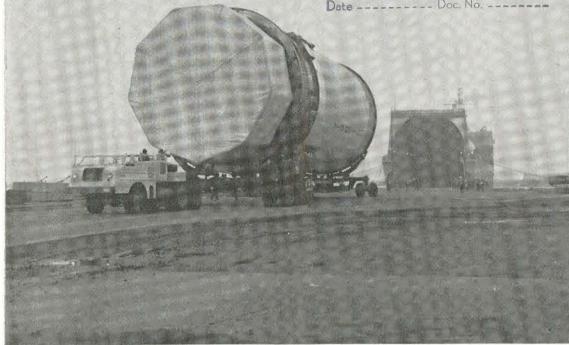
SATURN HISTORY DOCUMENT University of Alabama Research Institute History of Science & Technology Group





READY FOR BOARDING - Saturn S-II-8 stage waits on its transporter for loading aboard USNS Point Barrow for trip to NASA's Mississippi Test Facility where it will undergo static firing.

Apollo 9 Mission Astronaut Challenges Snoopy Award Winners for Encore Pre-Launch CDDT What do you do for an en-| attend due to illness. Under Way at KSC The night also marked the core after two highly successful manned Apollo flights?

A Countdown Demonstration Test (CDDT), one of the final major checkouts leading to launch, is in progress on the Apollo 9 space vehicle at NA-SA's Kennedy Space Center.

The on-the-pad checkout of the towering 363-foot tall ve-hicle started Wednesday and is scheduled for completion next Tuesday. The initial portion of the test, a "wet" CDDT in which propellants and fuels are loaded, will be followed by a half-day "dry" CDDT after the propellants and fuels have been drained.

Apollo 9 crewmen Jim McDivitt, Dave Scott and Russell Schweickart will take part in the "dry" test. The CDDT basically is a practice mission prelaunch countdown without any engine firings that checks out combined launch vehicle-spacecraft systems and affected ground support equipment.

The 10-day Apollo 9 flight is scheduled for lift-off from Kennedy Space Center on Feb. 28. It will be the first manned test in orbit of the lunar module, and will include the initial extra-vehicular activities and docking in the Apollo program.

The Apollo 9 crew for the first three days of the mission will have meals that come closer to home cooking than the normal space bill of fare to date. Each man will have meat and potato entrees, in addition to the regular rehydratable and bite-size food items. The extra foodstuff, which can be eaten with a spoon, includes five-ounce servings of beef and potatoes, ham and potatoes, and turkey and potatoes -much the same as the Christmas day meals carried aboard Apollo 8. Astronauts McDivitt, Scott and Schweickart have been kept busy using command module

This was the question ad-dressed to division Snoopy asaward winners by astronaut Walt Cunningham as he urged them to continue their pursuits of error-free workmanship on the Apollo/Saturn V program. Cunningham shared the po-

dium with division Executive ners as persons "who will not Vice President Joe McNamara tolerate error." Vice President Joe McNamara at last week's Awards Night event for Snoopy pin recipients. Sixty division and NASA employees were presented their pins as a highlight of the night.

Lorne Greene, star of televi-sion's "Bonanza," who was

premiere of "Ocean of Space," a division-produced film that Greene appeared in and narrattronaut personal recognition ed as a public service. Also shown was "Apollo 8: Go for TLI," a NASA film on the historic moon orbit flight.

McNamara, who welcomed the award winners and their spouses, hailed the Snoopy win-

"We have had much success, but we cannot become com-placent," he said. "We owe a continued pledge of good workmanship to our country and to the astronauts who fly Apollo." sion's "Bonanza," who was Commenting on the value scheduled to receive a special placed on the Snoopy awards by

A major pre-delivery goal on the Saturn S-II-8 flight stage was attained through an outstanding team effort by S-II

by Team Effort

Manufacturing. important insulation An modification was released to S-II Manufacturing on Jan. 13 by S-II Engineering on the stage, the first to exclusively use the new spray foam insulation. The change called for the addition of cork sheeting, core foam details, and laminates to the aft section of the stage.

The modification was proposed by the division and ap-proved by NASA's Marshall Space Flight Center on the basis of data obtained in two special tests of the foam using (Continued on Page 3, Column 1)

stage is a plastic-based, sprayon material that transforms it-self chemically into a tough ance static firing test as a pre-lude to being delivered to NASA's Kennedy Space Center coating. The lighter, easier to apply foam replaces the prefab ricated honeycomb core sandwich insulation used on earlier S-II stages, and is credited with having a greater insulating factor per cubic inch.

riter

NORTH AMERICAN ROCKWELL CORPORATION VOL. XXIX, No. 7 (Aerospace and Systems Group) FEBRUARY 14, 1969

S-II with All Spray Foam

Weight of Stage Reduced by 3,000 Pounds

The Saturn S-II-8, first S-II stage with all spray foam insulation, left Seal Beach Tuesday for a two-week ocean

At MTF, a test facility of NASA's Marshall Space

Through Use of New Protective Coating

trip to NASA's Mississippi Test Facility.

Flight Center, the stage will

undergo a full-duration, ap-

proximately six-minute accept-

The foam that insulates the

S-II-8 Delivery

Goal Attained

MANY PRAISED

Insulation MTF-Bound

The S-II's insulation plays a key role in protecting the stage from aerodynamic friction during the early phases of launch, and in lessening the "boil-off" of its supercold liquid hydrogen and liquid oxygen fuels on the ground prior to launch, said Frank Moritz, project engineer for the stage.

Moritz said use of the new spray foam insulation reduces the weight of the stage by approximately 3,000 pounds.

"The work done on the stage by S-II Bonding and Stage Insulation in preparing it for de-livery was fantastic," said Mor-itz. "They did an outstanding job."

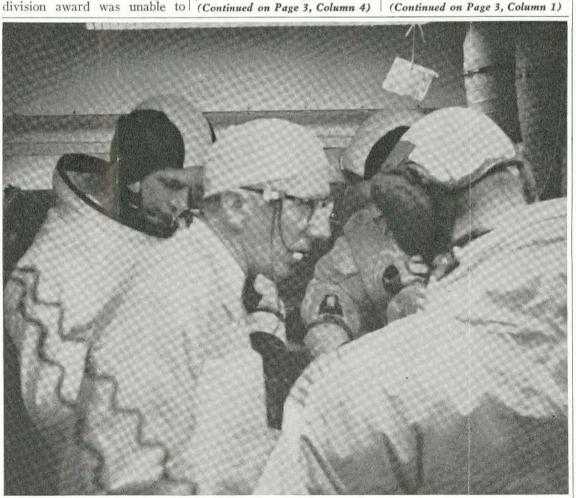
Also cited by Moritz for their work on the stage were Larry Krueger, Oscar Nordman, Arnold Kniep, Paul Ferazzi, and Jerry Tesinsky, all of S-II En-gineering; Bill Schafer of S-II Bonding and Stage Insulation, and B. D. Manly, Hank Adams, and Orville Morgan, all of S-II Final Systems Installation.

Heading the testing of the stage in S-II Stage Checkout were Manager Milt Petersen, Gale Waite, chief of Test Engineering, and Bob Meece, chief of night shift operations. Bob Lugibihl was senior project engineer for the testing, and Ray Searcy was assistant project engineer.

(Continued on Page 2, Column 2)

Construction Expected To Hamper Bay Blvd. Traffic Through March

Bay Blyd, traffic will be affected through late March by the installation of a new water



line and other construction, ac cording to the city of Seal Beach.

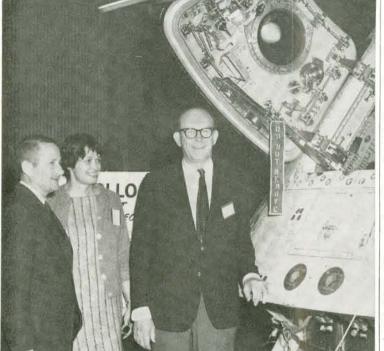
The construction, already under way, is expected to last until March 28. Scheduled work areas are:

Bay Blvd., from Bolsa Ave. to 1,400 feet north, one southbound traffic lane closed through Feb. 18.

The intersection of Bay Blvd. and Westminster, one northbound traffic lane closed intermittently through Feb. 28.

Bay Blvd. between the Pacific Coast Hwy. and Bolsa Ave. will have one northbound lane

and lunar module simulators at APOLLO 9 PREPARATION-Guenter Wendt, left, of division's Launch Operations, lends hand KSC, working with Manned to Apollo 9 prime crewmen during emergency egress test preparations in "white room" of Kennedy Spacecraft Center flight con-(Continued on Page 3, Column 3) Schweickart. Scheduled for liftoff Feb. 28, flight will be first manned orbit test of lunar module. closed March 17-28. Page Two



NOBEL WINNER - Space Division's Mel Clancy, at left, discusses features of Apollo 8 command module with Dr. and Mrs. Willard Libby during visit last week. A 1960 Nobel Prize winner in chemistry, Dr. Libby will perform analyses of Apollo 8 passive thermal control material in studies of solar winds.

Osbon To Become New VP, Product Planning, CPG

H. Gary Osbon, executive director of Industrial Systems for the Aerospace and Systems Group, will join the commercial Products Group March 1 as vice president, Product Plan-ning. He will report to Robert Anderson, president.

In this newly created posi-tion, Osbon will be responsible for coordinating all of the product planning activity of the Commercial Products Group.

Osbon spent four of his 16 years with the company as chief engineer for the Apollo program, and as chief engineer for the Hound Dog missile project.

SPORTSMEN AWARD **BANQUET SLATED**

Leading Downey Rod and Gun Club shooters, hunters and fishermen will be honored tomorrow night at the organization's annual Awards Banquet. The banquet will be held in

the Oak Room at the Long Beach Elks Lodge. It opens with a social hour at 6 and dinner follows at 7 p.m. Guest speaker for the night is Lee Palm from Long Range Sport Fishing of San Diego.

DeAngelis and Schwab Join Award Winners Fred DeAngelis of Apollo Material and Bert Schwab of Procurement Quality Assurance are two of the division's latest recipients of Snoopy astronaut personal recognition awards. The two men were honored for their outstanding work with division Apollo program subcontractors. Schwab was incorrectly identified as being from Apollo Material in an earlier Skywriter article.

Five Division Software Meet

Five division men will participate in a communications seminar on "The Software Revolution" tomorrow at California State College, Fullerton.

The event is co-sponsored by the college and the Society of Technical Writers and Publishers. The seminar opens at 7:30 ed shoppers are invited. a.m.

Taking part as panelists or moderators will be Jim Caron, Bob Cueto and Russ Romain of Quality and Reliability Assurance, Jack Rheinhardt of De-sign Graphics, and Charles Car-ter of Publications.

Secretaries Plan Rummage Sale Men to Join in for Scholarship Fund Benefit

their scholarship fund will be sponsored tomorrow by members of the Stellar Chapter, National Secretaries Association.

The sale will be from 8 a.m. to 3 p.m. and will be at the Rummage Shop, 7323 Eastern Ave., in Bell Gardens, one block south of Florence. All interest-

Holding the center of attention will be items ranging from clothing to knicknacks, vases, plastic-ceramic items, books, and toiletries.

A rummage sale to benefit | sored scholarships. Two will be awarded to outstanding Downey-area students planning to enter the secretarial field, and the other to a member of the Future Secretary's Assn.

Mitchell Will Address Numismatic Society

Ralph (Curly) Mitchell, West Coast representative of the Franklin Mint, will be the guest speaker for the division Numismatic Society (coin club) meeting Tuesday.

and toiletries. Proceeds from the sale will be used for three chapter-spon- ation Center Auditorium.

Atwood Honored as Citizen of Month

J. L. Atwood, North American Rockwell president, has been honored by the El Se-gundo Chamber of Commerce as February "Citizen of the Month." Atwood is a director of the California State Chamber of Commerce.

20 Full-Color Apollo 8 Slides Available to Company Employees

A set of 20 full-color 35 mm | 8 lunar orbit flight plan and slides highlighting the Apollo 8 includes shots of the command mission is the latest addition to module, lift-off, artist's conthe list of company items cepts of flight operations, views available to employees through of the Earth and the moon, and the Downey Surplus Store.

The set starts with the Apollo

a picture of astronauts Frank Borman, Jim Lovell, and Bill Anders.

The slides list at \$4.95 and will be available to employees for \$2.85. The set and other company items may be obtained at the Bldg. 1 area and Bldg. 2 cafeterias from 11:30 to 1 p.m. Tuesday through Friday, and at Surplus Sales, on Clark be-tween Lakewood and Imperial, on Saturdays from 8 a.m. to noon.

Also available are 8 mm color films on the Apollo 4 and Apollo 7 launches, and a variety of jewelry, Apollo/Saturn models, cigarette lighters, and space pens and refills.

Jewelry items include Apollo and Saturn S-II tie bars and tie tacks, charms and charm bracelets, a spaceman tie tack and charm, key chains, money clips, ballpoint pens, charm bracelets, and silver pen knives. Most of the jewelry, on sale

at the Surplus Store, is available in gold, silver, or rhodium.

SPACE VETERANS - Apollo 7 command module, background, joined Apollo 8 "sister ship" last week in Bldg. 201 at Downey, where both are undergoing post flight testing. Watching work are,

Explorer 1 Still in Orbit Hoover To Give After 10 Years; Expected Explorer 1, the first satellite

launched by the United States, is in its 11th year in orbit.

IN PERFORMANCE

Originally expected to fall into the atmosphere and burn about six years ago, the satel-lite has completed more than 60,000 revolutions of the Earth since it was launched Jan. 31, 1958. It has far exceeded lifetime expectations.

The 30.8 pound satellite, six

Precision Flight Demonstrations

Precision flight demonstrations by R. A. (Bob) Hoover, one of America's foremost pilots, will be featured during the Florida National Air Races at Ft. Lauderdale's Executive Airport tomorrow and Sunday. Piloting a twin-engine Shrike

Commander business/utility aircraft, Hoover each day will execute a series of maneuvers which would be considered spectacular if performed in a fighter plane. Hoover is executive assistant to the corporate vice president, Public Relations and Advertising. Sponsored by North American Rockwell, Hoover flies the Shrike Commander and other aircraft built by the company at air fairs and celebrations throughout the world.



from left, division's Jerry Wilken, Harry Peck of NASA, and division's Dick Brundin, Jay White Chuck McKim. Apollo 7 craft was returned to Downey, after Inaugural Parade for added testing.

... and How are Your Bulbs?

In a nationwide motor vehicle safety check, lights, both front most defective equipment.

inches in diameter and 80 inches long, now circles the Earth each 98.1 minutes. Trajectory ex-perts at NASA's Marshall Space Flight Center say it is likely the satellite will re-enter the atmosphere late this year.

S-II Stage . . .

(Continued from Page 1, Column 5) Heading the various test areas were Supervisors Dale Ewald, mechanical; John Mes-mer, ACE/GSE; Howard Koch, Electrical Instrumentation; Norm Rossi, Test Documents and Control, and Kenand rear, were found to be the neth Earl, general supervisor of Technician Support.



APOLLO 8 HIGHLIGHTS - Judy Gallaher of AAP Engineering looks over set of 20 full-color 35 mm slides highlighting the Apollo 8 lunar orbit mission. Slides are latest addition to list of company items available to employees at Surplus Sales.





TOP TEAM -- Joint Saturn S-II Manufacturing first and second shift team from S-II Bonding and Stage Insulation and S-II Manufacturing Engineering and Tooling played major role in key modification work leading to delivery of Saturn S-II-8 stage. First shift members of team are shown in photo at

Goal Attained by Team Effort . . .

(Continued from Page 1, Column 4) | days, and Supervisor Herb Cothe X-15. The material was add- rey and leadmen Cal Durham, ed to the protruding areas in the Lee Cobb, Lou Bergevin, and aft section of the stage as extra Gene Alsworth on nights. Also aft section of the stage as extra of the Alsworth on highes. Also protection against the extreme aerodynamic heating it encoun-ters during the early phase of leadmen Jack Tupper and Bill flight, said A. C. Van Leuven, director of S-II Manufacturing. The work had to be completed before the scheduled Ensley and Clark Robbins. stage delivery date.

the material in the foam insulation in all ramp, or tapered stepdown, areas surrounding the stage's five liquid hydrogen Earl Shortridge and the top feedlines, the systems tunnel, and the leading edge ramp of the forward skirt. Additional Marie; Aron McKelvey of material was bonded to the adjacent flat areas.

In all, said Van Leuven, approximately 450 square feet of the cork sheeting was used, about 70 per cent of this in the aft portion of the 33-foot diameter stage.

Van Leuven gave full credit for accomplishment of the task to Al Kudenov, manager of S-II Manufacturing, and the em-General Supervisor Les Hart-

'Manufacturing sequences and bonding tools had to be de-

Greenway, and department special assignment personnel Andy Anderson, Bill Schafer, Bill

From S-II Manufacturing The work involved imbedding and Tooling under Jacobson were Hank Sinai and advance programmers Chuck Miller Bill Stiles and Mike Martin; planning and design team of Hersh White and Lloyd St. Tool Engineering and Fabrication and tool engineers Joe Moore and Mat Wallace; Supervisor Glen Barnes of Tool Fabrication and leadmen Earl Trammel, Doug Jolly and Colbert Gentle on days, and Supervisor Carlos Diaz and leadmen Weaver Emery and Jack Lilly

on nights. Also making important contributions to the manufacturing ployees of S-II Bonding and effort were Paul Gallagher, day Stage Insulation, headed by supervisor, and leadmen Arnold Jones and Harold Wood, and man, and S-II Manufacturing, un-Engineering and Tooling, un-der General Supervisor Walt all from Quality Assurance, and General Supervisor Elden Murray and engineers Dale Erb had to be worked out, trimming and Don Robinson, from S-II

Facilities and Plant Services. signed and fabricated, and task Van Leuven also credited the teams had to be formed for the support of Central Manufacturoperation," said Van Leuven. ing's Plastics and Tooling Sup-"And all under a compressed port Depts. In charge of the schedule to meet the Feb. 10 work were Don Green, general delivery date of the stage." supervisor; Paul Bourne, as-The manufacturing team was sistant general supervisor, and further commended by John Healey, vice president of Man-Supervisor Bob McCune, of Plastics, and Supervisor Glenn ufacturing and Facilities. Emmel and Norm Morton and "These men knew they had a Floyd Bosley of Tooling Supbig job to do in a short time port. when they were given the as-signment," said Healey. "They Doing the design work for the modification was a team accepted the challenge and did from S-II Structural Design under Manager Sam Kreidel that included Supervisor Jack Sherlock and Oscar Nordman an outstanding job in meeting their goal." Heading the team effort in S-II Bonding and Stage Insula-tion under Hartman were Su-work in Laboratories and Test pervisor Mike Mungaray and was spearheaded by Manager lead men Pete Verdin, Frank Pete Scanlon and Cliff New-Fletcher, and Tom Giffin on land and George Stevens.



Deadlines are fast approaching for engineering and scientific personnel who plan to apply for a 1969-70 Aerospace and Systems Group Science-Engi-neering Fellowship. Application deadline is March 3 for a Full-Study Fellowship and April 1 for a Work-Study Fellowship. Fellowships are awarded on a competitive basis to qualified employees seeking graduate degrees in certain specialties in the fields of engineering, science or mathematics.

A total of 572 small business firms in Orange County received contracts from Autonetics valued in excess of \$12 million during the 1968 fiscal year, according to figures released this week by the divi-sion's Small Business Administration office.

Apollo 9 Mission . . .

(Continued from Page 1, Column 1) trollers at Houston in mission simulations.

Phases practiced in the simulations include launch, transposition and docking, docked service module service propulsion system and lunar module descent engine burns, rendezvous and entry-all key parts of the upcoming mission.



left, and second shifters at right. Work called for addition of cork sheeting, core foam details and laminates to aft portion of stage to provide added protection against extreme aerodynamic heating in initial stage of mission. S-II-8 stage left Seal Beach Tuesday for NASA's Mississippi Test Facility.

Astronaut Challenges . . .

(Continued from Page 1, Column 3) | Mertin Paddock, and Don the astronauts, Cunningham pointed out that only 800 persons of the more than 300,000 who have participated in the lunar landing program have been presented the award. Two hundred of those persons, or less than one per cent of the employees, are from Space Division.

"You have had two successes, but what do you do for an encore?" asked Cunningham.

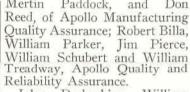
He said, "the next flight is the Apollo 9 mission with the Grumman-built lunar module.

"You can bet that the people at Grumman are 'running scared' now, just like you here were doing in September be-fore your first manned flight," declared Cunningham. "But its not bad to run a little scared sometimes - it keeps you on your toes and alert.

He explained that as a member of NASA's Apollo Applications Program team he would be spending more time at Downey in the future. "I'll be very interested in watching your encores," he noted. Employees presented their

Snoopy pins by Cunningham as part of the division PRIDE program included:

Homer Day, Bert Graham, Naomi Letcher, Bob Lowry



John Derbyshire, William McKee, Charles Overbey, Aloys Striepens, A. L. Banton, William Buntin, and Frank Scott, all of Laboratories and Test; Kenneth Neary and Joseph Reder, Systems Engineering Management; Charles DeVore and Henry Gauthier, Apollo Configuration Management.

Fred Black, Rex Collins, Harold Edwards, Harley McLain and David Ratliff, Apollo Structures Assembly; Lewis Tellez and Fred Schmitthammer, Saturn S-II Structures Installation; Daniel Kennedy and William Turner, Traffic and Transportation; Otha Conway, Gene Alsworth, Jose Gomez and Fred Guinn, S-II Stage Insulation.

Beverly Grisham and Ted Finneran, Customer Relations; James Beard, Guy French, lames Keller, Charles Korleski. Eugene Landauer, Victor Nardelli, Emerson Parker, Gastone Scranton and Lewis Vann, Apollo Bonded Structures.

Walter Lowe and Will Waddell, Apollo Training and Support Documentation; William Goodman, Division Pur-chasing; Thomas Hughes, Procurement Quality Assurance; Victor Diaco, Central Quality and Reliability Assurance; Ha-rold Brown, Manpower De-



velopment.

Don Butler, Apollo Material; George Salchak, Apollo Service Module Installation; R. M. Boyd, Apollo Manufacturing Engineering; Russell Edwards, S-II Final Systems Installation; James Young, Interdivi-sional Operations; Dave Mon-teau, S-II Major S/A Welding

and Bonding. Garvin Kimble, Air Force Quality Assurance: Kenneth Öril, Quality Assurance, and Gerald Anderson, Tom Black

SNOOPY AWARDS - NASA astronaut Walt Cunningham, left, Will Waddell of Apollo Training, and Otha Conway, Saturn and George Fiedler, project en-S-II Stage Insulation, discuss Snoopy award prior to division gineers, all from the NASA Awards Night. Sixty persons were presented pins at special event. resident Apollo office, Downey.

Space Division Skywriter

AUTOS-

Classified Ads

- FOR SALE

'66 TR-4, \$1595, sell/trade, 714/630-0352.
'64 MGB, rollbar/headers, \$1600, 714/ 521-2219.

⁵50 Ford Dune Buggy, \$450.
⁶66 Mustang, stick, \$1750, 360-0474.
⁵66 Ford Truck, 433-7707.

66 Buick Skylark, \$1700, 862-7628. 62 Buick Spcl. Deluxe, Convert., 714/ 826-8737.

'68 Buick, Free Equity, 714/545-8515.

68 Ford Squire Wagn., 867-7868

60 Falcon 4 dr., \$75, 868-2576.
60 Dodge Dart, V8, 861-7806. ²63 Chrys. Imp., \$1200, 861-4639.
²52 Studebaker P/U, \$150, UN 4-8185



BIG BROTHERS - Employees and youngsters in division-sponsored Big Brothers group pause during visit to Air Museum in Ontario as guests of American Fighter Pilot's Assn. Division chapter has been commended by Big Brothers of Greater Los Angeles as only one of its type in state.

Applications for Scholarship Competition Exceed 170 Requests

competition for the Los Angeles to scholarship committee spokesmen. More than 170 requests for application have been processed by the association office, and several students have already returned their completed applications.

Page Four

The eligibility requirements for this competition are that the applicant must be a high school senior and be the son, daughter or dependent of an NR employee of the Aerospace and Systems Group, including wholly owned subsidiaries administered by the Group or the General Offices of NR. The parents do not have to be members of the Management Association. However, one parent must have completed a minimum of six months employment on or before March NR facility within 125 miles ing.

TWENTIETH ANNUAL

City

SCHOLARSHIP COMPETITION

Management Association Office E-10

North American Rockwell Corp.

The 20th annual scholarship of the General Offices.

Interested high school seniors Area Management Association who graduate, either in Janu-is off to a good start, according ary or June 1969, are urged to apply for the scholarship competition. A request for application form appears in today's Skywriter. The official application form must be completed and returned to the association office by March 7.

Scholarships of \$3,200 each will be granted to the top-ranking young woman and young man. Selection of the winners will be on the basis of high school scholarship achievement, scores on a competitive examination to be taken Saturday, March 22, and oral interviews for semifinalists.

The announcement of this year's scholarship awards will be made at the regular chapter membership meetings in May. The winners and their parents will be honored that night at 1969 and must work at an the appropriate Chapter Meet-

Spacecraft Metal **Course Slated** for 12 Weeks

course covering metals used in modern spacecraft will be presented this month in the division Scientific/Engineering Certificate Program, according to Manpower Development.

"Metals in Aerospace Design" will begin Feb. 24 and continue for a 12-week period. The course will be given on Mondays from 5 to 7:30 p.m. Instructor will be L. J. Korb of Advanced Materials and Processes.

Metals highlighted in the course will include major alloys of titanium, aluminum, steel magnesium, nickel, superalloys. refractory and composite materials. Also discussed will be modern fabrication techniques of forming, machining, weld-ing, casting, brazing and diffusion bonding.

A brief background will be presented in metallurgical theory and the strength of materials. Specialized spacecraft problems will be reviewed, including space environment, space lubricants, cryogenics, impact ignition, embrittlement, corrosion and stress corrosion, as well as special requirements of boosters, spacecraft, and pressure vessels.

Interested students should have experience in the design, purchase, manufacture, testing or quality control of metals. Full information may be obtained by calling Downey Ext. 1165-6.

'Big Brothers' Laud Division **Chapter Effort**

The division-sponsored chapter of the Big Brothers of Greater Los Angeles has drawn the praise of Robert Underwood, organization president.

In a letter to division pres-ident William Bergen, Underwood expressed the "deep apof the officers, preciation" directors and staff of Big Brothers of Greater Los Angeles to Bergen, the company, and the division members of the chapter.

He noted that the chapter was the first sponsored by an industry in California. "In our opinion," wrote Underwood, "In our "those employees and the North American Rockwell Corp. deserve tremendous credit for the successful operations now functioning. Thanks again for your wonderful interest and as-sistance at every turn."

The division chapter of Big Brothers of Greater Los Angeles will meet in the Executive Briefing Room, Bldg. 1, at 4:30 p.m. Monday. All men interested in becoming Big Brothers are urged to attend.

The division chapter is headed by chairman Ål Franklin. Members of the board are Earl Kunz, Ray Martin, Joe Simp-son, Ed Sack, Bill Walsh and Bob Cunningham of Space Divi-sion, and Jim Van Tatenhove and Dwight Zook of the Executice Offices.

The Big Brothers, founded in 1904, are men who volunteer to give guidance and companionship to fatherless youngsters eight through 16 years of age. Each Big Brother is carefully matched with a "Little Brother" to provide the youngster, through personal relationship, a man to talk to, a shoulder to lean on, and a friend to count upon.

Nineteen division men have been accepted as Big Brothers. Sixteen of them already have been matched with Little Brothers. On a recent outing, the di-vision Big and Little Brothers joined with others from the area for a visit to the Air Museum in Ontario as guests of the American Fighter Pilot's Association.

Skywriter

J. S. Elliott Editor, Skywriter Judy R. Brown

Assistant Editor

Space Division

Tony Longo, Ext. 6468



'60 Rambler, 4 dr., 714/827-3511. 65 El Camino, f/power, \$1275, 376-3192.
63 Impala, f/equip., \$850, 213/439-8047. 67 VW Sedan, \$1500, 714/536-6312. 769 Toyota, 4 dr., Corona, stick, 10 mo. warranty. Walker (D), 679-0989.
764 Buick, Skylark, Sports coupe, full pwr. make offer. Shellhorn (D), 545-5133. 60 Olds, 88, \$295, Lyon 377-5402. 765 VW Squareback, 213/862-2473.
 765 VW \$950, 430-0293. 63 Ford Galaxie Conv. 213/425-7505. MOTORCYCLES-68 Hondika, \$325, 714/827-0115. Honda S90, 213/421-2935 64 Honda 305, \$150, 863-1967

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3 br. furnished/or unfurn., 531-9869.

1700 E. Imperial Hwy. El Segundo, Calif. 90245 I am a high school senior interested in the 1969 Management Association Scholarship competition. Please send me an application form. PLEASE PRINT OR TYPE

(REQUEST FOR APPLICATION)

LOS ANGELES ÀREA MANAGEMENT ASSOCIATION

	TELADE TRACT OR TITE		
Iy name	e		
	(first)	(initial)	(last)
ddress.			
lity		State	Zip Code



SATURN S-II HONOREES - Supervisor John Mesmer and employees of the ACE/GSE team, left photo, are presented Saturn S-II Stage Checkout's semiannual Stage Effectiveness Award for outstanding performance in checkout of S-II-8 flight stage. Making presentation is Manager Milt Petersen, left fore-



ground. In photo at right, Petersen presents semi-annual Unit effectiveness award to Supervisor Bob Strand and personnel of Quality and Reliability Assurance, cited as the unit most outstanding in performance of its daily duties during past six months. Awards are made through division PRIDE program.