

New Lift-Off Date Only Change in Apollo 10 Mission

University of Alabama Research Institute
History of Science & Technology Group
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NASA has announced that the Apollo 10 mission profile will remain in its present form—a lunar orbit mission with a lunar module descent to within 50,000 feet of the moon's surface.

The decision to fly the mission as previously planned followed a series of reviews of technical and operational data from the Apollo 9 flight in Earth orbit

early this month and an examination of options for the next mission.

Additional Experience

Purpose of Apollo 10 is to provide additional experience in combined system operation during the three-day trip to the vicinity of the moon and in lunar orbit, NASA says. With the exception of the actual landing of

the lunar module on the moon's surface, the mission planned is the same as for the lunar landing flight.

The only change in the flight is a rescheduling in lift-off from May 17 to May 18, which is the second day of the lunar launch window for that month, NASA officials explained.

The change from the first to

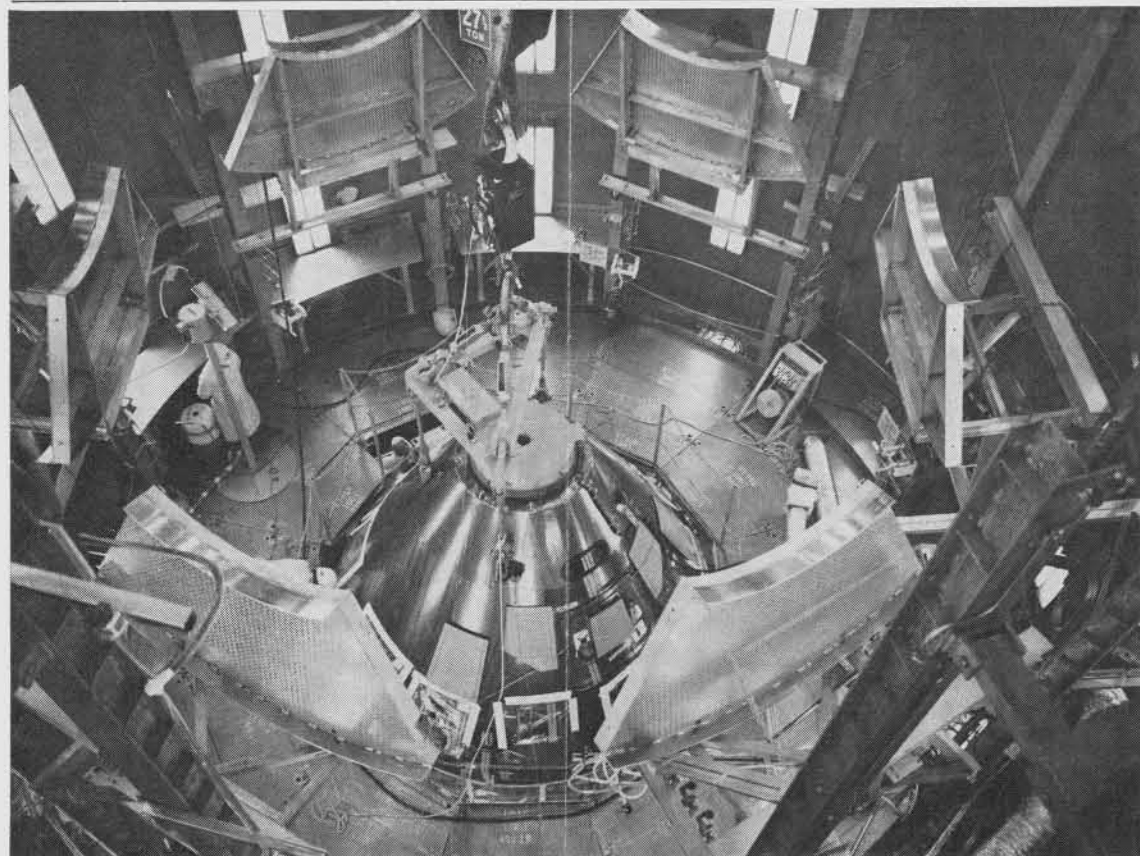
the second day of the May launch window will permit observation and the collection of data on Apollo lunar landing site 2 as the area of primary interest, and also permits the observation of site 3 after sunrise on the moon.

Apollo site 1 was the area of primary interest in the historic lunar orbiting flight of Apollo 8

last December.

Astronaut crewmen for Apollo 10 are Tom Stafford, commander; John Young, command module pilot, and Gene Cernan, lunar module pilot. The flight will be the first test of the lunar module in the moon environment. While the spacecraft circles the moon at an altitude of

(Continued on Page 2, Column 5)



ALTITUDE RUN—Apollo 11 command and service modules are shown in giant test chamber at NASA's Kennedy Space Center. Spacecraft last week completed manned altitude test with prime crewmen Neil Armstrong, Mike Collins and Ed Aldrin aboard for space simulation.

Eleven Employees Paid Royalties Through Special Awards Program

Eleven division men received a total of \$6,450 last week in company Special Awards.

Presenting the checks was Executive Vice President Joe McNamara. The men received the money as their share of royalties paid the company by firms under license agreements.

Receiving royalties for various chemical milling processes were E. W. Cooke of Apollo Engineering, \$250; John Derbyshire, Laboratories and Test, \$750; D. C. Mitchell, Lab-Shepherd, Laboratories and Test, \$300; C. C. Test, \$1,500; R. W. Spencer,

Structures and Design, \$150; E. L. Triman, Science and Technology, \$250, Sam Young, Laboratories and Test, \$300.

T. J. Dorse, who developed a metallic boss seal for high-pressure, high-temperature tube fittings, received \$100. Ken Highley, inventor of a clip fastener, was presented \$2,500. Both are from Structures and Design. E. G. Stevens of Laboratories and Test, developer of a protective coating process, received \$150.

A combined total of \$20,700 in royalties has been paid to (Continued on Page 2, Column 1)

REBROADCAST OF 'VIEW FROM SPACE' SET FOR APRIL 7

"View from Space," the third North American Rockwell television special in the "Man and His Universe" series, will be rebroadcast in color on Monday, April 7, 4:30-5:30, channel 7, due to the interest generated by the Apollo 8 and 9 flights and the general acclaim for the show.

Guides for the spectacular composite trip into orbit and around the Earth are Frank Borman and James Lovell, two of the three astronauts who orbited the moon in Apollo 8, and Apollo 11 (Continued on Page 2, Column 1)

SPACE DIVISION

Skywriter

NORTH AMERICAN ROCKWELL CORPORATION
VOL. XXIX, No. 13 (Aerospace and Systems Group) MARCH 28, 1969

Division Delivers Apollo, Saturn Flight Vehicle

Shipment of SC-108, Saturn S-II-8 Stage Keys Activities at Downey and Seal Beach

This week was a particularly busy one for division Apollo and Saturn S-II personnel at Downey and Seal Beach.

Heading activities at Downey was the shipment of Apollo Spacecraft 108 to NASA's Kennedy Space Center, Fla. The spacecraft service module and command module left Downey Thursday morning.

The eighth S-II flight stage was rolled out of Seal Beach on Thursday for the start of its approximately two-week journey to NASA's Mississippi Test Facility, where it will be put through a static-firing test before its delivery to Kennedy Space Center.

Spacecraft 108 presently is scheduled for Apollo 12, the first manned mission following the planned lunar landing, said Ted Clauss, assistant spacecraft manager for the vehicle.

Among those persons working with Clauss on the spacecraft were Bill Lish of Apollo Engineering, vehicle project engineer; John Hill, senior test project engineer, and Phil Otte, chief test conductor, both of Apollo Test Operations; Art Huffman of Apollo Manufacturing; Chuck Lockabee of Manufacturing and Test Support, and Paul Hirsh of Apollo Quality and Reliability Assurance.

(Continued on Page 2, Column 5)

Astronaut Trio Lauds Apollo 9

"The Apollo Command and service modules gleamed like a brilliant star in orbit," Apollo 9 commander Jim McDivitt said Tuesday as he described the flight for newsmen.

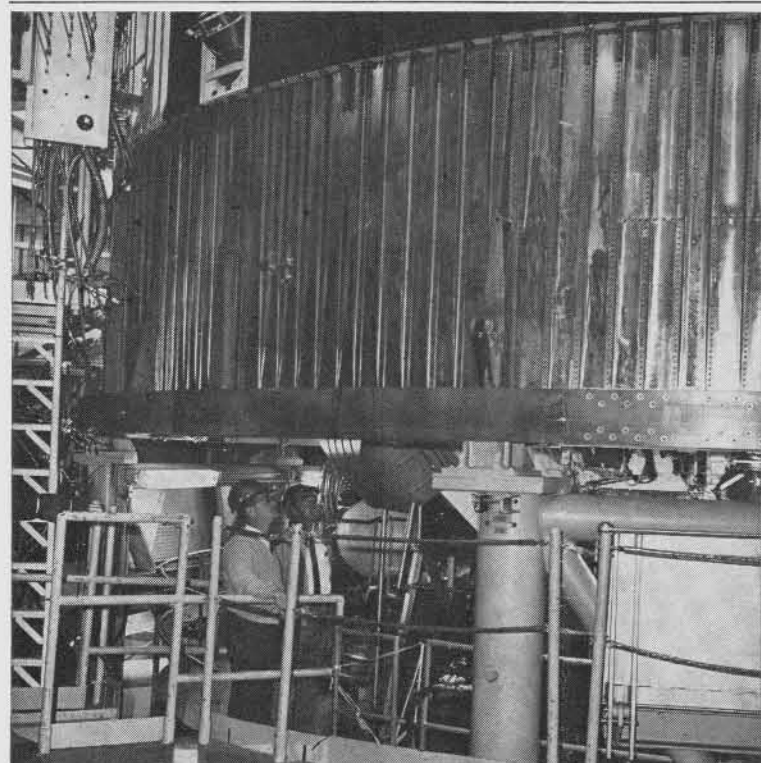
Commenting on the crew's view of the command/service module spacecraft from the lunar module, McDivitt said the craft was so bright that it was "very easy to track across the ground: it shone just like a brilliant star. We were able to see the command module as far out as 60 miles in the daylight."

Ground Support

McDivitt paid full credit to the success of the mission to "thousands and thousands of people on the ground, and we would like to thank all of them."

Dave Scott, who piloted the command/service module spacecraft while McDivitt and Russel Schweickart were in the lunar module, pointed out that

(Continued on Page 2, Column 5)



READY FOR SHIPMENT—This week was big one for division with shipment of eighth Saturn S-II flight stage from Seal Beach and Apollo Spacecraft 108, payload for Apollo 12 flight, from Downey. In photo at left, Paul Trees,



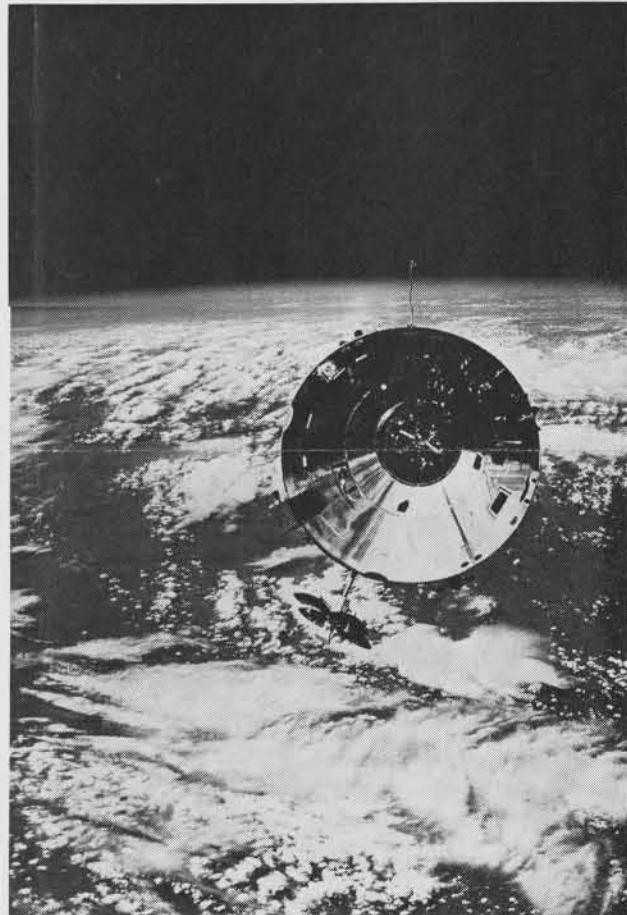
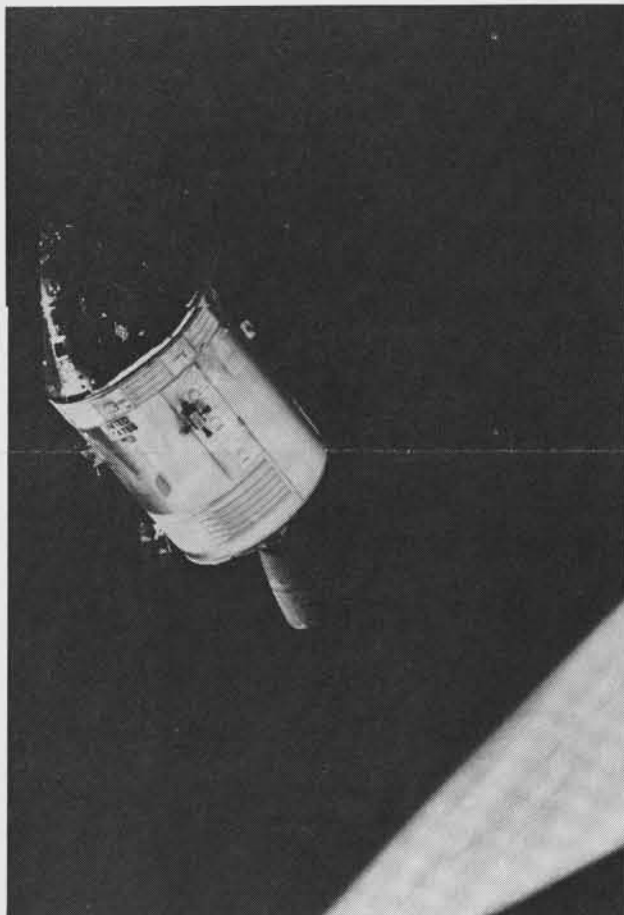
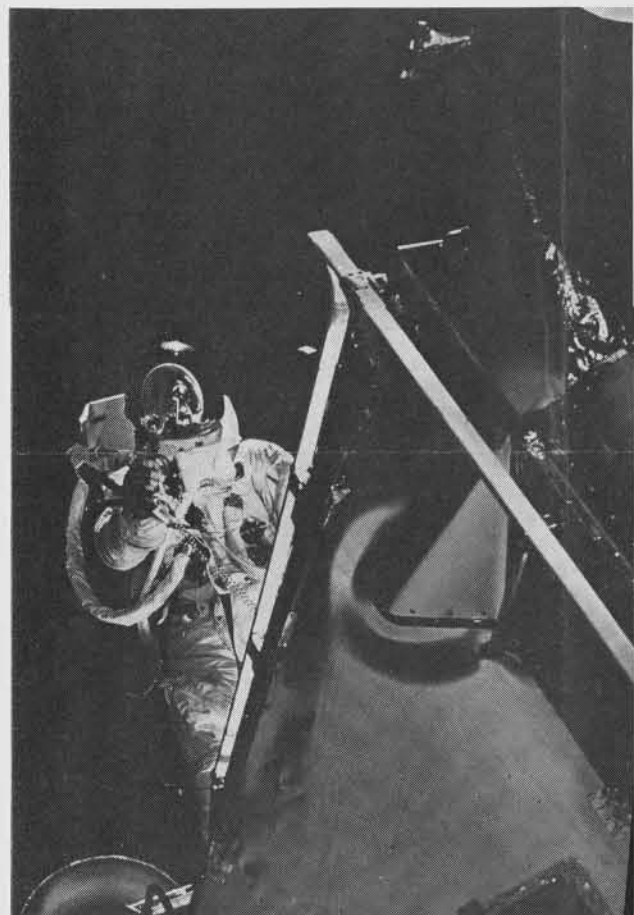
right, test conductor, and John Jones, assistant test conductor, check work in progress on S-II-8 just before shipment. At right, employees in Bldg. 290 at Downey put finishing touches on spacecraft in readiness for air delivery.

THE MEN — THE EXPERIMENT — THE NEW VIEW OF AN OLD WORLD



THE MEN — Apollo 9 astronauts Dave Scott, left, Russell Schweickart and Jim McDivitt, in left photo, wave to crew of recovery ship *USS Guadalcanal* during inspection of "Gum Drop," Space Division-built Apollo command module

that was their home for 10-day Earth-orbital mission. In right photo, McDivitt, Apollo 9 commander, gives "thumbs-up" sign as trio samples cake baked for them aboard the *Guadalcanal* — first "real" food since their return from space.



THE EXPERIMENT — Light of sun seems to spotlight Schweickart as he stands on lunar module "porch" during extra-vehicular stint to photograph Earth and Apollo command and service modules. Schweickart's extra-vehicular

activity was first for Apollo program. Center photo shows command and service modules highlighted against dark of space in photo from lunar module. Right, head-on view of command module shows docking assembly used in flight.



THE NEW VIEW — Lunar module photo at left shows third stage orbiting in space following separation. Center photo shows cloud-specked Los Angeles area from Santa Monica Bay at top left down past Catalina, shown clearly

lower center. The right photograph shows a king-side thundercloud formation hovering over Earth like a giant mushroom. Photographs were part of series taken from Apollo 9 in orbital altitude studies of Earth's natural resources.



GUM DROP ON DISPLAY — Almost 10,000 employees and their families visited Downey Friday night, Saturday and Sunday to see the command module payload for Apollo 9 which gained

the affectionate name "Gum Drop" from its astronaut crew. Six-minute telecast highlighting flight and CBS-TV mock-ups used in nationwide telecast, also were a part of the unique display.

Astronaut Trio ...

(Continued from Page 1, Column 5)

"everything worked just as advertised with the probe and drogue, and it was a good, firm docking."

Although Schweickart did not perform the extravehicular transfer from the lunar module to the command module, Scott noted that the simulation maneuver performed by the crew convinced them that it could be done safely and within the time allotted.

Schweickart said his portable life support system, tested for the first time during his EVA, performed well. He said using the lunar module hand rails, "was a pleasant surprise to me that this was far easier in flight than it had been in any of the simulations on the ground."

Apollo/Saturn ...

(Continued from Page 1, Column 4)

NASA representatives on the spacecraft were Fred Peters, project engineer, and Chuck Archer, Reliability and Quality Assurance, both from the resident Apollo office at Downey.

The S-II-8 stage is the second built by the division with the new spray-on foam insulation. The stage is destined for use in a launch following the initial lunar landing mission, said A. H. (Bunky) Aldred, S-II-8 project engineer.

Working closely with Aldred on the stage was a team including Jerry Tesinsky of S-II Engineering; Bob Lugibihl and Gale Waite of S-II Stage Check-out, and Jim Herriage and Bill Schaffer of S-II Manufacturing.

Apollo 10 ...

(Continued from Page 1, Column 5)

about 69 miles, Stafford and Cernan in the lunar module will separate from the command and service module, approach twice to within about 10 miles of one of the pre-selected Apollo landing sites, then rejoin Young in the command module in maneuvers similar to those performed in Earth orbit by Apollo 9.

The closest approach to the surface will be at the pericynthion, or low point, of the lunar module transfer orbit. Because of propellant limitation in the ascent stage for this flight, it will be impossible to make a landing and subsequent lift-off from the moon, NASA said.

During 11 more revolutions of the moon, the crew will make landmark sightings, take photographs and transmit live TV views of the lunar surface, of the Earth from lunar distance and of their own activities inside the command module.

On Launch Pad

The Apollo 10 space vehicle, with the division-built Apollo Spacecraft 106 command and service modules and the fifth Saturn S-II flight stage, is already on the pad at Kennedy Space Center's Launch Complex 39B.

Manned altitude chamber runs with the prime and backup astronaut crews have been completed on the Apollo 11 spacecraft and the launch vehicle is mated and undergoing check-out in the Vertical Assembly Bldg. at KSC. Apollo Spacecraft 107 command and service modules will be the payload for the flight, which could result in the first lunar landing, and the sixth S-II flight stage is included in the launch vehicle.

Special Awards ...

(Continued from Page 1, Column 2)

company employees during the past year, said Al Rothenberg, division patent counsel. The 11 division men have been presented \$32,900 in royalties since the inception of their product or process.

The Special Award plan is part of the company Invention Award program. Full information on the program may be obtained by calling the Patent Dept. at Downey Ext. 6700.



ROYALTY RECIPIENTS — Executive Vice President Joe McNamara, left center, presents royalty check to Sam Young, one of 11 men receiving company special awards as their share of royalties paid North American Rockwell by other firms under license agreements. At right is Al Rothenberg, division Patent counsel. Employees shared a total of \$6,450 through the Special Award program.

QUARANTINE

NASA Checking Moon Trailer for Man's Safety

While the Apollo 9 astronauts were making preparations for their return to Earth, five NASA men were testing a silvery house trailer designed to return moon explorers from their splashdown point to the space agency's Manned Spacecraft Center at Houston.

The trailer is MSC's Mobile Quarantine Facility (MQF), a vehicle that looks much like a regular house trailer but has special bacteriological seals to isolate its environment from that surrounding it.

During the final four days of the Apollo 9 mission, four test subjects and a surgeon lived in the MQF aboard the USS *Guadalcanal*, main recovery ship for the flight. They remained sealed in the trailer until it arrived at Houston, except for a brief period when it was moved from the *Guadalcanal* to a cargo plane at Norfolk, Va.

On returning from a real lunar mission, astronauts will spend four or five days in the MQF and at least two weeks in the MSC Lunar Receiving Laboratory.

This period is required to insure that the astronauts do not bring back from the moon any organisms that might contaminate the Earth.

The trailer-like MQF weighs 12,000 pounds, is 35 feet long, 9 feet wide and 8½ feet high. It contains a microwave oven for preparing frozen dinners, a tub, six bunks and a lounge with six airplane-type seats.

'View' Telecast ...

(Continued from Page 1, Column 3)

Lunar Module pilot Edwin (Buzz) Aldrin, who describes his feeling as he stood outside of Gemini 12 and looked down on Earth more than 100 miles below him.

INVOLVED UP TO MERIT BADGES

Employees Assist Scout-O-Rama

Three Autonetics employees and two men from the Space Division are involved up to their merit badges in the annual Scout-O-Rama for the North Orange Council of the Boy Scouts of America.

TRAM AT SEAL BEACH

Surplus Sales' new traveling tram is at the Seal Beach facility on Tuesdays and Fridays.

The tram has available for employees a complete line of company jewelry and other items for both men and women. Open hours for the tram on both days are from 11:30 a.m. to 1 p.m.

Tickets for the event, to be held from noon to 9 p.m. on Saturday, May 25, in the Anaheim Convention Center, went on sale this week from 14,500 Cubs, Boy Scouts and Explorers in the council's 375 units, according to H. Eugene Wilson, supervisor of Clearances, Audits and Accountability for Autonetics Industrial Security, who is general chairman of the Scout-O-Rama.

Other Autonetics personnel assisting the Scout-O-Rama are Donald J. Vincent, manager of Graphics, who is advertising chairman; and Dr. William Jones, Autonetics medical director, who is serving as

health and safety chairman.

Carl Kiefer, manager of F&IE at the Space Division Seal Beach facility, is boosters chairman and Bob Welsh, manager of Schedule management, Apollo Applications Program, Downey, is ticket sales chairman. Admission to the event is free for all children under 18 years, when accompanying a ticket holder. Tickets, available from any Cub, Boy Scout or Explorer, are \$1.



THE ONLY WAY TO GO — Division Ocean Systems Operations divers test lock-out section of Beaver Mark IV in tank submergence test. Diver lock out is one of key features of Beaver submersible, now undergoing sea trials at Catalina Island that are scheduled for completion in early spring.



CHAMP CANDIDATE — Pert Barbara Jo Guedel, 14-year-old daughter of Ruth O'Hara of Apollo Bonded Structures, will be among candidates competing for ladies singles title in world roller skating championships next month in New York. Barbara Jo took state crown in California State Gold Skate Classic.

Gate Changes Become Effective This Week

Four gates were closed to employee use this week at the Downey facility. Closed were Gate 26-A, north of Bldg. 3; Gate 30, south of Bldg. 288; Gate 56-A, east of Bldg. 2, and Gate 58, north of Bldg. 4. With the closing of Gate 26-A, employees working in Bldg. 3 should park in Lot 33 (Southeast Parking Lot) north of Imperial Hwy., and enter the building through Gate 33-A. Persons who work in Bldg. 288 will use the same gate because of the closure of Gate 30. Due to the closing of Gates 56-A and 58, the main entry to Bldgs. 2 and 4 will be through Gate 60, which is just east of Bldg. 4. Employees working in Bldg. 2 will use Parking Lot 9, east of the building, and employees in Bldg. 4 will use that lot or Lot 10, just south of Bldg. 4.

PUT PRIDE IN YOUR WORK

APOLLO 9 EVENTS BOX SCORE

Event	Ground Elapsed Times	
	Predicted	Actual
	hr:min:sec	hr:min:sec
Liftoff	10 am CST	10 am CST
S-IC stage cutoff	00:02:40	00:02:42
S-II stage ignition	00:02:44	00:02:43
S-II stage cutoff	00:08:56	00:08:56
S-IVB stage ignition	00:08:58	00:08:57
S-IVB stage cutoff	00:10:49	00:11:04
(Insertion into 102.3 x 103.9 nm orbit)		
Transposition/docking, LM extract	3:00:00	3:02:08
SPS burn No. 1 (108.3 x 125.6)**	5:59:00	5:59:00
SPS burn No. 2 (107.7 x 198.5)	22:12:03	22:12:03
SPS burn No. 3 (109.5 x 271.8)	25:17:38	25:17:38
SPS burn No. 4 (109.3 x 272)	28:24:40	28:24:40
Docked LM-DPS burn (108.0 x 271.2)	49:41:33	49:41:33
SPS burn No. 5 (125.4 x 129.2)	54:26:11	54:26:11
SM-RCS separation burn (122 x 27)	93:02:53	93:02:53
LM-DPS phasing burn (111 x 136)	93:47:34	93:47:34
LM-DPS insertion burn (133.9 x 138.9)	95:39:07	95:39:07
LM-RCS concentric burn, staging (113 x 138)	96:16:03	96:16:03
LM-APS constant height burn (111.9 x 116.4)	96:58:14	96:58:14
LM-RCS terminal phase burn (122 x 127)	97:57:59	97:57:59
Docking, LM ascent/CSM	—	98:58:59
LM-APS burn to depletion (126.6 x 3746)	101:53:14	101:53:14
SPS burn No. 6 (105.4 x 120.2)	123:25:05	123:25:05
SPS burn No. 7 (97.7 x 250)	169:38:59	169:38:59
SPS burn No. 8 (deorbit)	240:31:14	240:31:14
Splashdown	241:00:43	241:00:53

(**Maneuver times shown are those predicted in real-time trajectory calculations — not pre-mission flight plan. Post-maneuver orbits are in nautical miles)

Booth Predicts Increased Sales, Earnings in '70

Significant increases in both sales and earnings in 1970 have been predicted by Wallace W. Booth, North American Rockwell's vice president — Finance. Speaking before the Austin Investment Association, at Austin, Tex., Booth cited a number of major aerospace programs for which the company is contending and is optimistic of capturing. Among them are two multi-billion-dollar Air Force programs — the F-15 advanced air superiority fighter and the Advanced Manned Strategic Aircraft, Booth told the audience.

Major Areas

He also mentioned four major space programs that currently are being considered:

1. The "Apollo Applications Program" which contemplates three earth-orbital post-Apollo flights that will use Apollo vehicles that North American Rockwell is building and modifying internally to permit longer duration flights.
2. "Project Leo" which will make use of existing North American Rockwell designs as well as some new equipment to permit astronauts to explore the moon.
3. An earth orbital space station large enough to accommodate up to 100 persons. North American Rockwell has teamed with General Electric, Booth said, to compete for a definition study.
4. "The Grand Tour" of the outer planets in the solar system. From 1977 to 1980, Booth said, the planets will be in position to permit spacecraft from a single launch to visit Jupiter and Saturn and fly by Uranus, Neptune, and even the most distant planet, Pluto.

'Grand Tour'

During his address to the association, he pointed to a sense of urgency for this proposed program because this optimum position of the planets will not be repeated again for 174 years.

Classified Ads

FOR SALE

- AUTOS**
- '63 Buick, Riviera, \$1,000, full pwr., air. Kraut (D), 805/482-8404.
 - '41 Olds Coupe, JA 7-2510.
 - '62 Rambler Wag./new engine, 528-2909.
 - '55 Chev Wag. Make offer, DA 9-2784.
 - '56 Chev, Tuck/Roll, \$250, 427-8034.
 - '57 Chev, 4 dr., 2-10 Wagn., rebuilt eng., \$225, 679-4395.
 - '60 Chev, 1/2 T Truck, \$450, ME 4-2546.
 - '64 MGB, \$1,595, 714/544-4179.
 - '62 Austin Healy, 300, Hrdtop, 714/675-3180.
 - Triumph TR-3 Rdstr., \$125, 714/539-7585.
 - '58 Opel, 2 dr., \$295, 524-0618.
 - 1T Ford Van, Housecar, nearly finished, 528-4097.
 - '61 Chev. (348) nomad wagon, \$650, 637-1979.
 - '64 Olds 98, air, fp, 714/772-6990.
- MOTORCYCLES**
- '68 Honda CL90 Scrambler, 862-3361.
 - '66 Triumph TR6, 650cc, 869-7463, aft. 5.
 - '67 Honda S65, \$175, 596-8356.
- HOMES**
- 3 bd., pool, N. Downey, \$27,500, 862-6790.
 - 3 brd., Whittier, \$19,750, OX 8-7076, aft. 6.
 - 3 brd., 2 ba., Anaheim, 714/776-1610.
- APPLIANCES**
- 11' Refrigerator, Westinghouse, frost free, \$85, 696-3539.
- MISCELLANEOUS**
- Porsche luggage rack, '62-'65, 213/439-9231.
 - Air compressor, \$65, 596-0645.
 - Couch, Maple, \$25, 714/537-7458.
 - Relax-a-Cisor, 862-3396.
 - Diamond Wedding Ring, \$500, 868-5027.
 - Watch, Omega, \$100, 714/539-1873.
 - Aluminum sliding glass door, 9x4', 714/524-2558.
 - Base guitar "VOX", \$100, 213/NE 2-4133.
 - Piano, spinet, walnut/bench, 923-3507.
 - Birch d/r table, 4 chairs, 213/596-1448.
 - Vacuum, all attach., \$25, 329-2951.
 - Piano & organ lessons, HA 1-7402.
 - Amplifier for guitar, 634-1550.
 - Cemetery lot, Roosevelt Memorial Pk., \$200, 691-7194.
 - Lgr. old elec. train, 714/826-1396.
 - Lrg. Potted Evergreens, OS 6-3272.
 - Telescope, 4" Reflector, \$35, 213/423-6856.
 - Camera/Projector, 325-3573.

FOR SALE

- MISCELLANEOUS**
- Washer & Dryer, Maytag, sofa, club chair, Leone (D), 675-5694.
 - Torch Set, Presto Lite, complete, \$20, 370-4760.
 - Box Trailer, 4' x 8' x 18", \$25, 213/691-7202, aft. 6.
 - Piano Accordion, 120 Base, \$85, TO 9-3821.
 - Power Tool, 632-6940.
 - Portable Generator, 450 watt Honda, \$95, 869-8264.
 - Guitar & Amp, 697-2252, aft. 5.
 - Tape Recorder, Portable Mercury, 421-2935.
 - '57 Olds Engine, \$50, 14063 Anderson Ave., Paramount.
 - Office desk/chair, steel, \$100, 537-7458.
 - 4 pc. redwd. patio set, \$25, 284-4197.
 - Minibike, Bonanza, 5 hp., \$100, 633-5523.
 - Accordion, Universal, red, 120 base/case, 597-6888.
 - Generator, 1,100 wt., Sears, 213/634-6797.
 - Hair dryer, Sunbeam, \$10, 213/860-5144.
 - TV and stand, \$25, 778-4358.
 - '56 Olds eng., auto., \$85, 14063 Anderson Ave., Paramount.
 - Wheelchair, 866-5641.
 - Pentax, 35mm with 3 lenses, 421-2935.
 - Communicator, 2-meter, 213/697-4903.
 - Unicycle, \$15, 714/897-2849.
 - Stove, Wedgewood, 36 inch, \$45, Rutledge (D), 925-5159.
 - TV, 23" con. Magn, \$150, 862-2933.
 - Scalloped rocks (50), .25¢ ea, 213/596-0645.
 - Skis, 213/439-4847.
 - Snow Skis, 862-3934.
 - Tape Deck Stereo, Viking "86", \$70, 879-8522.
 - Sleeper Camper 8', \$150, ME 0-5793 aft. 4.
 - Redwood Patio Set, 4 pc., \$25, 284-4197.
 - Elect. Hand Saw, 6 1/2", 864-5111.
 - Irons, Matched Wilson, \$30, 714/897-6072.
 - Bike, Rupp Mini, 376-8153.
 - Tricycle, Childs, 535-7596.
 - Encyclopedia, '65 Colliers, 714/826-1396.
 - Dble. Sink, w/7" drain, \$20, 696-3539.
 - Antique Clock, 421-1640.
 - Pool Table, \$25, 4 x 7, 828-7583.
 - 4 Tires, Pirelli Centurado, 378-1835.
 - Camping Trailer, \$35, 691-7270.
 - Model A Ford Parts, 421-1640.
 - Boat Trailer/motor, HA 1-2335.
 - Ski Boots, Lange 10 1/2 N, 213/439-9231.
- BOATS**
- 18' Stevens Inboard Ski-Boat, 376-8153.
 - 13' 3" Boston Whaler, 40 h.p. Evinrude/Trlr, 213/598-1879.

WANTED TO BUY

- '55-57 T-Bird Hrdtop, 433-3385.
- Lot, Big Bear City, 429-1192.

RIDE OFFERED/WANTED

- St. College & Commonwealth to B/1, 8:12-4:54, 870-0195.



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Evening Courses Scheduled To Begin at Downey Wednesday

A variety of courses of interest to employees in almost all fields of endeavor are scheduled for presentation beginning Wednesday in Manpower Development's afterhours educational program. Courses are planned in the management and administration, science and engineering, technology, and manufacturing fields. Course titles in the major areas and their starting dates are:

Management and Administration—Performance Appraisal Work Shop, April 8.

Science/Engineering — Non-Metallic Materials in Aerospace Design, April 9; Space Exploration, Part II, April 16; Separation by Heat and Mass Transfer Processes, April 21; Space Exploration, Part I, May 21.

8; Scientific Computer Programming Part B, April 14; Industrial and Radiation Safety, May 6; Programming Systems Part A, June 23; Programming Systems Part B, Sept. 8.

Manufacturing — Basic Shop Math (12-3 a.m.), April 2; Basic Shop Math (5-8 p.m.), April 9; Mechanical Blueprint Interpretation, April 2 at Seal Beach and April 8 at Downey.

Full information on course content and registration information may be obtained by calling Downey Ext. 3078-9 for the management - administration course and Ext. 1165-6 for the other courses.

Camping Club Formed for Employees, Families

A new camping club has been formed for NR employees and their families. The first meeting will be held at the Autometrics Recreation Center, Room D, on Tuesday, April 22, at 7:30 p.m.



WOMEN'S SOFTBALL — Cheryl Pellicano, left, Gladys Lesnek and Lorraine Adriance check equipment that will be available for gals playing in division Women's Softball League. Women interested in participating can sign up by calling Recreation Center, Ext. 6094 or Cheryl, Ext. 1723-4 or Mary Ford, Ext. 2841, all at Downey. The deadline for registration is April 4.