



Astronauts Thank 7,000 During Brief Ceremony

Tom Stafford, John Young and Gene Cernan Praise Engineering, Manufacturing

In ceremonies marked by appropriate levity and brevity, the Apollo 10 astronauts came "home" to the Space Division last week, to thank the assembled 7,000 employees for building "such a beautiful machine."

Spacecraft commander Tom Stafford, command module pilot John Young and lunar module pilot Gene Cernan, each in turn, praised the spacecraft and the persons—manufacturing as well as engineering—who made possible the outstanding success of their lunar orbiting mission last month.

The astronauts, whose mission will make safer and easier the lunar landing Apollo 11 mission next month, were welcomed by J. L. Atwood, North American Rockwell president and chief executive officer, and Joseph P. McNamara, executive vice president of the Space Division.

Others who took part in the welcoming ceremonies were K. S. Kleinknecht, manager, CSM, NASA Manned Spacecraft Center; Ralph H. Ruud, senior vice president, Operations, Executive Offices, Aerospace and Systems Group; D. D. Myers, vice president and general manager, CSM Program; R. E. Greer, vice president and Saturn S-II program manager; William H. Gray, NASA Resident Apollo Spacecraft Program Office manager; W. K. Gengelbach, NASA S-II resident manager; C. W. Guy, executive vice president, Rocketdyne.

After the ceremonies, the astronauts visited Bldg. 247, to see the command module for the first time since it left the carrier *Princeton*. The vehicle is now undergoing analysis.

Astronauts' Praise

Following are excerpts from the astronauts' remarks: Stafford: In the English language there are not too many words for the two words of Thank You. But to the crew of Apollo 10, to all you people out there, we could never say those enough. I know I have been coming to this plant for nearly seven years and I've seen a lot of you on the assembly lines, I've shaken hands with most of you. I wish I could go out there today and do all of it again, but I don't think we'll quite have time.

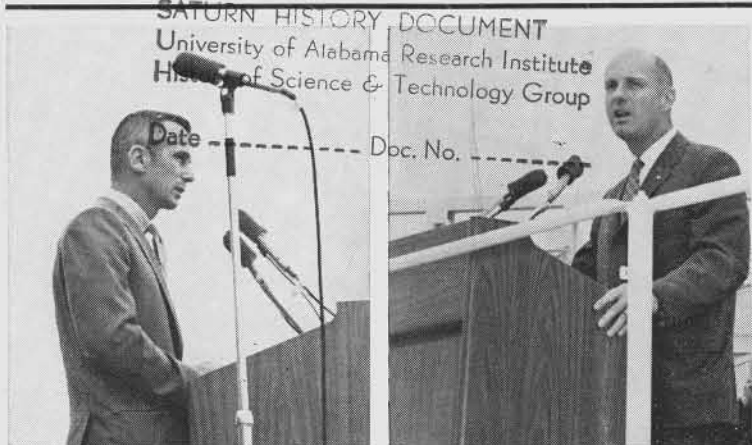
One thing that you probably didn't know... that early in the

mission we were designed only to stay in lunar orbit about 40 hours. But the requirement was put forth that we really had to pin down the lunar potential and would the crew volunteer to stay there, or have a request to stay there for another day. And we said, look, with the people we know out in Downey and the way they have built Charlie Brown, there's no problem. Just press on. So we stayed there for 61 hours. And we had faith in you when we made that decision. And you saw what happened... no problem. Again, it was a great spacecraft and I just can't tell you how perfectly it went.

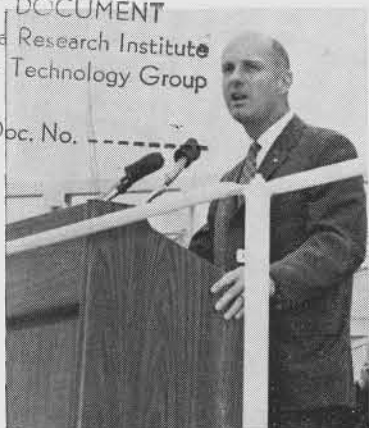
Manufacturing Lauded

Young: You know, it's true that Tom and Gene and I have been around here for about seven years... we figured up the other day that we've got more time in Los Angeles than Mayor Yorty. So, I think it's fitting that we come back and tell you about that Charlie Brown. Boy, now there's a spacecraft for you. What a beautiful piece of machinery. It worked perfect. Burned us into lunar orbit... precisely into a 60-mile circular orbit around the moon where there's a gravitational field that nobody understands very much. Burned us out of lunar orbit into a precise trajectory where we didn't have to do another doggone thing except sit there and coast... took good care of us all the way going and coming... nice cool fresh air... breathed it all day long... no problem... and then reentered and landed where the Navy says was within three miles of the ship. Now, I want to tell you this, because I'm an old Navy man... that the ship was out of place! And let me really get down to the meat of why we're here, I want to pay a special, special vote of thanks to the people in manufacturing. You know, we've got a lot of good engineers here in the country, at NASA and North American Rockwell, and they designed a wonderful spacecraft. But the people in manufacturing are what made it that way. Let me tell you what I mean. I've seen people down there working in the plant, working with their arms over their heads on wire bundles, putting things together, for shifts at a time. Now, I don't know if you realize it, but I realize it... that work done in that fashion is not likely to be free from problems associated with being the most reliable piece of work that's ever been turned out. When you have a ding in a spacecraft, and somebody goes in there to repair it... if he's not just careful as

(Continued on Page 2, Column 1)



Eugene Cernan



Tom Stafford



John Young

Newsman To Be Briefed in Eight Cities on Moon-Landing Mission

Space Division's role in the Apollo 11 lunar landing mission is being outlined for newsmen in eight cities and areas across the United States.

Opening the series of special briefings for news media will be Dale Myers, vice president and general manager of CSM Programs, and Mike Vucelic, senior manager of CSM System Engineering. The two will speak to Orange County Press Club members tonight at the Royal Roman Restaurant in Santa Ana. Newsmen covering the Apollo 11 mission at Houston, Tex., also are being briefed today.

Space Division President William Bergen will team with Vucelic to explain the impor-

tance of the division role in the historic mission to newsmen in New York on Monday and in Washington, D.C. on Tuesday.

Other Briefing

Vucelic will present the program for newsmen in Boston and another briefing will be given for news media men in Chicago, both on Wednesday.

Jim Edwards, manager of CSM Programs, Planning and Control, will present the Apollo 11 briefing for Tulsa area newsmen Thursday.

Winding up the special presentation will be a program for Los Angeles area news media early next week.

Final Preparations Under Way for July 16 Launch

Division Launch Operations employees are working with NASA personnel at Kennedy Space Center, preparing the Apollo CSM and the S-II second stage of the Saturn V launch vehicle for the lunar landing mission.

Many tests have been completed, others are under way and still more are to begin next week for the Apollo 11 mission, scheduled for launch July 16.

The Apollo 11 crew, spacecraft commander Neil Armstrong, command module pilot Mike Collins and lunar module pilot Edwin Aldrin continue training for this most complicated of all missions.

Armstrong and Aldrin, who will be the first humans to set foot on the lunar surface, are spending many hours in the lunar module simulator. Collins, who will continue orbiting the moon in the Space Division-built CSM while Armstrong and Aldrin descend to the lunar surface, is concentrating on the command module simulator.

Working with T. J. O'Malley, director of Apollo CSM Operations for Launch Operations, and with Dan Jensen, 107 Spacecraft chief, engineers and technicians have been checking, rechecking, verifying and testing every item on the command and service modules since they arrived at KSC more than six months ago.

Following transferral of the Apollo 11 Saturn V stack from the Vertical Assembly Building to Launch Pad 39A May 20, the Flight Readiness Test was completed June 7, the Flight Readiness Review was finished June 9 at NASA's Manned Spacecraft Center, Houston, and the Launch Readiness Review was completed June 8.

Hypergolic servicing of the command module was performed last Monday, Tuesday, ordnance devices were installed. Preparations are underway for the Countdown Demonstration

(Continued on Page 3, Column 5)

SC 109 FLOWN TO KSC

The Spacecraft 109 command and service modules, destined for a lunar landing mission, left Downey early this week and took off for NASA's Kennedy Space Center Wednesday.

Downes Named NR Staff VP for Development

Appointment of Harold J. Downes as staff vice president—Corporate Development, was announced this week by Dupuy Bateman, Jr., senior vice president, Corporate Development, North American Rockwell Corporation.

Downes, who has been serving as vice president—Special Market Development of the Aerospace and Systems Group, will report to Bateman at corporate headquarters.

Bateman said Downes' ap-

(Continued on Page 3, Column 4)



H. J. Downes

Kight Appointed NR Staff VP—International

A. B. "Lon" Kight has been named to the new position of staff vice president—International and made a member of the corporate management committee, Robert Anderson, executive vice president, North American Rockwell announced this week.

Kight joined NR last month as vice president—International for the company's Commercial Products Group after having been a vice president of Borg-Warner Corporation, Chicago,

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A. B. Kight

NO HOLIDAY 'SKYWRITER'

Because of the Independence Day holiday Friday, no Space Division Skywriter will be published next week. Next issue will be published July 11.



WELCOME HOME — 7,000 employees last week attended division ceremonies which marked a "homecoming" for the Apollo 10 astronauts, spacecraft commander Tom Stafford, command module pilot John Young, and lunar module

pilot Eugene Cernan. Each astronaut, suit shoulders flecked with confetti showered by employees, stepped to the microphone and thanked the men and women—manufacturing as well as engineering—who built such "a beautiful spacecraft."

ASTRONAUTS WIN FRIENDS ON RETURN TO DOWNEY FROM SPACE

(Continued from Page 1, Column 5)
 the dickens he's just as likely to put another ding in there that nobody will ever notice. When you make and break connectors in spacecraft, if you're not careful they're not going to be locked up right, and on launch boost vibration day, those connectors can shake loose and then you're going to have all kinds of trouble. Well, I'm here to tell you that Charlie Brown didn't have any of those problems. And that's not our fault... that's your fault and we thank you for it. That's great. Let me tell you about how good I really think Charlie Brown is. He's sitting over there in the hangar. If we want to, we could take the heat-shield off, put a new heatshield on there, and fly Charlie Brown again right now, and I'll bet he'll do just as good the next time. And any outfit that can do work like that is great, and I'm here to tell you that you're the greatest. Thank you.

Cernan: Now, what more can a guy ask for in his life than to spend eight days going to and coming back from the moon on a fantastic and incredible voyage and then coming back to a reception, not just among people, but among the people who made it all possible and among friends. When we crossed the "gangway" you might call it, up there some 360 feet above the ground to get into that spacecraft, which

was probably one of the most dangerous parts of the whole flight, we got into that spacecraft not just as three individuals, as Tom, John and Gene, going out to seek adventure and have a ball, paid and funded for by 200 million people. But we went up there very sincerely representing a great many people throughout this country, and even to be more specific, we went up there to represent the people like yourselves who made this all possible. We feel that we were

a symbol of what you had done... a symbol of your dedication and a symbol of your ambitions, when we went out there on Apollo 10. We had many, many incredible experiences certainly. We were representing you... you were with us on that flight, you made it possible... there's a tremendous amount of rewards from this program, from our particular flight. The rewards come from the successful completion of meeting of the challenges. And believe me, there

were many and they were very exciting. We went back to Houston, and we went to the Cape, and we saw the other end of the Downey contingent down there who actually light the fire. And then we come here and we see you people. And believe me, from the bottom of my heart I say thank you for allowing us to share with you your excitement and your joy and your pride in this space program and in our flight and in our country. You know, this is a great team.

You've heard the word team before. It's a word that we use very explicitly, one that Tom and John and myself believe in. We try to fly it that way. But this team is big, and you all are a very vital part of it. And I'm not going to say that we're glad to have you as part of our team. We're just thankful and privileged that you will have us as part of your team. And we can only say thank you... you're a great people... and a great country.

COMPANY PERSONNEL TO PLAY KEY ROLES IN AIAA MEETING

Several key roles are being played by company employees in preparation for the Annual Meeting and Technical Display of the American Institute of Aeronautics and Astronautics in Anaheim, Calif., Oct. 20-24.

President J. L. Atwood is serving as Honorary Chairman of the Honors Banquet which will highlight the five-day event. Assisting him is Steve Nordeck of Autonetics' Customer Relations department.

B. D. Haber, Aerospace & Systems Group senior vice president, Research & Engineering, is a member of AIAA's 17-man Honorary Committee.

Robert Doudna of North American Aviation Divisions is

chairman of the Exhibitors Committee. He reports that new hardware, techniques and processes from the nation's leading aerospace firms, as well as governmental agencies, will be on display in the 100,000-square-foot exhibit hall of Anaheim's new Convention Center.

A 65-man committee has been working on details of the program since the middle of last year. Plans include presentation of nearly 135 technical papers covering the state-of-the-art of aeronautics, astronautics and hydronautics. About 50 members of panels in these and other areas will assess the political and social implications of the march of technology.



CONSERVATION CONVERSATION — Ford L. Miller, chief, Project Engineering Branch, NASA Apollo Spacecraft Program Office, Downey, was featured speaker at recent semi-annual Conservation Committee Dinner, hosted by division for committeemen.



MUTUAL ENTHUSIASM — Space Division version of heroes welcome greeted Apollo 10 astronauts, Tom Stafford, left, John Young, center, and Gene Cernan, when the crew visited Downey last week. Cernan, for the astronauts whose lunar

orbiting mission blazed a trail for the Apollo lunar landing mission next month, said, "We don't consider that you're on our team; we're privileged to be on your team. That Charlie Brown sure is wonderful piece of machinery."

Smoke Detection System Installed

NARROW MARGIN SEPARATES SWEEPSTAKES CONTENDERS

A new fire alarm system which electronically records the presence of smoke particles before the smoke could be noticed visually has been installed in several division areas.

Called the Smoke Detection System, it is now operable in computer rooms in Bldg. 290, electrical-electronic equipment rooms in Bldgs. 289 and 6, and in the Downey Facility Electrical Substation.

The system consists of devices which detect smoke particles through ionization (electrically charging of particles). These detection devices are linked with Protective Services which would dispatch fire-fighting equipment.

W. A. Graham, project engineer in Facilities Engineering, the department which designed and installed the system, explained that "one of the keys in fighting any fire is early detection. Our new system will afford much more protection to the highly valuable electronic equipment, such as our computers and programmed memories."

In the annual Buc Trimmer sweepstakes, Apollo CSM is pacing the field but the hoofbeats of Material and Saturn S-II can be heard closely behind.

Now, in the final month of the cost reduction competition, only four points separate these three front-runners. In cumulative point standings, Apollo CSM has 98; Saturn S-II, 95, and Material, 94.

For May, Apollo CSM retained first place; Material jumped from fourth to second, and Saturn S-II maintained its third-place position. Material and Saturn S-II each are striving to move into first place. At stake is permanent possession of the 1969 Buc Trimmer trophy. A three-way tie is possible.

Other standings for the month of May were Research, Engineering and Test, Administration, Quality and Reliability Assurance, Financial, Manufacturing and Facilities, Management Planning and Control, and Launch Operations.

Outstanding individual May contributions included H. W.

Kanne, Jr., Administration; W. J. Lenew, Advanced Programs; R. J. Rutten, Financial; J. F. Mihelich and Sandy Falbaum, both of Apollo CSM; R. J. Krause, Management Planning and Control; L. P. David, Manufacturing and Facilities; J. L. Cicchese, Material; C. S. R. Marshall, Quality and Reliability Assurance; T. W. McCrary, Research, Engineering and Test, and Leo Rankin, Saturn S-II.

Savings Bonds Drive Closes on 97% Mark

Climaxing one of the most successful U. S. Savings Bonds campaigns ever held by the Aerospace and Systems Group, final results show 97 percent of all employees currently enrolled in the payroll deduction plan.

The final tally shows an increase over last year's effort, when 94 percent of all employees participated in buying bonds through the payroll plan.

Leading the way among the major divisions was Columbus, which started in last place at 70 percent but closed out with a 99.5 percent enrollment.

Other Divisions Close

In close second was Space, which reported a 99.1 percent participation figure, which was also an increase over last year's 98.6 percent.

Reporting in at 100 percent were General Offices, Navan, McAlester and Mississippi.

Other rankings, in order, are Launch Operations at 99 percent; McGregor, 98 percent; Tulsa, 97 percent; Los Angeles and Rocketdyne, 96 percent; Atomics International, Autonetics and West Virginia, 95 percent; Executive Offices, 92 percent and Science Center, 87 percent.

The Commercial Products Group achieved 74 percent participation which, combined with the Aerospace and Systems Group, gives North American Rockwell Corporation a final figure of 90 percent.



HOME STRETCH — Only a few points separate top three contenders in June, final month of the annual competition for permanent possession of the Buc Trimmer trophy. Representing three leading functions are Nell Shephard, Material; Jack Chapman, Saturn S-II, and, clutching Buc, Rolly Willett, Apollo CSM.

Downes . . .

(Continued from Page 1, Column 1) pointment "is intended to enhance our merger, acquisition and joint venture activities primarily related to the Aerospace and Systems Group."

Downes is the third staff vice president assigned to Bate-man's Corporate Development staff. The others are John J. Henry, who is based at the Pittsburgh, Pa. headquarters of the Commercial Products Group, and I. Gordon Odell, who is located at the General Offices.

Downes was initially associated with NR from 1948 to 1956 as assistant patent counsel at Downey. He joined Lear-Siegler, Inc., in 1956 and held the position of vice president for foreign operations prior to returning to NR in April 1967.

He has served as chairman of the board of Navan, Inc., and also as chairman of the board of North American Aviation International, Inc. wholly owned, U.S.-based international marketing subsidiary of the corporation.

A native of Willow Lakes, S. D., Downes graduated with a bachelor of science degree in civil engineering from the South Dakota School of Mines, completed graduate work at Ohio State University and received an LL.B degree from Columbia University Law School.

A World War II Navy veteran, Downes lives with his wife and their four children in Pacific Palisades, Calif.

Kight . . .

(Continued from Page 1, Column 2) for a number of years.

In his new position Kight will report directly to Anderson but will continue to be based at the Commercial Products Group's Pittsburgh, Pa., headquarters.

"Creation of a staff vice presidency responsible for all corporate international activities," Anderson said, "clearly indicates that North American Rockwell is placing increased emphasis upon foreign markets, operations and acquisitions."

Anderson said that Robert J. Clark, president of North American Aviation International, Inc., wholly owned subsidiary primarily responsible for overseas marketing of products of NR's Aerospace and Systems Group, now reports to Kight.

Kight joined Borg-Warner as a patent attorney in 1948 after having served eight years in the same capacity for Western Electric Company. He became administrative assistant to the president in 1952 and vice president of Borg-Warner International Corporation in 1955.

In 1961 he was named president and general manager of Borg-Warner International. He served in that capacity until he was elected a corporate vice president in 1964 and named president and general manager of the Norge Division.

From July, 1968 until he joined NR, Kight specialized in the area of corporate development, with responsibility for evaluating new business opportunities, reporting directly to the board chairman of Borg-Warner.

Kight received an AB degree from Harvard University, an LL.B from Columbia University Law School, and an MBA from the University of Chicago.

Final Preparation . . .

(Continued from Page 1, Column 3)

Tests, which are to be completed during the first week of July, and the final countdown, slated to start July 11.

A. B. Kehlet, assistant program manager for Spacecraft 107, said that so far the spacecraft checkout has proceeded smoothly. "This has been a very clean bird all through test and check out," he said.

Other Launch Operations employees have been working with NASA on the Saturn S-II Stage under the direction of A. C. Martin, S-II Operations director, and Tom Martin, S-II test conductor, since the stage arrived in February.



CHARLIE BROWN — Apollo 10 astronauts, John Young, Tom Stafford and Gene Cernan, during their day at the division last week, visited Charlie Brown, the command module in which they orbited the moon last month. Said Young: "We could put on a new heat shield and fly Charlie Brown again right now."

Classified Ads

FOR SALE

AUTOS

- '69 Bronco, 213-585-1692.
- '57 Chev., V/8, \$105. TO 6-203.
- '65 Corvair, \$650. 598-1557.
- '60 Corvette, 714-638-2845.
- '65 Dart 270, air, 763-6911.
- '62 Metro, 867-8902.
- '57 Olds, 88, \$235. 714-774-5948.
- '63 F85 Deluxe, \$550. 594-4151.

MOTORCYCLES

- '66 Suzuki, 80cc, 867-8902.
- '67 Honda Scrambler, \$450. 830-8627.
- '69 Yamaha, \$375. TO 6-0069.

HOMES

- 3 bdrm., 2 ba., nr. Torrance, 547-9222.

BOATS

- 14' boat, motor, trailer, TO 9-6629.
- 15' boat, motor, trailer, 866-1890.
- 16' ski boat w/trailer, 847-8468.
- 18' cruiser w/trailer, 431-0128.

STEREOS, TAPES, TV, RADIOS

- 21" color TV, \$175. 430-0109.

MISCELLANEOUS

- (4) 8.55x14 tires, 714-629-0573.
- Short wedding dress, veil, 862-8603.
- Golf clubs, \$50. 920-2786.
- Johnson o.b., 25 hp, 920-2786.
- Full set left-hand golf clubs, Yonkers, 340-5863.

WANTED TO BUY

- '65-'67 s/wagon, f/air, 714-826-1396.
- Used porta-crib, 714-892-5669.
- Tent, must sleep 5 min. 862-4735.

RIDE WANTED/OFFERED

- Offer, W.L.A.-Downey, 8-12-4:54, 271-0190.



SECURITY AWARDS — D. W. Gere, left, manager of division Security and Communications; John Boza, center, representative, Defense Contract Administration Services Region, and W. F. Donovan, director, division Security, are proud of the two "Award of Merit" plaques presented Gere at a recent International Security Conference in Chicago. One plaque is for Donovan; the other for the division. Donovan said, "We are proud that we were nominated by DCASR and that we were the first company in the manufacturing category to qualify for these awards. The plaques recognize the division's entire loss-prevention program, including the patrol and fire functions as well as division Security."

AIPE Elects George Paula

George Paula, chief facilities engineer for Downey Facilities and Industrial Engineering, has been elected regional vice president of the Western Region for The American Institute of Plant Engineers.

In this office, he will represent all AIPE members in California, Oregon, Washington, Nevada, Utah, Arizona, Hawaii, Alaska and parts of Mexico.

Paula also is a member of the AIPE Executive Committee and of the International Board of Directors.

Tropical Storms Detected

Weather satellites, launched by the NASA and operated by the Environmental Science Service Administration, have detected and tracked every tropical storm since 1966.

Mick O'Mach & Buster



"Buster, quiet please! You know Miss Green doesn't have her security clearance yet!"

Laboratories Essential to Space Division

If all division laboratories were combined, they would occupy floor space greater than twice the square footage of Bldg. 4, wherein most of the laboratories are located.

The 116 laboratories in Downey and Seal Beach are devoted to 22 technology disciplines and occupy 425,000 square feet.

Complete, technical information about all division laboratories and test operations has just been published by Facilities and Industrial Engineering. The volume, Laboratories Facilities Directory, is available from R. P. Pierson, Industrial Planning, Ext. 3455.



Organ Lessons Available Every Third Thursday at Rec Center

Organ lessons are under way on Thursdays at the Downey Recreation Center.

It is not necessary to bring an electric organ—or even to own one—in order to take lessons at the Rec Center. One is available there. Gladys Burger, of

the Downey NASA travel office, is a certified teacher.

Beginner and intermediate lessons begin at 6 p.m. Fee for five weekly lessons is \$10. The division Organ Club meets every third Thursday.

ANOTHER FIRST

Quadrant Door Completed With 'Zero Defects'

What is believed to be the first "zero defects" completion of a service module quadrant door has been chalked up for SC 114 by Manufacturing Subsystems Assembly.

The quadrant door is one of four on the service module. The quadrants themselves are panels of four small-thrust reaction control engines.

Gilbert Garcia, chief, Manufacturing Operations Section, NASA-Downey, said that the zero defects action was "one in a continuing line of North American Rockwell successes that deserves special recognition and pride." This thought was echoed by W. J. Fitzgerald, NASA supervisor, and R. L. Davis, NASA inspector.

As to the challenge faced by J. R. Adam, general supervisor, Manufacturing Subsystems Assembly and his team, these facts are pertinent:

To assemble one quadrant door, 2000 man-hours are required. A quad consists of 170-sub-contractor components, 105 feet of electro-polished tubing, 120 brazed joints, 2,000 feet of electrical wiring and 450 electrical connections.

H. M. Baird is department supervisor. Other members of the Manufacturing team include: Al Dirner, N. A. Robinson, and S. R. Gulizia, liaison engineers; Joe Lugo, P. R. Stohr, and J. W. Agee, leadmen.

Also, E. A. Porter and A. G. Avery, assemblers; Larry McNeal, instrumentation; R. E. Valencia, flusher; L. R. Sanchez, hydraulics; H. R. Blanchard and A. D. Wood, brazers, and Emil Kvorcka, planner.

Members of the Manufacturing Quality Assurance team included, R. D. Giovanine, manager; P. J. Laughlin, electrical inspector; M. L. Larrimore, mechanical inspector, and J. A. Gervaise, quality engineer.

Service Pins 30 Years



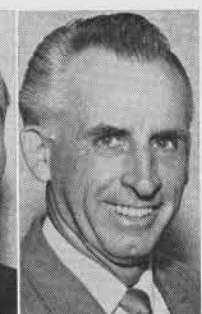
F. E. Underhill, Apollo CSM



R. M. Mulgrew, Shipping



R. B. Lipps, Apollo CSM



E. G. Foote, Apollo CSM

VEHICLE SAFETY URGED OVER 4TH

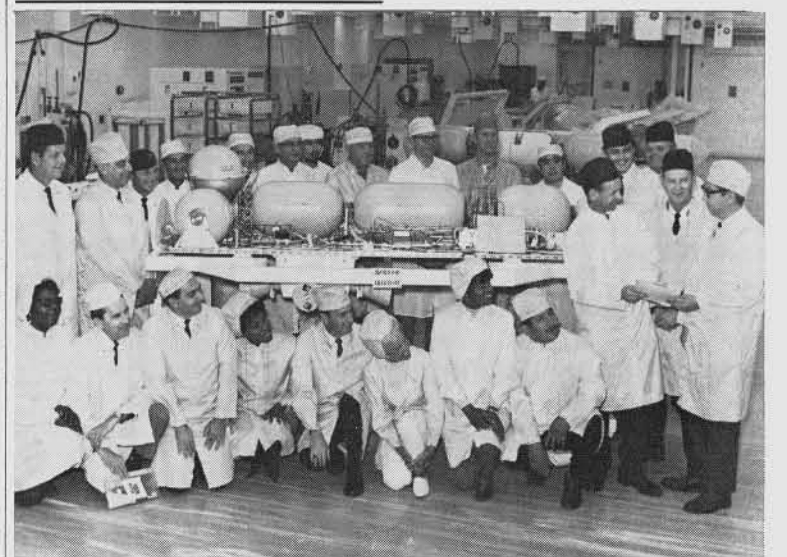
Many employees may be planning a motor trip next weekend during the three-day July 4 holiday.

Harley Tracy, manager of Industrial Safety, urges all such employees to thoroughly check their vehicles before they leave on a trip and then to drive defensively once they're on the road:

"Have tires, light, steering, wipers and brakes checked. Take along a flashlight and emergency equipment. If you don't have seat belts, get them—and use them.

"Study your roadmaps and expect the unexpected. Remember that indecision on a freeway may cause a pile-up."

Tracy added that for anyone wishing to report a traffic emergency, the telephone number of the California Highway Patrol from anywhere in the State is Zenith 1-2000.



ZERO DEFECTS—Gilbert Garcia, right, chief, Manufacturing Operations Section, NASA-Downey, presents "buy-off book" to J. R. Adam, general supervisor, Manufacturing Subsystems Assembly after zero defects completion of a SC 114 quadrant door.

MOON MATERIAL

LRL Rehearsal Under Way for Data Gathering

At NASA's Manned Spacecraft Center Lunar Receiving Laboratory, personnel and visiting scientists are rehearsing procedures necessary to receive and study material from the first lunar landing.

An unobtrusive building in the northeast corner of the Houston complex will be the focal point of an elaborate scientific community for several months following the lunar landing.

Through its doors will pass some of the most valuable scientific material man has ever owned, says Dr. Elbert King, curator of the LRL.

Approximately 100 pounds of lunar rock will be delivered within 24 hours of splashdown to the well-equipped biological and chemical laboratories of the LRL.

From the rock samples, scientists hope to extract information on the age, origin of the moon and possibly on the chemical process that led to the origin of life.

The extensive quarantine precautions will be taken until such time as it is determined if there are any lunar pathogens or extraterrestrial organisms on the crew, in the equipment or in the samples, that might be harmful to terrestrial environment.

The Apollo Lunar Surface Return Container, or rock-box, is an air-tight receptacle into which crewmen Neil Armstrong and Edwin Aldrin will place the bulk lunar samples.

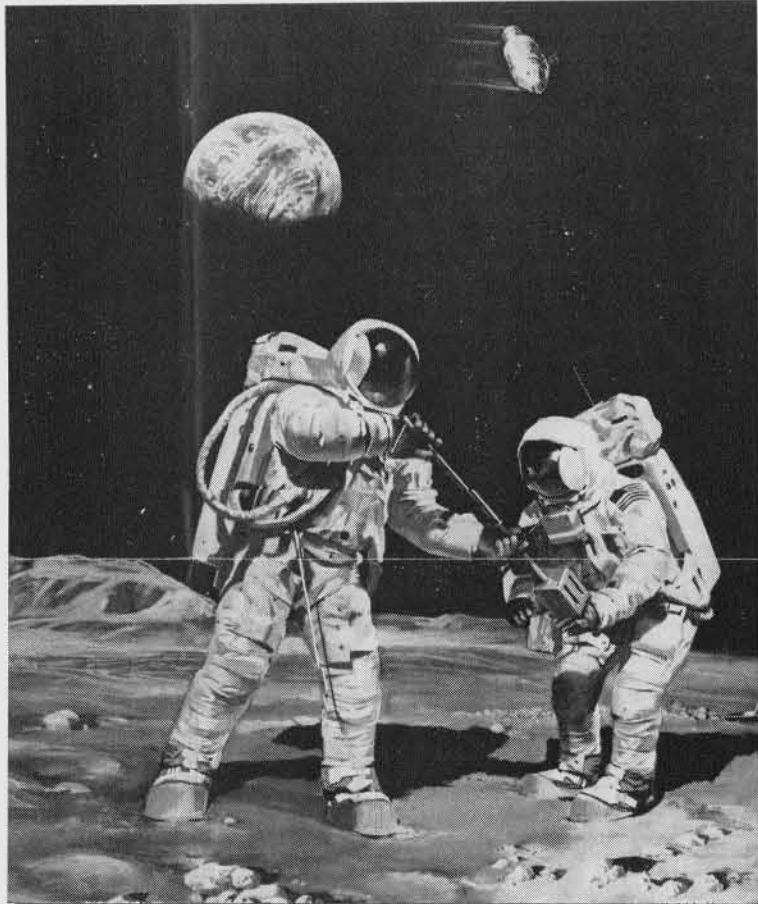
An attempt will be made to open the sample boxes on Earth in an environment similar to the environment on the moon.

Therefore, the samples will be delivered into the LRL's system of vacuum chambers where most preliminary examination will be carried out.

Special Precautions

Scientists will work with the samples, equipment and biological specimens through observer's ports along the system. These ports are fitted with arm-length rubber gloves to facilitate handling of materials.

Of first priority among the



GATHERING KNOWLEDGE—Apollo 11 Commander Neil Armstrong is depicted in this artist's rendering scooping lunar soil into pouch held by Lunar Module Pilot Edwin Aldrin during mission next month. Space Division will be among organizations analyzing the 100 pounds of material to be returned to Earth.

experiments are the time-critical tests such as radiation counting.

These tests will determine the moon's history of natural gamma activity caused by cosmic ray bombardment.

The measurements must be taken quickly before the samples' radioactive properties fade.

Other samples will be photographed, weighed and catalogued before being sent through the vacuum chamber to the various laboratories.

Other Tests Follow

Then innumerable tests—biological, geochemical, mineralogical, petrographic, etc. will be performed by specially selected scientists.

In the biological laboratory, technicians will study the effect of prolonged exposure to lunar samples on birds, fish, insects, micro-organisms and germ-free and normal laboratory mice.

More than twenty different species of plant life will also be tested.

The Physical-Chemical Laboratory will take pictures, classify elements, minerals and gases and identify properties of their

samples using various types of equipment: microscopes, spectrographs, gas reaction apparatus, separators and magnet detectors.

Blood Available Free of Charge

If for any medical reason, an employee or members of his immediate family should need blood, it is available through the division blood banks free of charge.

Reserves for this blood bank are built through blood donations made by employees; an account of division donations is kept by the Red Cross. All employees and their families are eligible to make withdrawals, regardless of whether the employee has donated.

The next Red Cross Bloodmobile will be set up July 8 and 9 in the Bldg. 1 Assembly Room, N13-E23. Within the past few days, employees have received a card offering them an opportunity to make an appointment at the Bloodmobile.