

AAP REVIEW-Jim Gates of division Apollo Applications Program, at podium, goes over slide during opening session of last week's division-NASA Apollo Applications Program (AAP) Preliminary Design Review. Included in review were check of proposed craft configuration, program plans and technical specifications. More than 200 persons took part in week-long review from division and NASA's Manned Spacecraft Center, Marshall Space Flight Center, and Kennedy Space Center.

APOLLO 9 COUNTDOWN TO BEGIN THIS WEEKEND AT KSC

leading to the planned Feb. 28 lift-off of Apollo 9 is schedat NASA's Kennedy Space Cen-

mechanical preparation of the a multispectral camera - comcomplete launch vehicle-spacecraft stack and affected ground support equipment to insure all is ready for lift-off. The launch is scheduled for 7 a.m. Cali-the photo fornia time.

Crewmen for the flight are Jim McDivitt, commander; Dave Scott, command module crops, forests, and the contipilot and Russell Schweickart. lunar module pilot.

The 10-day mission will be the first for the "all-up" lunar-configured Apollo spacecraft and is aimed primarily at demonstrating for the first time in operations and performance with astronauts aboard.

The combined Apollo command and service modules and greatest engineering feats in hislunar module will operate in tory, and the contributions of Earth orbit in the same manner in which the lunar landing mission will be flown.

Apollo 9 will include the first docking in the Apollo program and the initial extra-vehicular activities. The command-service modules and the lunar module also will perform a rendezvous simulating as closely as possible the maneuver they will perform in lunar orbit following the LM's take-off from the moon.

flight includes the launch phase, a period during the initial evalu-

The pre-launch countdown vehicular activities, and during recovery.

During the latter part of the uled to begin Saturday afternoon flight, a camera experiment is t NASA's Kennedy Space Cen-planned as part of the NASA Earth Applications program. The countdown is the final The Apollo 9 crewmen will use posed of four cameras with different filters — to photograph

> NASA hopes to deduce from the photographs new methods of inspecting Earth's natural resources from orbiting space-craft. Photographed will be nental shelves where future generations may harvest much of

Beryllium Booms Fabricated for Antenna System

Space Division's advanced manufacturing capability was spotlighted in the development of antenna booms for the huge Tactical Communications Satlaunched earlier monta.

Under subcontract to Hughes Aircraft Co., Central Manufacturing fabricated 13 beryllium booms for use in the satellite antenna system. Six were used

SATELLITE NEWS

on the flight craft, six on a (Continued on Page 3, Column 3)

saturn history

NORTH AMERICAN ROCKWELL CORPORATION VOL. XXIX, No. 8 (Aerospace and Systems Group) FEBRUARY 21, 1969

NR Executives Hail Technology Exchange

Company Progress Emphasized at 1969 Shareowners Meeting

Exchange of technology among the divisions of North American Rockwell Corporation has been one of the most promising developments of the year, approximately 700 shareowners attending the 1969 annual meeting at the

Century Plaza Hotel were told

During presentations by Willard F. Rockwell, Jr., chairman of the board; J. L. Atwood, president and chief executive officer; John R. Moore, president, Aerospace and Systems Group, and Robert Anderson, president, Commercial Products Group, shareowners heard that the corporation is investing in the future on a far-reaching scale.

In the first month after North American Aviation, Inc., and Rockwell-Standard Corporation merged in September, 1967, the newly created North American Rockwell Corp. was involved in 28 projects of technology exploitation.

"A year later," Anderson stated, "we were working on 159 such programs involving interaction between the various livisions of the corporation.

"In a number of these we have already made improve-

John R. Moore, A&SG president, in his opening remarks to the stockholders, said that over-all space systems activity at Space Division showed an increase from \$619 million to \$656 million in the past year, and indicated the company expects further activity in the national space program beyond the moon landing. The Apollo 8 command module, which recently completed post-flight testing at Downey, highlighted division participation in the company display for stockholders.

ments and savings in manufacturing processes, such as welding, in various parts of the company. In others we are making significant product improvements, such as electronic brake control and better design of commercial aircraft.'

The technology exchange also is leading to the creation of new products. Examples cited included an electric motor developed by aerospace engineers and (Continued on Page 2, Column 4)

CHANGES APPROVED FOR RETIREMENT. SAVINGS PROGRAMS

Shareowners Tuesday approved the proposed amendments to the company savings plan and the retirement plans.

The amendments to the Salary and ATP savings plan, providing an increase in company contributions from the current 50 percent to 75 percent, will become effective March 1, 1969. The amendments also provide that the company contributions will thereafter be held in a separate fund and invested solely in NR common

These changes and other savings plan modifications are explained in a new booklet which will be mailed to employees next

Changes in the retirement plans are subject to approval of the Internal Revenue Service. They will be explained in detail when that approval has been

Division Engineers, Scientists Earth orbit the lunar module Observe Engineering Week

program, hailed as one of the division engineers and scientists were spotlighted this week in the annual national observance of Engineer's Week.

Helping to spread the word on the program and its status at 10 events in eight cities across the nation were six division

Dr. Milton B. Hammond of Advanced Environmental Systems returned to the campus from which he received his Television coverage for the Ph.D. in engineering when he spoke before engineering students and faculty members at

The Apollo lunar landing fornia Polytechnic Institute-Po-

Don Schnaufer, assistant to the vice president of Manufacturing and Facilities, is speaking at American Institute of Aeronautics and Astronautics chapters in Pittsburgh, Syracuse and Cleveland.

Featured speaker for the Los Angeles Section of the AIAA (Continued on Page 3, Column 4)

M-G-D Merger with NR Approved in Principle

North American Rockwell and Miehle-Goss-Dexter, Inc., announced Tuesday that the boards of directors of both companies have approved in principle the proposed acquision of MGD by NR. Executives of the two companies said that it was anticipated definitive agreements would be approved before the end of the month.

The transaction is subject to approval of the shareowners of both companies and to obtaining a ruling from the Internal Revenue Service that it may be effected on a tax free basis.

One of the world's major manufacturers of printing equipment, MGD makes letterpresses and offset presses; magazine and rotogravure presses; automatic binding equipment; paper cutting machines; and folding carton equipment. It systems and auxiliary equip-



EVA PREVIEW - Astronaut Russell Schweickart, lunar module pilot for Apollo 9 flight, demonstrates remote control panel for portable life support system (PLSS) he will use during also manufactures pneumatic extensive extra-vehicular activities planned during 10-day mission. Flight is scheduled for lift-off next Friday morning. ment,



SHAREOWNER'S VIEW - Before and after meeting, shareowners viewed major exhibits such as this mock-up of the Beaver undersea vehicle. Products and systems of Aerospace and System and Commercial Products groups were described for visitors.

APOLLO 8:



QUALITY CREW - Quartet of Saturn S-II Manufacturing Quality Assurance employees hold certificates of achievement for "Zero Escape Rate" presented them by Chief J. O. Ronningen, left. Honorees, from left, are Jack Potter, Fred Black, Anthony Kaptain and Elaine Anderson. Awards, presented as part of engineering drawings informa-PRIDE program, go to top department employees in each quarter. tion may be obtained by dialing

Dr. Nathan Snyder Presents Paper on Heat Transfer

Dr. Nathan W. Snyder presented a technical paper on 'Mass Transfer Model in Subcooled Nucleate Boiling Heat Transfer," today at the Science Center. Snyder is assistant to the Group's senior vice president — Research and Engineering.

His paper was based on an hypothesis which explains the reason why heat transfer increases enormously in boiling, due to an evaporation-condensation mechanism inside the bubble during its lifetime.

Snyder first presented this theory more than a decade ago when he was a professor in engineering at the University of California, Berkeley.

Before that he was a member of the Advanced Research Projects Agency and the Institute for Defense Analysis in Washington, from 1958 to 1961 during the initiative period of the U.S. space program. He was involved in advanced propulsion and space power.

Snyder served on the space technology panel of former President Johnson's Science Advisory Committee.

He also was a member of the Research Advisory Committee on Nuclear Energy Systems,

He is currently a member of the Scientific Advisory Board culties. to the Air Force.

Blood Donors To Get Cards for March 16

Donor cards were in the mail this week to Seal Beach facility employees for a blood bank to be held at the site March 13.

The Blood Bank will be in

ENGINEERING-INFORMATION AID GOES 'ON-LINE' NEXT WEEK

quickly respond to in-house needs for engineering information will be enhanced next week when a new computer audioresponse system goes "on-line."

Scheduled to be operational Monday is the Engineering Release System (ERS), which replaces the "DOES" and "EDICT" engineering information systems, said W. E. Castrey, Management Systems Engineer.

To obtain engineering doc-ument status information, employees throughout the division need only dial the specified telephone extension to obtain a direct connection with the ERS equipment. The computer then automatically searches the files and provides the latest information relating to the particular document.

Castrey said that Apollo and Apollo Applications Program

Space Division's capability to | Ext. 7911; Saturn S-II information is available by dialing Ext. 7912, and specifications and other related engineering documents information is available on Ext. 7913. All extensions are at the Downey facility.

NR Executives . . .

(Continued from Page 1, Column 5) about to be sold through the company's Boston Gear Division, and automated knitting machinery.

Atwood said that acquisitions and joint ventures are two areas that have major impact on progress of the corporation and, eventually, return on investment.

"We are actively seeking strong companies, in this country and abroad, which will fit into our acquisition plans," Atwood said.

"When we consider mergers and acquisitions we are primarily interested in companies with which our technological capability is compatible, and to which our management and marketing talents can make a realistic contribution.

"In the past year," he added, 'using these guidelines, we've brought six companies into the corporation.'

Atwood also announced the setting of a 10-year annual sales

goal of \$6- to \$7 billion a year.

Moore said that the Aerospace and Systems Group is engaged in a maximum effort to win some combination of the U.S. Air Force F-15 and AMSA contracts for aircraft and avionics. The F-15 is to be an advanced air superiority fighter aircraft weapons sys-

Moore also stressed several joint ventures under way or nearing completion. These included development with Mobil Oil Corp. of a total system for more efficient drilling operations and oil recovery at great ocean depths; a joint-venture com-pany with Gould National Batteries, Inc., to produce and sell electro-chemical timers and batteries using solid electrolytes.

Shareowners also voted to ratify the re-appointment of Haskins & Sells as NR's independent auditors for the current year and approved an amended incentive compensa-

Rigorous Test **Proves Apollo** 'Magnificent'

An inch-by-inch inspection of the Apollo 8 moon-circling spacecraft by division engineers has confirmed the verdict of its astronaut passengers that it was a "magnificent piece of machin-

The confirmation was the result of a rigorous 28-day, postflight test program just completed, said Norm Casson, manager of Apollo Spacecraft Checkout.

Following splashdown in the Pacific, the Apollo 8 command module was returned to the Space Division, where it was stripped of its heat shield. The command module was eyeballed, checked, scraped, probed, repowered, disassembled, leakchecked, photographed and tested electronically during the 28-days, Casson said.

Around the lower outside edge, the complex of aluminum and stainless steel fittings, valves and pipes were as shiny as the day they were installed in the command module.

Without the heat shield, there was no visible evidence of wear or tear in the cone-shaped craft that underwent heat of 4,700° F. on entry and flew faster-24,-695 mph — than any other manned spacecraft.

A time-and-distance report by division engineers calculated the command module flew 650,-000 miles during its 147-hour mission. Its astronaut crew totaled 441 man-hours during the flight.

Test engineers said the heat shield's cover of ablative ma-terial, a type of reinforced plastic, was charred a fraction more than one-half inch on the bottom section, which takes the brunt of the heat.

Fogging of the command module's side and hatch windows, reported by the crew during the flight, was caused by gas released from silicone sealant around the windows. This resulted in the formation of an oily film on the surface, which froze in flight. The two rendezvous windows remained clear at all times. Window sealants in future spacecraft are being cured longer before installation.



PATENT AWARD - T. H. Seitz, left, receives \$500 company Invention Award check from Norm Ryker, vice president of Research, Engineering and Test. Seitz invented an insulated tank designed to hold cryogenic liquids for long-time periods. The tank is an evacuated double-walled vessel for cryogenic fluid storage developed under company research-development program.

2,750 INNOVATIONS REPORTED FOR POTENTIAL INDUSTRIAL USE

By the end of this year, the new lubricants. National Aeronautics and Space Administration will have be useful outside the space proannounced more than 2,750 gram are announced in singletechnical innovations of potential use in industry, medicine and other non-aerospace appli-

Recent ones range from a miniature paint spray gun to an suffering from breathing diffi-

New ideas like these are byproducts of research and dethose of its contractors, in practically every field of technology.

keep men alive in space, they documents. have had to design valves, pumps, filters and switches.

They have devised miniature medical sensors to monitor the others and sells these at the cost astronauts' reactions to stress. They have vastly extended the Bldg. 80 Auditorium from 9:30 range of communications a.m. to 3 p.m. Employees, who equipment for flights to the wish to contribute and who do moon and beyond, and have denot receive donor cards, should veloped compact computers, imcall Blanche Parkhouse, Wel- proved electric power sources,

Technical advances that may sheet bulletins called Tech tion plan. Briefs, or described in more detailed publications issued by the NASA Office of Technology Utilization.

That office also sponsors a and on Power Systems and automatic alarm that keeps number of experimental Electric Propulsion to NASA. watch over hospital patients projects to stimulate secondary use of new knowledge resulting from NASA work in space and aeronautics. In one, a number of universities operate centers velopment work by NASA that provide business firms scientists and engineers, and with specialized information services based on NASA's worldwide collection of nearly To build machines that can 400,000 scientific and technical

Another center reviews NA-SA computer programs to see which ones might be useful to of handling and reproduction.

In the medical field, three NASA-supported teams of scientists and engineers help researchers define their technical fare, at Seal Beach Ext. 4018. new alloys, new adhesives and perts at NASA laboratories.



SPACE PROSPECTING - Dr. Abdel Gawad, of NR's Science Center, spoke at the Space Division's 15th Interdivision Seminar last week on how Earth resources particularly petroleum, problems and then seek answers may be discovered through examination of photography from NASA documents and ex- from space. Dr. Gawad detailed advantages of standard color photography, infra-red film, radar and microwave images.



TWO IN ROW - Apollo Spacecraft 114 service module was fabricated with no defects by Apollo Service Module Structure Installation team, making two in row completed without errors. Team has sights set on adding SC-115 service module to string.

PRIDE IN PERFECTION

Apollo Service Module Structure Installation Comes Through Again

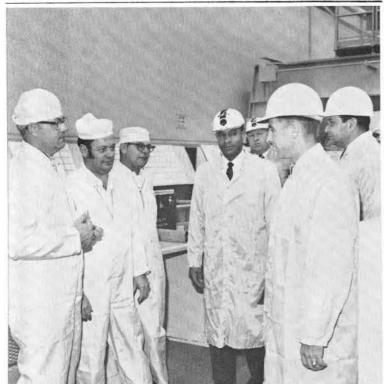
again being displayed by employees in Apollo Service Module Structure Installation, who have completed their second consecutive error-free Apollo Jim Keife, Willie Draughn, spacecraft service module.

Latest to be added to the de-Tony Ciotta. It makes a total of Al Roman. six of the team's last 10 service modules to earn the defect-free headed the Inspection crew that rating, after undergoing the included Leadman Morton Gerthorough inspection cycle the sten and Lee Culp, Pauline modules are put through prior

The "sign of perfection" is | Hal Gordon, special assign-

On the various teams were Frank Sprague, Roy Parrish, Bernie La Berge, Jimmy Ropartment's string is the service dela, Ed Johnson, Les Threlkeld, module for Apollo Spacecraft Oscar Pieper, Cecil Stafford, 114, said General Supervisor Bernard Fears, Ernie Taite and

Supervisor Norm Hewitt Schwartzrock and Roger Klevto beginning systems checkout. en. Larry McCarthy was the Taking part in the high- inspector for the NASA Apollo quality work were Jess Hill and resident office at Downey.



APOLLO REVISITED - Astronaut Bill Anders, right foreground, lunar module pilot for Apollo 8, chats with Bob Baughman, left, Edmon Beshears, Paul Rodko, and Norm Casson during visit to Bldg. 90 clean room Tuesday. With Anders was Joe Cuzzupoli, right, who was division assistant program manager for Apollo 8 spacecraft. In telecast earlier, Anders commended employees for their contributions to success of Apollo 8 and urged personnel to continue their outstanding work on Apollo program. and Laboratories and Test.

OSO Moves in to New Quarters

Ocean System's manufacturing and test facilities this week were in their new "home" at Seal Beach's Bldg. 86 — a home which will house the fabrication and assembly of the second Mark IV Beaver as well as other division-initiated underwater projects.

The successful relocation of personnel and equipment from the Compton facility was completed last week under the direction of Facilities Supervisor D. A. McVeigh and C. E. (Chuck) Johnston of Industrial Engineering.

A test tank, which is currently being utilized to test manipulator arms in a series of underwater tasks, is the only OSO operation remaining at Compton. This test program is scheduled for completion in the

The relocation, in line with the division objective to vacate leased facilities and improve utilization of company-owned properties, consolidates Ocean Systems activities to the Seal Beach and Long Beach facilities. OSO's ocean underwater testing facility is located at Fisherman's Cove on Catalina Island.

Satellite Antennas . . .

(Continued from Page 1, Column 3) prototype test model, and the remaining boom was a test article, said Fred Burry, director of Central Manufacturing.

Developed under the direction of the Air Force Space and Missile Systems Organization (SAMSO), the 1,600-pound, two-story-tall satellite is the most powerful radio relay craft ever built. It is designed to relay messages between small remote military units and their headquarters.

The satellite went into a stationary orbit about 22,300 miles above the Earth.

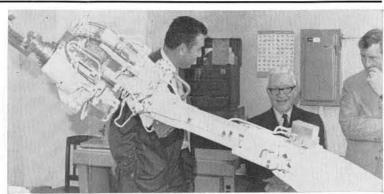
The satellite's division-built booms were made from extruded thin-wall beryllium tubing. being extruded, the one - eighth - inch - thick tubing selectively chemically milled to wall thicknesses as thin as .020 of an inch.

Burry pointed out that this is the first time the extremely brittle, lightweight beryllium has been used in thin-wall tub-

In performing the work, Central Manufacturing had to develop the process for selective chemical milling of the tubing, and devise tools to grind the boom's riveted collars and techniques and tooling to drill holes in the booms.

Burry explained that the benefits of using beryllium for the booms resulted from its light weight and stiffness. As an example, he said beryllium is about two-thirds the weight of comparable aluminum tubing and five times more stiff. The stiffness was particularly important in holding the satellite antennas in the proper align-

Heading the project for Manufacturing were Del Kern, Neil Packer and Charles Olsen, all of Manufacturing Development. Departments volved in the work were Sheet Metal Fabrication, the Engineering Model Shop, Plastics and Advanced Projects, the Quality Control Laboratories



OSO LOOK - Paul Mayer, left, chief engineer for Ocean Systems Operations, explains function of Beaver IV work boat manipulator arm to Col. Willard Rockwell, center, honorary board chairman, and Jim Brooks of EO during OSO facility visit.

Third AIAA Space Simulation Conference Slated in Houston

Rockwell director of Southwestern Regional Offices, A&SG, Houston, is administrative chair-

Division Engineers . . .

(Continued from Page 1, Column 3) this week was Mike Vucelic, manager of Apollo Systems Engineering. Vucelic also addressed engineering students and faculty at California State College Long Beach.

B. J. Long, manager of Program Support, will speak to-morrow to the San Diego Section of AIAA, and Jerry Wheeler of Mission Requirements was the guest speaker for the Los Angeles Chapter of the International Standard gineers Society. Bob Eggert of Public Relations was spotlighted as banquet speaker at Cal-ifornia State Polytechnic College, San Luis Obispo.

Jack Waite, North American | man for the American Institute of Aeronautics and Astronautics' (AIAA) Third Flight Test Simulation and Support Conference, to be held in Houston, Tex., March 10-12.

Other NR personnel who are assisting in the technical sessions are: C. E. Cook, A. G. Lane and T. T. Smiley, Columbus Division, and R. L. Nelson, Rocketdyne.

The three-day conference will be divided into the following sessions: Monday — Support Systems-Onboard Checkout and Ground Support Equipment for Space Vehicles and Aircraft, Ground Testing and Simulation; Tuesday - Flight Test, Development of Simulation Equipment and Awards Banquet; Wednesday—The Ground Test-Flight Test Interface (Panel) and a field trip to NASA Manned Spacecraft Center.

F.G. LARKIN, JR., B.M. ROCKWELL **ELECTED COMPANY DIRECTORS**

Tuesday announced the election of two new directors and declared two quarterly dividends.

Shareowners at the NR annual meeting elected to the board Frederick G. Larkin, Jr., chairman of the board and chief executive officer of Security Pacific National Bank, Los Angelesbased statewide bank, and Bruce M. Rockwell, vice president of First of Michigan Corporation, Detroit, the largest Michigan investment banking firm. Share-owners also re-elected 17 direc-

Following the annual meeting, the board of directors declared the usual quarterly dividend of the regular quarterly dividend of gan.

North American Rockwell \$1.1875 per share of Series A uesday announced the election preferred stock, payable April 1, 1969, to shareowners of record Feb. 28, 1969.

> Larkin also is a director of Getty Oil Co., Pacific Mutual Life Insurance Co. and Southern California Edison Co., as well as the president of the Southern California Symphony-Hollywood Bowl Assn. and a director of The Music Center Operating Co. He is the chairman of the American Bankers Association's Governmental Borrowing Committee, and he represents the Twelfth Federal Reserve District on the Federal Advisory Council.

Rockwell also is the president 50 cents (\$0.50) per common of the Detroit Basis Club, a dishare, payable March 24, 1969, rector of the Bond Club of Deto shareowners of record Feb. troit, and a trustee of the Munic-28, 1969. Directors also declared ipal Advisory Council of Michi-



F. G. Larkin, Jr.



Bruce M. Rockwell



"WORLD" RATED - Jo Jo Starbuck, daughter of Alice Starbuck of Apollo Test Operations, and partner Kenneth Shelley will be among 11 skaters who will represent U. S. in next week's World Figure Skating Championships at Colorado Springs. Duo the design of an intercom for took second in the recently-held North American Championships. playing music between classes

16-Year-Old Larry Pomatto Has Golf Tourney Fingers in Many Electronic Pies Transferred to

Beach facility.

The youth's most recent endeavor, a display on the "Design of an Analytic Computer," won him a trip to the National 4H taking entrance exams for vari-Congress in Chicago. The Ma-4H members.

Young Larry's achievements include winning several first place ribbons in the electrical ATS Processes division of the Orange County Fair, the Sweepstakes Award in Data Through the local Science Fair and the publication of a scientific paper entitled, "Fuel Cells — Space Age Generator of the Future." He also is a regular on his high school honor roll.

Larry's latest projects include

Marina High School of Hunt- at Marina High School and the ington Beach has its own Mr. design and construction of a Wizard — 16-year-old Lawrence more efficient smog device. He Pomatto of the Special Interest also developed a light board to Explorer Post, which is spon-sored by the division's Seal Marina High's annual Homecoming, and a scouting program that coaches can use in determin-

ous universities he would like to rina High senior was one of 42 attend. He also is going to night selected to attend the event from school at Goldenwest College to nearly 50,000 competing state obtain his "ham" radio operator

Administrative Terminal System, a computerized system for processing at a central location assorted texts and data from remote points throughout the Aerospace and Systems Group, is now in operation.

The central location for the system is at Autonetics where the ATS services the A&SG operating divisions.

The ATS began as a pilot study in January of 1967 and has been in operation ever since. Through the system, hundreds of various docu-ments can be revised, updated or prepared from scratch in less time and at less cost than conventional manual methods, by virtue of the com-

Even such perfunctory

The division Monthly Golf Tournament, scheduled for the Corona National Golf Course on March 2, has been changed to the Shore Cliffs Golf Course in San Clemente, it was announced this week.

Shore Cliffs is an 18 -hole, 6,147-yard, par 71 course. Interested golfers can register at the Recreation and Welfare offices in Downey, Ext. 6734, or Seal Beach, Ext. 4018.

Lawrence Wins Sports Trophy as 'Leader'

A sparkling new trophy bearing the inscription "Sportsman of the Year" is on display in the home of Roger Lawrence.

Lawrence, of Recreation and Welfare, was commended by the division Rod and Gun Club as its leading member of the past year. In earning the honor, Roger joins his father, Cliff, of Saturn S-II Manufacturing, who was presented the award in

At the same time, Roger was the recipient of trophies as the club's all-around hunter and for taking the largest fresh water bass. Also winning honors at the club's annual awards dinner last week were:

Bob Harn, best over-all fish-erman and largest trout; Ray Farmer, best fresh water fisherman; Bill Henry, best salt water fisherman; Lou Slimmer,

largest yellowtail. And Cliff Lawrence, largest game bird and largest corvina; Dick Thomas, largest deer; Larry Pearson, most varieties of game; Al Abbott, most predators; Bob Walker, best with pistol; Bob Slaughter, best with shotgun, and Mark Miller, best with rifle and Al Abbott for the outstanding catch, a 30-inch German brown trout.

Special award plaques, recognizing outstanding service to the club, were presented to Cliff Lawrence, Art Rawlings and Dave Branscome.

Featured speaker for the night was Lee Palm of Long Range Sportfishing of San Diego.

A&SG Network

text requirements for all Later this year a new computer will provide an even more modern system.

The system's time is shared from remote terminals at all divisions, and ATS can quickly process almost every form of document produced by the company, from complicated and lengthy new business proposals to updating a standard dcument.

puter's vast memory capacity.

chores as making error-free proofreading corrections, adjusting margins, sequential page numbering and proper line spacing are performed by the computer, relying on its extensive capabilities.

Classified Ads

- '57 T-Bird, \$1,800. OX 2-4116.
- ¹55 Thunderbird, \$1500, 860-2570.
 ¹63 Dart \$595, 430-0293.
- '67 Corvette, 631-0725.
 '57 Chevy ½ Ton, Hydro. 213/FR 2-6771.
 '57 Nomad Chevy \$325. 865-0016.
- 68 Bonneville Sta. Wagn. \$3800. 714/ 630-2642.
- '58 Fiat Roadster, \$225. 714/879-5365.
- '67 MGB, 213/434-0288.
- ¹51 MG 714/546-3724. ¹61 Chevy (348) Nomad Wagon, make offer, 637-1979.

68 Toyota, 4 dr, Corona. 675-7868.

MOTORCYCLES-'66 Triumph TR6, 650cc, 213/869-7463. 68 Honda 160 Scrambler, ME 3-3226. 65 BMW 1800TI \$1350, 213/370-0859.

4 br. 2 bath, Downey. 213/869-5936. 7/2 Acre, near level view lot, PV Estates 378-9614.

APPLIANCES

Automatic washer, Sears, \$35. 213/634-2334. 30" Gas Range, \$50, 426-4304.

BOATS-

Ski Boat, 16' Regatta, Merc 110 hp. 213/867-4202.

WANTED TO BUY-Lrg. Old Lionel Train. 714/826-1396.

Engine for '49 Desoto. 213/537-1362. RIDE WANTED/OFFERED

Wanted—La Habra-Seal Beach, 7:30-4:30, Imperial & Euclid. 714/871-0045.

1 br. Apt. Patio/gar./heat \$110. 714/ 838-1281. Home, Huntington Bch. \$175. 213/592-

REAL ESTATE-

1/2 Acre Near-level view lot, PV Estates. Olsen (D), 378-9614.

New Dispensing Optician Joins Downey Facility Optometry Office

REMINDER - Rosemary Miller, division president William

Bergen's secretary, reminds employees that 1969 license tags

should be put on license plates as soon as possible. Tags should

be affixed to the upper left-hand corner of rear license plate.

Sy Cohen, a dispensing opti-cian with more than 20 years' dispensing optician for the Seal experience, is the latest addition Beach office. to the division Downey facility Optometry Office.

Cohen joins the team of Drs. Stanley Pearl and Lawrence

The Downey office is located

in the southeast corner, first floor, of Bldg. 5, and is open from 8 a.m. to 3:45 p.m. on Monday, Wednesday and Friday, and from 1-7 p.m. on Tuesdays. Located on the first floor of Bldg. 80 adjacent to the Countervend, the Seal Beach office is open from 7:30 a.m. to 3:30 p.m. on Monday and Thursday.

The optometry office provides complete eye examinations and prescriptions. Available are both safety and regular eyewear for men and women, as well as a full line of eyeglass

Skywriter

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

Space Division Tony Longo, Ext. 6468 Published weekly by North American Rockwell Corporation, 12214 Lakewood Blvd., Downey, Calif. 90241, as a service to employees.

SPORTSMAN OF YEAR - Roger Lawrence, left, is congratulated on being named Rod and Gun Club's "Sportsman of Year" by Lee Palm of Long Range Sportfishing. Palm was guest speaker for club's annual "Awards Night" banquet held on Saturday.

MOD SIR WALTER

Thank-You Extended to 'True Gentleman

A division "gentleman" - unfortunately unidentified has been hailed for his thoughtfulness in stopping to aid a young lady in distress during a recent rainy day.

The man was cited in a letter to Public Relations carrying the request that it be printed in Skywriter. Addressed, simply, to "The Gentleman: North American Rockwell, Dow-

ney," it read:
"Thank you very much, you are a true gentleman for stopping and helping me with my flat tire that day, that

rainy day of 6 February, 1969.
"Knowing it would probably make you late for work, you still stopped to inquire. I waited 10 minutes for someone to stop and help me, (but) all I received were stares as they

"You were so nice to stop and help that I would like to thank you this way-through your company newspaper. Not knowing your name, I was unable to send you a 'thank

"In reading this, you will know who you are, for there aren't very many gentlemen like you around." "Thank you again from a very appreciative young lady."