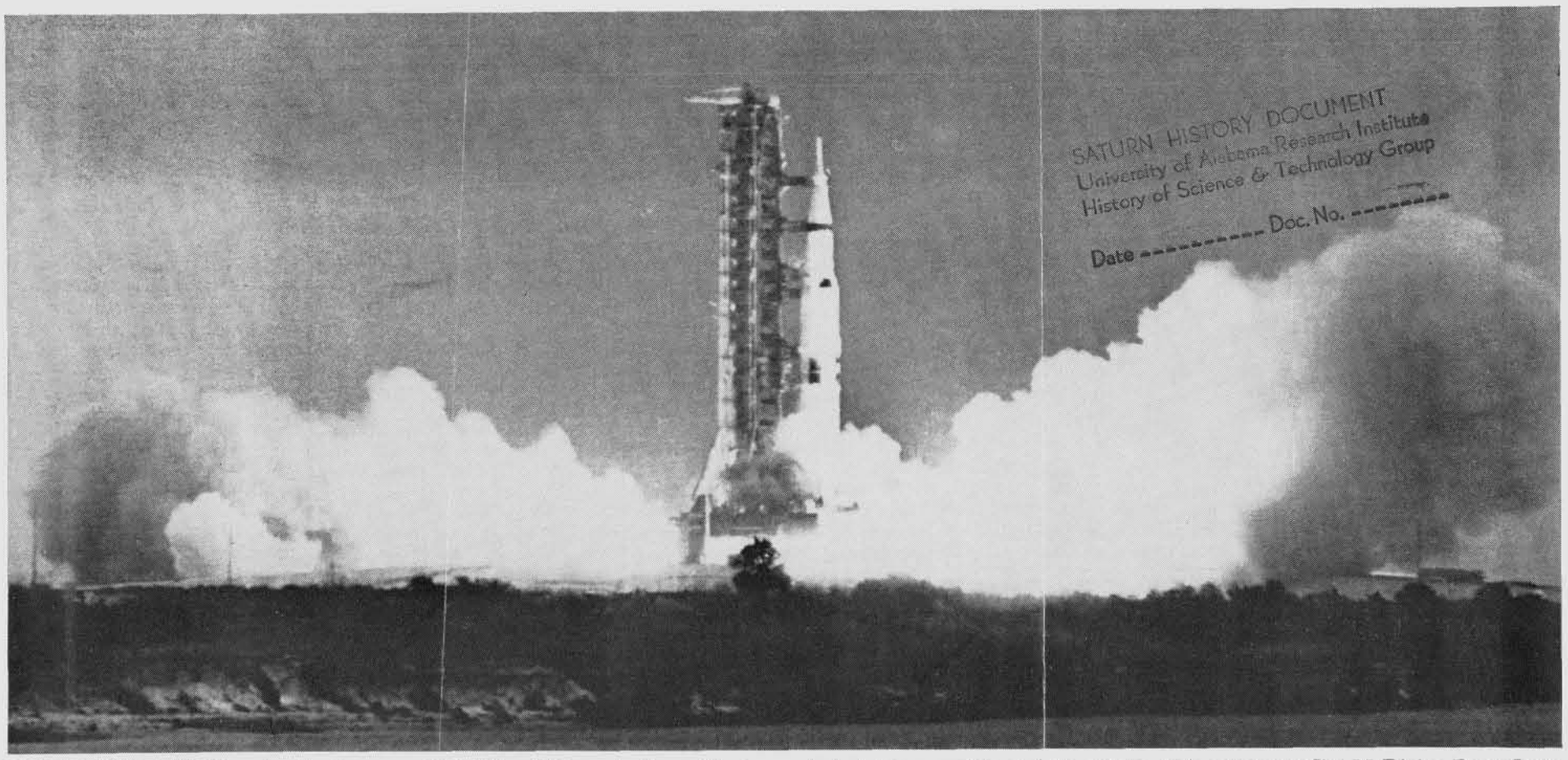



**UP, UP AND AWAY — Apollo 9 space vehicle lifts off Kennedy Space Center launch pad Monday in on-the-button blast-off to begin key 10-day Earth orbital test of lunar module and its systems with astronauts Jim McDivitt, Dave Scott, and Russell Schweickart aboard. Splashdown is planned in the west Atlantic. —UPI Telephoto**

SPACE DIVISION Skywriter

NORTH AMERICAN ROCKWELL CORPORATION
VOL. XXIX, No. 10 (Aerospace and Systems Group) MARCH 7, 1969

# Astronauts Set To Perform Key Test of Lunar Landing Technique

## McDivitt, Scott, Schweickart Complete Majority of Principal Goals but Face Critical Experiment Today

With the test-packed first half of their mission drawing to a close today, Apollo 9 astronauts Jim McDivitt, Dave Scott and Russell Schweickart are looking forward to a more leisurely pace in the remainder of their 10-day flight.

Already behind the trio is the accomplishment of the majority of the principal goals. The major activities planned during their sixth through tenth mission work days include landmark-tracking and command/service modules systems exercises, and a multi-spectral terrain photography experiment for Earth resources studies.

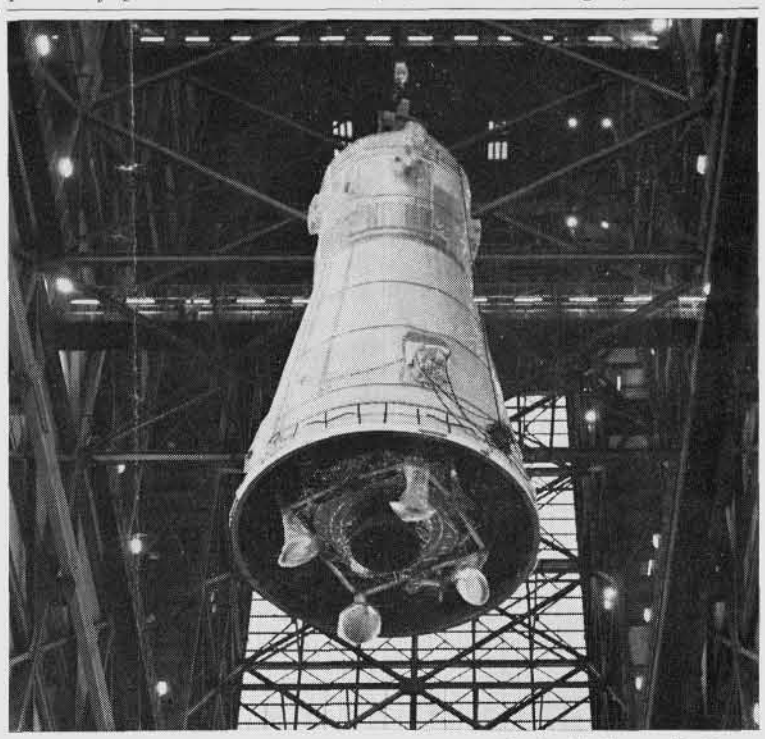
The photo experiment, being flown for the first time, is designed to obtain full photo coverage of selected land and ocean areas. Film-filter combinations for the four synchronized cameras that will be used in the test are similar to those presently planned for the Earth Resources Technology Satellite (ERTS-A) payload.

Plans emphasize coverage of the southwest U.S., where ground information is more readily available. Areas of interest include Tucson, El Paso, Dallas/Ft. Worth, and the Welaco Agricultural Experiment Station in southwest Texas, as well as Mexico and Brazil.

**New Techniques**

NASA hopes to obtain from the photographs new methods of inspecting Earth's natural resources from orbiting spacecraft. Photographed will be

*(Continued on Page 3, Column 1)*



**PREPARATIONS — Apollo 10 spacecraft, including division-built command and service modules, spacecraft/lunar module adapter, and lunar module, is hoisted ceiling-ward in preparation for mating with its waiting launch vehicle. Scheduled for launch in May, Apollo 10 will be lunar orbit flight designed to check out lunar module under moon environment conditions.**

# SPACE, NASA NEGOTIATE AAP MODIFICATION COSTS

NASA and Space Division are negotiating basic costs of modifying four Apollo spacecraft for use in long-duration Apollo Applications Program missions.

Combined value of the spacecraft, already covered under the division's basic Apollo contract, and the new modification work is estimated at about $340 million. NASA explained that the basic number of spacecraft being fabricated by the division will not change.

The contract will require manufacturing, assembly, test and checkout work on the modified command and service modules. The division also will provide AAP mission support, and work related to the fabrication of trainers, models, mockups, simulators, and design integration analysis.

The modified spacecraft are planned for use in the Orbital Workshop Program scheduled in the late 1971 time period, which is the initial phase of the Apollo Applications Program. The AAP spacecraft will be used to transport three-man, long-stay crews to and from an orbiting workshop.

Dale Myers, formerly vice president and Apollo program manager, recently was appointed vice president and general manager of CSM Programs and will direct division work on both the current Apollo effort and the Apollo Applications Program. Charles Feltz, former Apollo deputy program manager, was named assistant general manager.

George Jeffs, who was Apollo assistant program manager and chief program engineer, was promoted to the post of program vice president for the Apollo CSM Program, and will be directly responsible for the Apollo program. Len Tinnan, formerly Apollo Applications program manager, was appointed program vice president to head the AAP work.

George Merrick, who was Apollo assistant chief engineer, was named chief program engineer, succeeding Jeffs.

## BLOOD DONATIONS SLATED THURSDAY

**Seal Beach employees were reminded today of the Blood Bank that will be held at the facility Thursday.**

**For first-shift employees, the Blood Bank will be in the Bldg. 80 Auditorium from 9:30 a.m. to 3 p.m. Personnel who wish to contribute to the Bank and who did not receive cards should contact Blanche Parkhouse, Welfare, Seal Beach Ext. 4018.**

## Kennedy Space Center Prepares For Next Flights

While the nation's attention this week was focused on the flight of Apollo 9, crews at NASA's Kennedy Space Center were busily engaged in the preparations leading to the Apollo 10 and Apollo 11 lunar missions.

The Apollo 10 launch vehicle, with the Saturn S-II-5 stage, and spacecraft, with the Space Division-built Spacecraft 106 command and service modules, are mated on their mobile launcher in KSC's Vehicle Assembly Bldg. in preparation for Monday's scheduled rollout to Launch Complex 39B.

**Transporter**

The 6-million-pound-space vehicle and its 12-million-pound mobile launcher will be moved to the pad by a giant transporter vehicle. The transporter has a special leveling device which keeps the tip of the 363-foot tall vehicle vertical within plus or minus 10 minutes of arc — about the diameter of a basketball.

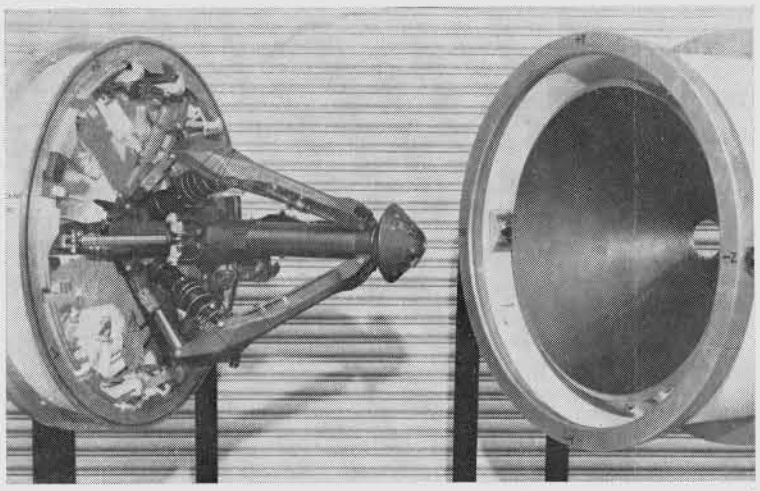
The 3½-mile trip to the pad takes about seven hours aboard the transporter.

Both the Seal Beach-built Saturn S-II-6 stage and the S-IVB third stage of the Apollo 11 vehicle are scheduled to be mated with the booster stage this week. Apollo Spacecraft 107, mission payload, is being prepared for its first simulated altitude run.

## Invention Awards Total $20,700

The Invention Award Committee recently granted a total of $20,700 in awards to inventors in eight divisions and facilities of the Aerospace and Systems Group under the special award provision of the company's Invention Award Plan. These awards were made on the basis of incomes received by the company for licensing the inventions. Among those receiving awards were:

E. W. Cooke, J. J. Derbyshire, Jr., T. J. Dorse, K. G. Highley, C. O. McAdams, D. C. Mitchell, Jr., C. C. Shepherd, Jr., R. W. Spencer, E. G. Stevens, S. S. Young, Jr., all of Space Division.



**PROBE AND DROGUE — Command module probe, left, and lunar module drogue assemblies are shown in closeup photo. Assemblies played key role in Apollo 9, linking command/service module craft with lunar module in first docking operation in Apollo program. Two docking maneuvers were scheduled for flight.**

# Lunar and Command Modules Are Docked During Apollo 9 Mission

A mechanical apparatus that operates like a handclasp in space connected the Apollo command/service modules mothership with the lunar module during the Apollo 9 docking operations.

The docking system has two main sections—the probe installed at the top of the command module, and the drogue, or receptacle, on top of the lunar module. The probe assembly weighs about 83 pounds on Earth and is shaped something like an arrowhead. The drogue is a single, cone-shaped piece of aluminum honeycomb core material 28 inches in diameter and 13 inches deep, weighs 20 pounds, and is fashioned like an opening to receive the probe.

In the docking operation the command module, with the probe sticking out of its conical top, is maneuvered by its crew into position to make the thrust into the dish-shaped receptacle on the lunar module. The crew has an optical alignment sight, similar to the viewfinder on a camera, to help with the aiming.

The docking is completed when the extended probe enters the bottom of the drogue and three spring capture-latches are engaged to make a firm connection. Then the probe, powered by a nitrogen pressure system, automatically retracts from 34 inches to 24 inches, drawing the two modules tightly together.

Twelve other latches around a docking ring on the command module tunnel then automatically snap into place in a docking flange on the lunar module to make the connection more secure. This forms a pressure-tight seal of the two spacecraft.

The docking system links up the tunnels of the command and lunar modules, making a single passageway between them. The astronauts then can remove both the probe and drogue assemblies — while the docking system and its latches keep the two spacecraft connected—and make the trip from the command module into the lunar ship.

# Scott, Rasmussen Appointed To CSM Programs Posts

Appointment of Walter Scott as director and Jim Rasmussen as assistant director of CSM Programs Manufacturing has been announced by John Healey, vice president of Manufacturing and Facilities.

The new assignments for the two men head a reorganization designed to centralize the division's Manufacturing capabilities, said Healey.

In his new assignment, Scott directs division manufacturing work on both the Apollo and Apollo Applications Program. Formerly assistant director of Apollo Manufacturing, he succeeds Paul Greenhaw, who transferred to Autonetics. Rasmussen formerly was assistant director of Apollo Manufacturing.

At the same time, Healey announced the establishment of a number of new Manufacturing organizations. The functions and the men who head them are:

Fred Burry, former director of Central Manufacturing, new director of Details, Processes, and Tool Fabrication. Joe Cuzzupoli, who was director of AAP Manufacturing, moves to the post of director of Manufacturing Engineering and Development.

Sam Goldstein, formerly in Apollo Program Management, was named manager of Manufacturing Controls. Ralph McCleary, who was Manufacturing representative to Advanced Programs, is the new manager of Advanced Programs Manufacturing.

## SCIENCE CENTER SEMINAR SCHEDULE

*Friday, March 14*
Staff Seminar by:
Dr. Noel C. MacDonald
Member of Technical Staff, Semiconductor Physics
"Scanning Electron Microscopy"

*Friday, March 21*
Staff Seminar by:
Dr. Lewis T. Chadderton
Member of Technical Staff, Elementary Interactions
"Lunar Vibrations"

*Friday, March 28*
Staff Seminar by:
Dr. Walter N. Hardy
Member of Technical Staff, Spectroscopy
"Librational Waves in Solid Hydrogen"

**EXCELLENCE AWARD—S. I. (Jose) Jimenez, right, of Apollo Logistics Training, receives congratulations and division PRIDE Excellence Award from NASA astronaut Al Worden. Jimenez was commended for completion of 1,500 hours as instructor for Apollo training, many for the astronaut flight crew members.**

# *Snoopy Ranks Swelled at Space with Addition of Eight Winners*

The ranks of the astronaut personal recognition award winners (Snoopy) were swelled recently with the addition of eight division Apollo and Saturn S-II men.

All nominated through the division PRIDE program, the men were Norm Hewitt and Wally Oslie, both of Apollo Manufacturing Quality Assurance; John Amsberry, S-II Stage Insulation; Jerzy Kaminski, Apollo Test Operations.

And Thoral Gilland, Apollo Training and Support Documentation; Larry Laurie, Laboratories and Test; C. R. (Ron) Bishop, S-II Quality and Reliability Assurance, and George Franzen, Apollo Structures Assembly.

Hewitt and Oslie were inspectors and Amsberry was a member of the Apollo Spacecraft 101 "Tiger Team" that did the no-defect, ahead-of-schedule preflight modifications on the spacecraft. Kaminski is a member of the ATO rescue team.

Laurie was the responsible ordnance test engineer on a key test program instrumental in paving the way for the flight of Apollo 8, and Bishop is cited as the most knowledgeable person in the non-destructive test area in the Apollo program. Franzen has participated in the defect-free circumferential welding of 10 consecutive Apollo spacecraft inner crew compartments.

# Newsmen Get Flight Briefings

More than 100 top newsmen in New York and Washington, D.C., gained a closer insight into the Apollo 9 mission in a pair of briefings presented by a division team.

Explaining the role of Space Division-built hardware in the forthcoming Earth-orbital flight were Don Patterson of Apollo System Engineering, and Leo Krupp, chief Apollo research pilot. In their audiences were some of the leading science and aerospace writers in the nation's capital, and a number of space reporters and television newcasters.

# *Paula To Serve As Chairman, 1969 WPE&MC*

George Paula, chief Facilities engineer for Downey Facilities and Industrial Engineering, will serve as program chairman for the 1969 Western Plant Engineering and Maintenance Conference.

Sponsored by the American Institute of Plant Engineers, the conference and trade show will be held at the Anaheim Convention Center in September. It will feature 31 technical sessions concerning plant engineering developments in the industrial environment, management techniques, and future trends.

# Managing Ability Seen as Major 'Fallout' of Apollo Program Effort

The enhancement of man's ability to manage large, highly complex research and development programs is one of the major fallouts of the Apollo Project, Bob Greer, vice president and Saturn S-II program manager, told Town Hall of Long Beach members at their February meeting.

Greer, featured speaker for the meeting, opened his address with a behind-the-scenes look at events that took place in the Saturn V control center for the Apollo 8 flight, and outlined highlights of the Apollo 9 mission.

Equating man's growing capacity to govern himself with his increasing capability to organize and equip more complex projects, Greer emphasized:

"This progress is self-limited and will stop if at any point government, military or industry become so large and complex that they saturate man's capability to provide coherent direction and, thus, further progress.

"The exprience gained in organizing and managing the Apollo program, I believe, provided real progress in man's capability to organize, manage and conduct complex, difficult operations and hence," declared Greer, "to postponing the day when progress will stop because man's capability is saturated."

**ASTRONAUT AWARDS — NASA astronaut Mike Collins, left, command module pilot for Apollo 11 mission, commends latest division recipients of astronaut personal recognition (Snoopy) awards. Nominated through division PRIDE program, eight division employees were added to roll.**


**PROGRAM PLANNING — Plans for CBS-TV News network coverage of Apollo 9 flight from remote unit at Downey are reviewed by network newsman Bill Stout, left, division's Leo Krupp and Bob Eggert, and CBS producer Jack Kelly.**

# Lead Article, Magazine Cover Feature Division

Steve Nelson, division director of Material, John Mihelich, Apollo Material director, and the Apollo 8 command module were featured on the cover of the February issue of the *Golden West Purchaser.*

Lead article for the monthly magazine was entitled, "The Flight of Apollo 8," with the subhead, "Procurement that is Out of this World." The story dealt with advancements made by the division in the profession of materials management to keep pace with the technical evolutions developed in the Apollo/Saturn programs.

Spotlighted in the article were Nelson, Mihelich, Roy Beat, director of Saturn S-II Material; Dave Weber, director of Central Procurement, and J. E. (Red) Adams, director of Traffic and Distribution.

**NETHERLANDS TELECREW — J. B. Wilken, second from right, Apollo Post Flight Operations, explains work in progress on Apollo 8 command module for The Netherlands television crew headed by Henk Terlingen, astride hatch opening. Reinstalling one of reaction control motors on craft out of camera range are division's Mark Gordon, right, on floor, and Harold Porter.**

# Astronauts Face New Tests . . .

*(Continued from Page 1, Column 5)*

crops, forests, and the continental shelves where future generations may harvest much of their food.

The flight of Apollo 9 got off to a successful start with an almost to the second lift-off from NASA Kennedy Space Center's Launch Complex 39A.

From "quick-look" information, the Seal Beach-built Saturn S-II-4 stage performed its brief but important role in the flight almost flawlessly. Programmed to power the Apollo 9 spacecraft from an altitude of about 40 miles to about 118 miles above the Earth, the stage's five Rocketdyne J-2 engines roared to life only slightly off the planned time and shutdown approximately five seconds off the pre-calculated time.

**First Day**

Highlights of Apollo 9's first day in orbit included the initial docking in the Apollo program. The operation went smoothly and the system which mated the command/service modules craft with the Grumman lunar module "worked as advertised," according to the Apollo 9 astronaut crewmen.

On Tuesday, the crew performed three burns of the service module propulsion engine, and on Wednesday began the first of the extensive checks of the lunar module systems. McDivitt and Schweickart became the first men to fly in the lunar module in orbit when they entered the craft, powered up its systems, and test-fired its descent stage engine.

Ground-based television viewers were able to see the two men in the lunar module.

Thursday was one of the more spectacular days of the flight, with Schweickart performing the first extra-vehicular activity in Apollo program.

Although he did not do the planned transfer from the lunar module to the command module, Schweickart was outside the lunar module for 37½ minutes. He used the portable life-support system and the lunar module handrails, recovered a thermal sample from the module, and took a number of pictures.

At the same time, Scott partially emerged from the command module and also retrieved a thermal sample for return to Earth.

(The EVA was described as "very good" by NASA.)

During the television pass, viewers saw McDivitt and Schweickart and shots of the command module and the interior of the lunar module. This was the first space test of the new lunar surface television camera.

Planned for today were rendezvous and docking maneuvers between the command/service modules and the lunar module — one of the most critical periods of the flight. During this time the crew will simulate the checkout operations for a lunar landing descent.

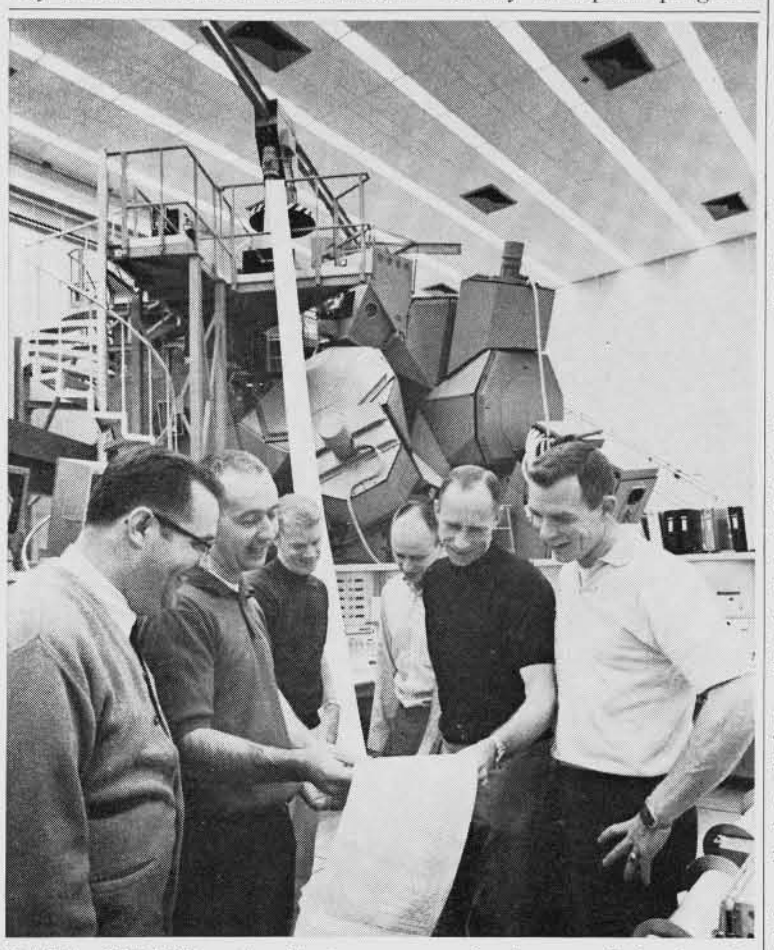
McDivitt and Schweickart, in the lunar module, are scheduled to separate from Scott in the command/service modules for both small-scale rendezvous and long-range operations.

**Separation, Docking**

In the first maneuver, called the "mini-football," the maximum distance between the two spacecraft will be about three and one-half miles. The lunar module descent engine will be test fired twice and then jettisoned as the two craft maneuver out to a maximum separation of about 109 miles before the second, and final, docking.

Following the operation, the lunar module ascent stage will be undocked and its engine burned to fuel depletion as the stage is placed into an orbit with an estimated apogee of more than 3,600 miles.

Mission splashdown is scheduled for Thursday at approximately 5:46 a.m. California time in the West Atlantic, some 250 miles east-southeast of Bermuda. Prime recovery ship is the USS *Guadalcanal,* a landing platform-helicopter (LPH) craft.



**DATA CHECK — Apollo 9 crewmen check over flight data in pre-flight meeting at NASA's Manned Spacecraft Center. From left are Riley McCafferty, chief of Flight Crew Operations; astronauts Jim McDivitt and Russell Schweickart of prime crew; Al Bean of backup crew, Al Worden of support crew, and Dave Scott of prime crew. Mission splashdown is planned Thursday.**

*FOR CSM MODULES, S-II*

# $1,370,000 IN INCENTIVE FEES AWARDED TO SPACE DIVISION

Space Division has earned incentive award fees totalling $1,370,000 under NASA contracts for the Apollo command and service modules and the Saturn S-II stage.

The awards were determined by a Performance Evaluation Board designated by NASA in January, 1968 on the basis of North American Rockwell's achievement of contractual management objectives. The amounts were $1,100,000 on the Apollo contract and $270,000 on the S-II contract.

The awards cover the division's management performance under the Apollo contract from Sept. 1, 1967 through Dec. 31, 1968, and S-II contract activities from Aug. 4, 1968 through Dec. 28, 1968. These periods represent the first of three time increments extending through completion of the Apollo program.

The total amounts of fee available for award through contract completion are in addition to the basic fees provided for in the contracts, limited to one-half of one percent of the estimated cost remaining at the time the incentive provision was negotiated. The award fee pools are fixed and not subject to adjustment.

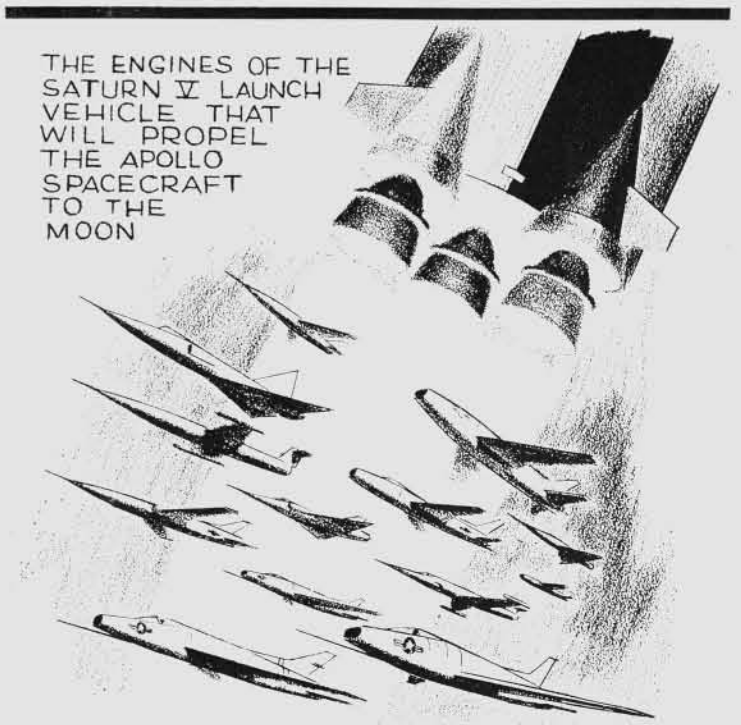
# Paine Appointed to Top NASA Post

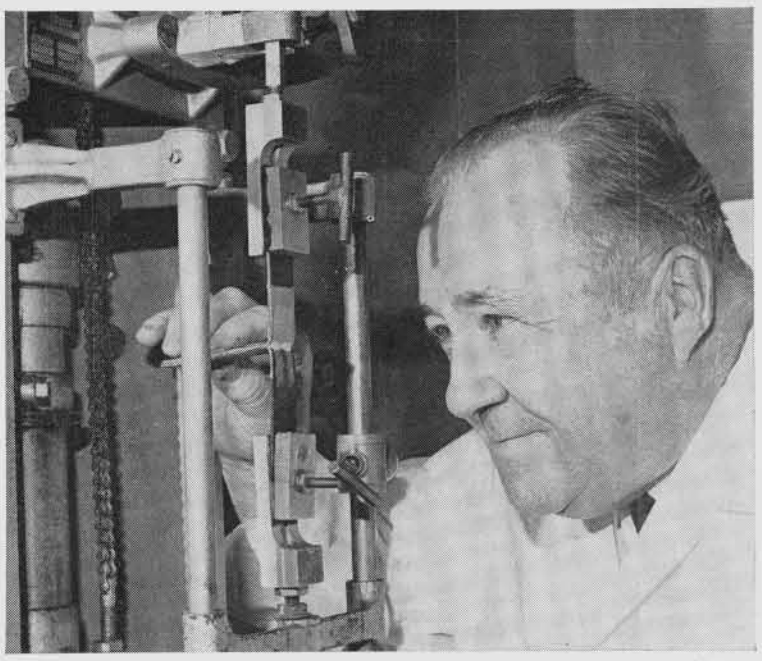
President Nixon Wednesday appointed Dr. Thomas Paine, administrator of NASA.

The announcement was made during White House ceremonies honoring Apollo 8 astronauts Frank Borman, Jim Lovell and Bill Anders as recipients of the Goddard Memorial Trophy. Paine, 47, had served as acting administrator of NASA since the retirement last fall of James Webb.

In making the appointment President Nixon said, "We searched the nation for the best man to take charge of the U.S. space program in this exciting period. After searching the country we found that the best man was in the program already."

# HOW ABOUT THAT !





NEW ADHESIVE — Dominic Mitchell of Laboratories and Test checks peel strength of new adhesive he developed. New cement, which has numerous uses, is being marketed commercially under license by company. It bonds various elastomers together, or to other materials with extremely high adhesion qualities.

*TIRES, GOLF CLUBS*

# Apollo Cement Now Available for Industry

A new cement developed by Space Division and subsequently used on the Apollo is now commercially available and promises substantial savings in a number of applications.

Longer life from nylon-supported automobile tires and longer drives from nylon-shafted golf clubs are among the product's future development potentials, according to Michael Watson, manager of Export Licensing. The adhesive was developed by Dominic Mitchell of Laboratories and Test.

A single component polychloroprene with a year's shelf life, the new adhesive bonds various elastomers together, or to other materials, with greater adhesion than is obtained with conventional products.

Mitchell said the cement retains its bond strength through a temperature span of minus 60° F. to plus 320° F.

On the Apollo, the new cement was principally used to hold wiring bundles and other parts in place, eliminating the weight and the holes in the wall problems of metal fasteners. The cured cement is particularly suitable for aerospace applications because it has no residual gassing characteristics.

TOUCH OF SPACE — Young students at Braille Institute of Los Angeles "see" space suit through their fingertips. Students at the institute received a special program on Apollo project.

*'VISION OF SPACE'*

# Division Men Help Blind Children Learn of Apollo Through Touch

The flight of Apollo 9 was brought closer to home for adults and youngsters at the Braille Institute of Los Angeles through the efforts of two division men.

Lee Wiltsie, division Cost Reduction Program administrator, and Chet Harris, assistant to the vice president of Administration, recently presented a special program for students at the institute.

The two men painted a detailed word picture of the Apollo program background, the history of space, technological benefits, and a word outline of the Apollo 8 and lunar missions. They supplemented their presentation with models of the Apollo command and service modules and the Saturn V launch vehicle, samples of space food and a space suit.

On the day of the presentation, students were able to touch and familiarize themselves with the models and sample the foodstuff prior to the address.

"Their questions were very searching, penetrating, and well thought out," said Wiltsie. "It was very rewarding to see their interest.

"Both Chet and I feel that we probably got more from having the opportunity to be there with them than they did from our program," Wiltsie said.

# Apollo Special Scheduled for IndianapolisTV

Five division Indianapolis-area natives will be featured in a television special on the Apollo program scheduled for presentation Tuesday by WISH-TV in Indianapolis.

Highlighted will be Perry Laffoon of Scheduling and Change Control; Katie Nielsen, Television and Film; Madge Culp, Apollo Test Operations; Bill Walker, Apollo Final Assembly and Checkout Support, and Hassell Chastain, Apollo Manufacturing Quality Assurance.

The division employees were introduced to a group of touring Indiana news media representatives who visited Downey recently to obtain information on the division's Apollo/Saturn program work. A number of the newsmen interviewed the employees to provide a local touch to their articles.

The WISH-TV program Tuesday is timed for presentation during the flight of Apollo 9. It will focus on the mission and include a review of the lunar landing program.

# Monthly Golf Tourney Slated for March 30

The division Monthly Golf Tournament for March, planned for the Shorecliffs Golf Course, has been rescheduled for March 30.

Tee-off time for the tournament will be 8 a.m. Registrations for the tournament will be taken at both the Downey and Seal Beach Recreation and Welfare offices on March 18.

YOU ARE THE "I" IN PRIDE

# Classified Ads

**AUTOS — FOR SALE**

'64 Dodge Van Camper, a/c. UN 3-2062.
'63 Porsche Super, $2,550/offer. 213/439-9231.
'64 VW w/sunroof, $900. TO 6-8133.
'65 VW, $1,050. TO 9-2154.
'65 VW. 714/527-3254.
'53 Chev. 2 dr. hrdtp, $250. 964-0497.
'55 Chev. V8 stwgn., $300. DA 9-2784.
'56 Chev., tuck/roll. 213/427-8034.
'62 Chev. Impala SS, showcar, $2,000/offer. TO 6-8133.
'64 Corvair Monza, 110 h.p., $825. 714/633-7416.
'65 El Camino, chrome whls. 864-6121.
'66 Caprice, w/air, $2,095. 866-4463.
'61 Continental, $800. 714/642-3939.
'62 Comet, best offer. 861-8739.
'62 Ford, conv., XL500, $525. 213/434-0718.
'57 Olds, $150. 714/523-2856.
'63 Cad., full power. GE 1-4797.
'64 Rambler wagn., $1,000. 714/828-8579.
'69 Toyota, Corona, stick. 675-7868.
Camping trailer, sleeps 8. 213/439-6996.
'50 Ford Dune Buggy, $450. 213/322-3740.
'55 Ford P/U w/camper. 213/531-0557.
'55 Ford ½T camper. 213/630-6051.
'56 Ford P/U, $350. 714/525-0190.
'57 Ford Sta. Wag., $200. 714/839-0360.
'59 Mercury Wag. 213/537-1362.
'63 T-Bird. 213/869-8800.
'66 Ford LTD. 213/433-3118.
'67 Mustang 2+2. 714/292-4042.
'67 Mustang fastbk., $1,695. 213/862-5970.
'57 Chev. Nomad stag. wagn., $325. 213/865-0016.
'62 Chev., needs work, $300. 213/695-7825.
'62 Chev., 4 dr. H.T., $725. 213/943-9539.
'63 Chev. P/U, V8. 714/897-8698.
'66 Caprice Cpe. 213/861-6608.
'67 VW bug, $1,600. 213/630-3371.
'66 VW sedan. 714/635-2136.
'65 Rambler sta. wagn. 833-1458.
'66 Riviera, F/P, AM/FM stereo,mk. offer. 213/373-4552.
'66 Riviera, $2,450. 213/638-1945.
'67 Olds Cutlass Supreme. 213/862-6731.
'65 Olds. 442, 4 spd., $1,600. 213/941-7607.
'57 Opel Cadet, $45. 691-7270.
'67 Firebird, 326, air/auto, AM/FM, PS&B, $2,550. 941-8834.
'64 Renault, auto., mke. offer. 714/523-2933.
'59 Renault, $100. 691-7270.
'62 Healy, H&S tops. 714/675-3180.
'59 Healy, $500. 213/867-8052.
'64 Olds. Starfire 2 dr. hardtop. Factory air, P/S, P/B, auto. trans., R&H, red, $1,295. Cox (D), 326-9388.

**MOTORCYCLES**

'66 Triumph TR6, 650cc. 213/869-7463.
'66 Honda 305, Scrambler. 923-8012.
'66 Yamaha 80, $125. GR 5-3623.
'66 Triumph TR6, 650cc, 213/869-7463.
Honda 305. 213/531-8234.
Honda S90. 213/421-2935.
'67 305 Honda Scrambler. 213/865-7014.
'68 Hodaka Desert Bike, $475. 213/862-3764.

**HOMES**

3 br., electric, Salton City. 925-1476.
4 br., Garden Grove, $29,000. 714/897-8022.
Horse Ranch, $21,000, GI. 213/336-2436.
3 br., 2 ba., Ft. Worth, Tex. 213/355-2062.
3 br., 2 ba., din. rm., Torrance. 213/324-2869.
1 br., Paramount. 213/866-9848.

**BOATS**

16′ Regatta ski boat, Merc 110 hp. 867-4202.
Boat, Javlyn, Mer & trailer, $500. 864-7212.
Sailboat, Sandpiper, 14′, $300. FR 9-3280.
Ski boat, Regatta 16′, Merc. 110 HP. 213/867-4202.
Ski boat, needs wk., $250. 213/695-7825.
30′ Trojan cruiser, twin-screw, sleeps 6. Rafnel 597-5388.

**FURNITURE**

Sofa Bed ¾, $195. 830-1923.
End tables, coffee table, $15. FR 9-6419.

**FOR SALE**

**REAL ESTATE**

Lot, Salton Sea. 861-5906.
5 acres/cabin, China Lake, $3,500. 213/696-3539.
Lot, Lake Front, San Luis Obispo. 213/321-0518.

**PETS**

Cocker-Poodles, $15. 943-5526.
Guppies, Blue Delta, $2.25 pr. 596-6698.
Siamese Cat, $10. 213/425-3021.
Dach., 6 wk., reg., $35. 691-7270.

**RIDE WANTED/OFFERED**

Orange to Downey. 633-6092.
Imperial at Euclid/Harbor to S. B. 714/871-0045.
Orangethorpe, Magnolia, a days/week. 521-2540.
Thousand Oaks to Downey, 8:12-4:54. 805/495-2967.
Orange to Downey, offered/wanted. 633-6092.
Costa Mesa/Downey, 7:30-4:12. 714/545-7414.
Mar Vista to Seal Bch. 397-8856.
Belmont Shore to B/6. 213/434-3162.
San Diego Freeway/Woodruff. 213/598-1788.
Beach Blvd. & Warner to Seal Bch. 842-5980.
Thousand Oaks to Downey, 8:12 to 4:54. 805/495-2967.
Magnolia & Talbert, 7:30-4, S/B. 962-4139.

**FOR RENT**

2 br., Downey area. 925-8044.
2 br. apt. unfurnished. 525-8414.
4 br., elec. blt-ins, Rossmoor. 430-5059. eve., 430-5059.
Big Bear Cabin, $15/day. 430-3066.
4 br., Anaheim, children. 714/772-4114.
Garage wanted to rent. 862-4392.

**WANTED TO BUY**

Water skis, adult/child. 213/861-1815.
Drafting machine. 213/ME 3-6181.

LIFT-OFF — Employees in Bldg. 290 at Downey take five to watch live closed-circuit telecast of Monday morning's launch of Apollo 9. Ten-day flight is designed primarily to check out lunar module and its systems with astronauts aboard in Earth orbit, and includes first Apollo docking, EVA.

SPACE DIVISION Skywriter

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