakewood & South, 867-0916.

*** COST REDUCTION**

*** BE CREATIVE**

GAME OF NAME — Janet Colmerauer, left, Janie Walker, both of Apollo Applications, ponder opportunity to suggest code name for Apollo 12 command module. Winner gets trip to the launch.

APOLLO 11 MATERIAL INCLUDED

Revised 'Man on the Moon' To Be Sold

The magazine, *Man on the Moon,* distributed to employees and throughout much of the world, will be revised to include additional Apollo 11 material and sold beginning around the end of August through Surplus Sales and division cafeterias.

The magazine was prepared by Space Division Design Graphics artists from material developed throughout the Apollo Program. The revision will include reproductions of actual photographs taken on the moon and this insert will be mailed to all Space Division employees.

Abroad, the United States Information Service distributed some 800,000 copies in 20 languages in 110 countries from Afghanistan to Zanzibar.

Wesley Pedersen, of USIS, said in Washington that "*Man on the Moon* created more interest throughout the world than any other publication we've ever issued." From USIS posts came these reports of popular demand.

Budapest: There was a near stampede when 5,000 Hungarians besieged the American Embassy for copies of the Magyar version.

Rome: After initial distribution, there was heavy pressure from members of Parliament, key journalists and others who were desperately seeking additional copies.

Athens: Hundreds of students and scientists came seeking copies.

Ibadan, Nigeria: Space pamphlet supply almost exhausted in somewhat chaotic tug-of-war among library users.

Hong Kong: The Colony's largest circulation Chinese language newspaper, Sing Tao Wan Pao, serialized the text.

Lima: Demand for *Man on the Moon* and other material on space was the "greatest in our experience." All Peruvian newsmen received copies of "Man."

Tehran: Comment included a personal letter from the deputy minister of the Imperial Court expressing his appreciation.

Manilla: *Man on the Moon* was used extensively by newspapers and television stations throughout the Philippines.

Kuwait: At a special embassy reception, hundreds of copies were literally grabbed.

Taipei: Prior to the moonwalk, USIS presented a 30-minute TV program on Apollo 11 during which *Man on the Moon* was offered. Within 36 hours, 15,000 letters of request were received.

Division Employees . . .

(Continued from Page 1, Column 4)

name, persons participating in the program were asked to explain in 25 words or less their reasons for selecting the particular name. The reason will be used in helping to determine the winner in the event the name chosen by the crew is submitted by more than one person.

All entries must be submitted on the form and sent no later than Sept. 5 to PRIDE Administration, Dept. 41-041, Mail Location EA-06. Only one entry per person will be accepted.

Apollo 12, the second lunar landing mission, is planned for launch from Kennedy Space Center on Nov. 14. Target landing site for the flight is in the Ocean of Storms, near the landing site of Surveyor 3. This will be about 920 miles from the Sea of Tranquility landing site of Apollo 11.

One of the mission objectives for the crew will be to photograph the planned landing area for Apollo 13.

As planned, Conrad and Bean will leave a bevy of scientific instruments on the moon. They also are scheduled to have two extra-vehicular activity periods on the surface, both longer than the EVA time for the Apollo 11 crewmen.

NAME APOLLO 12

My choice for the code name for the Apollo 12 command module is:

My reason for suggesting this name is:

(25 words or less)

This contest is limited to Space Division employees.
Only one entry per employee will be accepted.
Mail this form by Sept. 5 to:
PRIDE ADMINISTRATION
41/041/EA-06.
(internal mail)

NAME: _____

DEPT.: _____ *SERIAL NO.:* _____

MAIL CODE: _____ *TEL. EXT.:* _____