

January 17, 1986 Number 1

Contract signed for Titan II launch vehicle conversion

Martin Marietta and the Air Force have signed a letter contract authorizing the company to proceed with the final system design review for conversion of Titan II intercontinental ballistic missiles into expendable space launch vehicles.

The \$45.2 million letter contract sets the stage for negotiation of a definitive contract with the Air Force, that could exceed \$600 million, to convert and launch up to 13 deactivated Titan II missiles for Department of Defense payloads. The Air Force plans an initial launch of a converted Titan II in April 1988 from Vandenberg Air Force Base in California, with subsequent launches continuing into 1995.

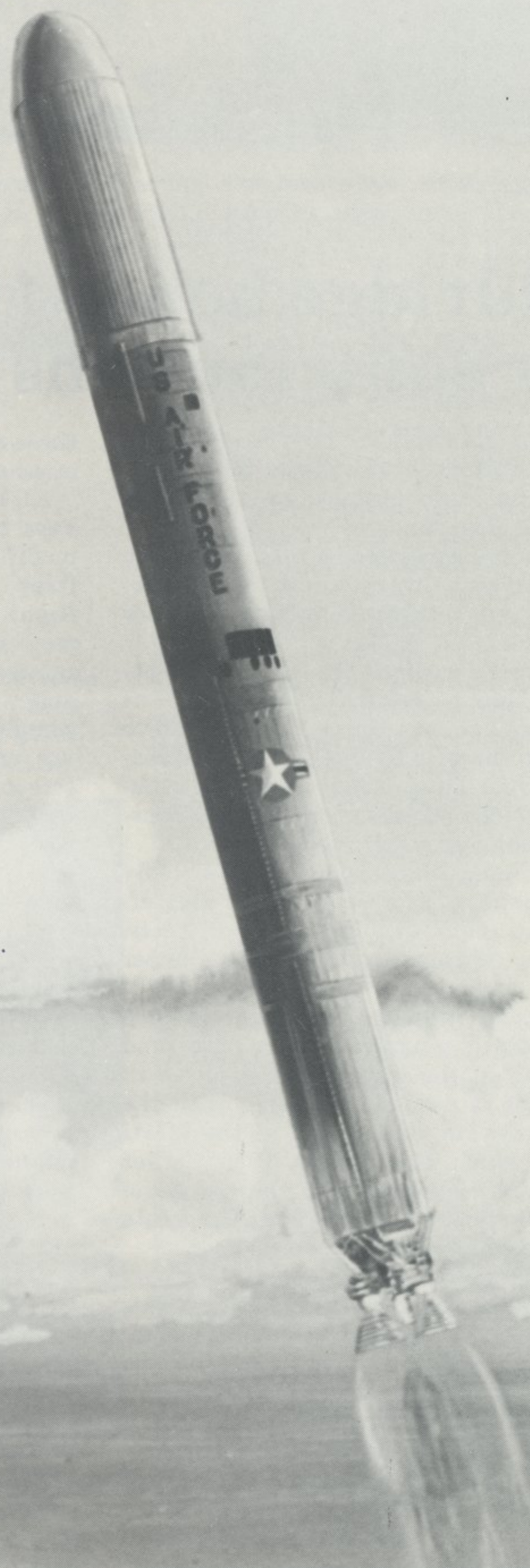
Martin Marietta originally built more than 140 Titan II ICBMs for the Air Force to replace Titan I ICBMs. The Titan II also was selected by NASA for use in the Gemini manned space program in the mid-1960s.

Deactivation of the Titan II ICBM system began in July 1982; completion is scheduled for 1987. At the end of 1985, more than 30 of the deactivated missiles were in storage at Norton Air Force Base in San Bernadino, Calif.

To convert the Titan IIs, Martin Marietta will modify the forward structure of Stage II to use a 10-foot diameter payload fairing with variable lengths; manufacture the new fairings plus payload adapters; refurbish the Titan's liquid rocket engines; upgrade inertial guidance systems; develop command destruct and telemetry systems; modify Vandenberg Air Force Base Space Launch Complex-4 West, and handle payload integration.

The majority of conversion work on the Titan IIs will be performed at Denver Aerospace. James P. Greichen is program manager.

Artist Charles O. Bennett depicts concept of an expendable launch vehicle.





Aldridge, left, receives congratulations from Gerald D. Griffen, NASA director of Lyndon B. Johnson Space Center.

Space Systems organization changes

Morris H. Thorson, vice president of Space Systems Division, has announced the following organizational changes:

- Robert J. Molloy is director of the Tracking Pointing Experiment (TPE) for Strategic Defense Initiatives (SDI).
- Daniel B. Hutchison is deputy program director and technical director for TPE.
- Laurence R. Soderberg is director of the SDI Architecture Study program.
- W. William Spieth is acting manager of all other SDI advanced program activity.
- Douglas D. Hart is director of business development for all of Space Systems Division, incorporating the functions formerly performed by D. B. Hutchison in his job.

Hart, Molloy, Soderberg, and Spieth will report directly to Thorson. ■

Aldridge honored by NASA for contributions to MMU

Louis L. Aldridge has received the NASA Public Service Medal for his outstanding contributions to the space shuttle program.

Aldridge, engineering manager of the manned maneuvering unit (MMU) program, was recognized in December for his work on the MMU.

Aldridge received the award at a Special Honor Awards Ceremony at NASA's Johnson Space Center, held to "honor those individuals and organizations who have made major contributions to the success of the Space Transportation System missions."

"I congratulate you wholeheartedly and thank you for your outstanding efforts on the MMU," said Peter B. Teets, Denver Aerospace president, in a letter to Aldridge.

Aldridge, who has been involved with the MMU program since 1982, and worked on the initial design phase in 1979-80, is a 27-year veteran with the company. He was a part of the MMU team which earned the 1985 Collier trophy, and was named Denver Aerospace engineer of the year and Corporate engineer of the year.

"I feel extremely honored to be a part of the MMU team," Aldridge said. "This award means a lot, not so much as an individual but for all of us working on the MMU program."

Aldridge said the MMU program is still in a refurbishment mode. Since retrieval by MMU-equipped astronauts of the Palapa B-2 and Westar VI satellites late in 1984, both flight MMUs have been screened to determine effects from

three extremely successful space shuttle missions.

All applicable life-cycle limited items have been replaced, a major electronics modification and three minor electrical fixes have been completed on both flight articles and on the qualification test article, Aldridge said. All thermal-related problems have been resolved and incorporated upgrades are near completion. A materials problem regarding battery latches, found during the screening operation, was resolved and fixed. In addition, two major propulsion components were changed out. Numerous upgrades to support equipment have either been completed or are nearing completion.

"A large number of studies have been worked since our last mission," Aldridge said. "They include control system evaluations, a new and much simpler separation nut system, navigational aids, new checkout electronics equipment, arm improvements, development of requirements for a digital electronics control unit, and a strap-on propulsion tank unit. These are, of course, only some of the areas being worked—the list would get too long."

Last month NASA's Johnson Space Center alerted Denver Aerospace to prepare for a 1987 early spring mission. They specified including the new separation nut system on both flight articles, and one strap-on propulsion tank unit.

"The entire MMU staff is prepared and ready to meet the challenges that lie ahead, leading to our next mission," Aldridge said. ■

United Way praises employees

The president of the Mile High United Way Campaign recently commended the employees of Martin Marietta "for the fantastic job" in this year's campaign.

In a recent letter to Peter B. Teets, president, Rolland E. Hoffman, president of the Mile High United Way, said the support "was critical...to achieve a ten percent increase in this very difficult year.

"We appreciate so much the leadership that Richard E. Weber, vice president, personnel and facilities, gave to the campaign, and the concern of all the people at Martin Marietta expressed through their contributions." ■

Weight loss made easy

In a move to help those employees concerned about their weight, the cafeteria has begun posting the calorie content of many foods offered.

In addition, a special 500 "calorie conscience" meal will be highlighted each day. These meals will emphasize good nutrition, food variety, and offer reduced calorie and sodium content.

The posting now offered resulted from employee responses to last year's employee surveys. ■



At the groundbreaking ceremony are, from left to right: Mark McQuater, Etking Construction Company; Frank Seprino, Denver Aerospace; Tony Betschowa, Etkin; Elmer Alexis, Denver; Chris Morton, Etkin; Ralph Stewart, Denver; Jack Schmidt, Ted Gavrilis, Denver; Rick Polmear, Etkin; Larry Burgess, Denver; Robert Snodgrass, director of facilities; Jim Ross, and Jack Mitchell, Denver Aerospace.

New facility planned for Waterton site

Ground has been broken for the construction of the Advanced Technologies Facility at the Waterton site. Located 1,000 feet north of the General Purpose Laboratory, the 75,000 square foot facility will house laboratories, offices, test, and fabrication areas.

The facility, designed by the facilities engineering department with Jack Schmidt as building architect, is scheduled for completion in late 1986. Ted Gavrilis is program manager of advanced technologies. ■

Performance Sharing Plan news

Before-tax contributions increased

The recently concluded open enrollment resulted in a maximum allowable before-tax contribution of 11 percent for participants in the higher pay level. This is an increase of one percent from the previous review.

New interest rate

Effective January 1, 1986, the interest rate on Fund B (fixed income) in the Performance Sharing Plan (PSP) for salaried employees became 12 percent, as compared with 12.4 percent in 1985. Thereafter, contributions to Fund B will earn .949 on a monthly basis. This rate will be in effect throughout 1986 unless interest rates decrease from year-end 1985 levels.

Fund performance

The unit values published monthly for each fund represent the relative economic status of that fund at a point in time. By comparing each fund's unit value with the value 12 months ago, the following annual rates of return can be inferred as follows:

Unit value	Annual rate of return (compared with Oct. 1984)
October 1985	
Fund A: 2.8897265549	20.5
Fund B: 2.2482435777	12.4
Fund C: 3.3616303877	12.8
TCESOP 1.312993889 (Tax Credit and Employee Stock Ownership Plan):	no comparison available
November 1985	
Fund A: 3.0946404024	30.1
Fund B: 2.2703769778	12.4
Fund C: 3.5078193614	26.4
TCESOP: 1.3725094138	no comparison available

Share-the-Ride cards needed

It's time for employees who carpool to obtain new certification cards. Current carpool cards expire January 31. Carpool recertification at the Main Plant and new certifications at DSC, ASC, LSC, GEPS, Greenwood, and Southpark will occur during the next two weeks.

The number of Share-the-Ride parking spaces at the main plant will change to reflect the number of carpools that actually exist. Security will check reserved areas to verify that cars are certified carpool vehicles. Each carpool receives one card, which should be displayed on the dashboard when the vehicle is parked in the Share-the-Ride area. Employees who alternate driving duties must share the certification card.

The January 31 cut-off date will determine the number of spaces available. Carpool certification forms may be obtained from the employee service/recreation office in the Engineering Building, 124-G, or by calling 7-6605. ■

Installation of copiers set for February

New self-service copy machines capable of reproducing 35 copies per minute will be installed in February.

The new copiers will use dry chemical systems and will replace existing copiers throughout Denver Aerospace and Denver Information & Communications Systems. They will have stationary platen and semi-automatic document feeders.

Training sessions will be scheduled in the major user areas.

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January 17, 1985

Corporate news

Larizza named VP, business development, for Information & Communications Systems

Rocco D. Larizza has been appointed vice president, business development, for the Information & Communications Systems Company.

Larizza replaces F. Donald Selbie, Jr., in advance of Selbie's retirement early next year. Selbie will act as assistant to the president of I&CS in the interim.

Larizza has an extensive background in program management and business development. He received a bachelor's degree in civil engineering from the State University of New York, and has participated in the executive master of business administration program at Loyola University, New York.

Salis, Beardsley assigned new positions

Michael L. Salis, formerly manager of the San Bernadino District office in California, became director of the Northern Region office in Lexington, Massachusetts in December 1985.

Salis will supervise all marketing activities in the region, including the Rome and Atlantic District offices. Salis has 20 years with Martin Marietta.

Also in December, Peter P. Beardsley, formerly assistant director of the Western Region office, assumed the position of manager of the San Bernadino District office in California.

Beardsley's assignments will include management of all marketing activities at the Air Force Ballistic Missile Office (BMO) at Norton Air Force Base, the Air Force Flight Test Center, and the Air Force Rocket Propulsion Laboratory at Edwards Air Force Base, Calif.

News briefs

Janice K. Henry named Corporate secretary

The Corporation announced the election of Janice K. Henry, 34, as secretary of the Corporation, effective January 1, 1986. She succeeds Mary Jane LaBarge, who retired after 23 years with Martin Marietta. *Henry*



Henry joined the company as an accountant in 1974, and served successively as project accountant, senior financial analyst, controller, and director of business management for commercial operations. She was assistant secretary prior to her election by the Board of Directors. Henry earned a bachelor's degree in business administration in 1974 from Columbia Union College and a master of business administration in finance and investments from George Washington University in 1980.

Parsons assumes new duties as vice president of AAS

Donald H. Parsons was elected executive vice president of the American Astronautical Society and named a Fellow of the Society recently.

Parsons, the program development manager of the *Parsons* hard mobile basing program in Strategic Systems, served as section chairman of the AAS Rocky Mountain Region in 1985, and has been an active member of the section for eight years. Parsons joined Martin Marietta in 1970 as senior engineer on the Skylab program.



Career Women's Association to install officers

Members of the Career Women's Association will meet at 5 p.m. on January 23 at The Padre Restaurant, 8035 S. Quebec. The program will include "travel savvy" and installation of this year's officers.

McEwen selected to serve on employer council

Timothy J. McEwen was selected to serve on the California Employer Council (CEC) Legislative Committee. McEwen, chief of staffing for Vandenberg Opera-



McEwen

tions, was chosen by the council after five years of experience on California employment advisory groups.

The CEC committee reviews and acts on current legislation for the Employment Development Department and the community in general. McEwen joins 11 other personnel experts from California. He joined Martin Marietta as chief of staffing in 1984, and earned a bachelor's degree in business administration from the University of Florida, and served as a Captain in the U.S. Air Force from 1970 to 1977.

Gradt earns joint recognition for Peacekeeper logistics

Frank Gradt recently earned praise for his support as transportation equipment management group (TEMG) secretariat. Gradt, senior logistics engineer, assigned to Peacekeeper test/field logis-



Gradt

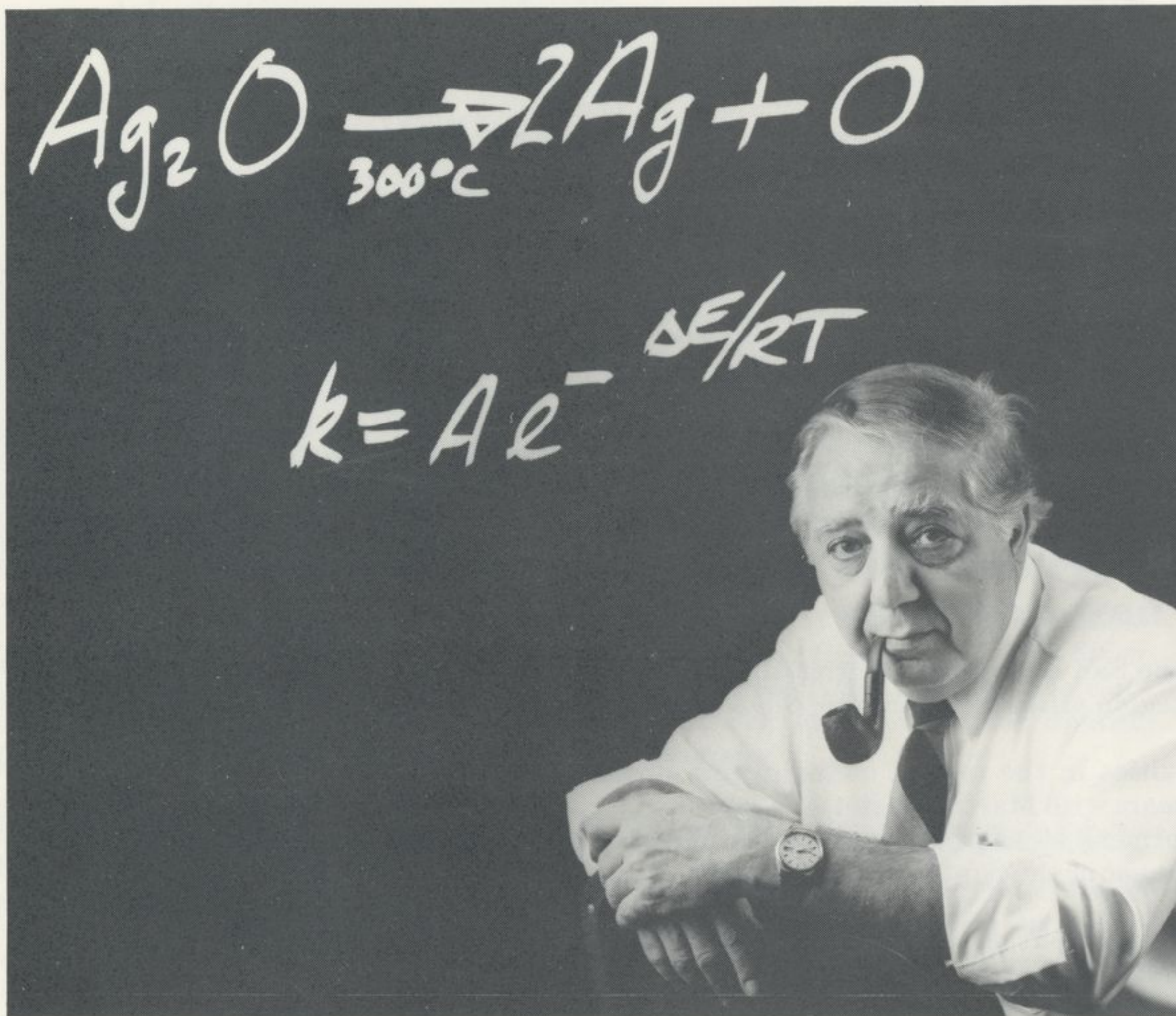
tics support, received the award from DeOrr Peterson, chief of the missile transportation section at Hill Air Force Base, Utah, and John Girrard, BMO/SD-ML (deployment logistics).

Gradt keeps the Air Force apprised of stage delivery requirements to Vandenberg Air Force Base, Calif., or other test sites. He also assists in management and control of pipeline transportation and handling equipment. Gradt joined Martin Marietta in June 1983. ■



U.S. Savings Bonds ★

America's favorite way to save!



Dr. Papazian describes a simple method for production of atomic oxygen.

Awards given for inventions; new technology disclosures

The following Denver Aerospace employees have been granted cash awards by the Denver Intellectual Property Review Board during the last quarter of 1985 for their inventions:

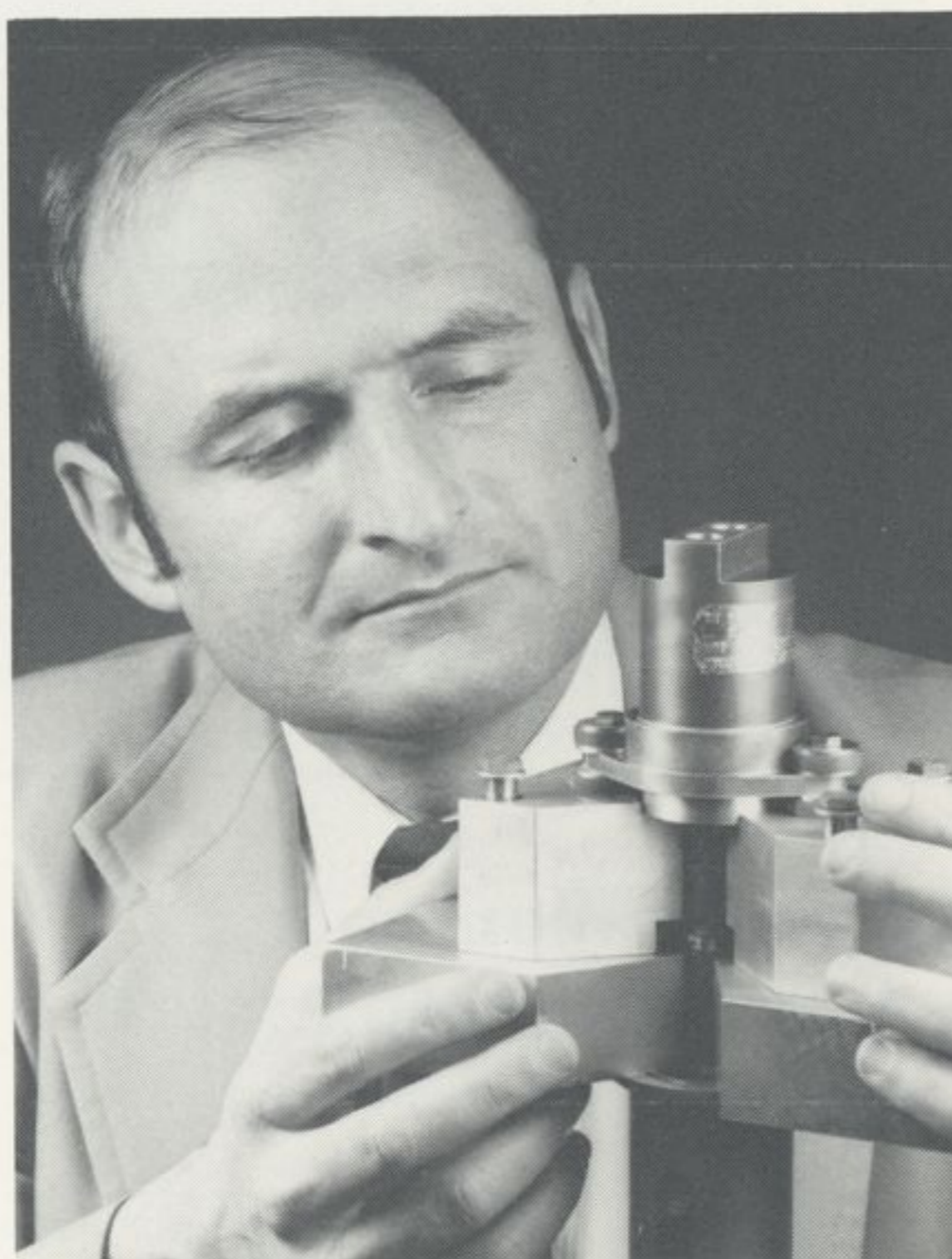
Curtis E. Farrell, systems engineering, and Roger T. Giellis, engineering mechanics, "Direct Interfacing of SUPERTAB/GEOMOD Finite Element Model Data to TRASYS"; Dr. Harold A. Papazian, electronics, "Production of Atomic Oxygen"; and Timothy D. Thames, engineering mechanics, "Separation Nut Shock Isolation System".

The following employees were granted cash awards by the Denver Aerospace New Technology Evaluation Committee for their new technology disclosures submitted as a result of work on NASA contracts:

Eric E. Bachtell and John V. Coyner, Jr., engineering mechanics, and Curtis E. Farrell, systems engineering, "HF and VHF Box Truss Array Design for Direct Voice Broadcast from Space"; and Timothy D. Thames, engineering mechanics, "Separation Nut Shock Isolation System".

These employees have received cash awards and certificates of recognition from NASA for their new technology disclosures which were published as a NASA Tech Brief:

Bernard C. Scott, electronics, "Ambient vs. Case Temperature Burn-In"; Carl R. Griesbach, electronics, "Bidirectional Power Converter for 331 kW Electrodynamic Tether for Space Station".



Timothy Thames inspects his design for reduction of separation nut shock levels. This system was developed for use on the Venus Radar Mapper program.

Employee services/ recreation

Photo—The Platte Canyon Photo Club will meet at 7 p.m., Thursday, January 23, in room 200 K of the DSC facility. Mike Worthy, nature photographer, will present a multiimage slide presentation entitled "Rural South". All members and interested employees and spouses are invited. Contact John Smith, ext 1-8768, or Bill Privatsky, 7-4969, for more information.

Travel—The Weekends Unlimited club offers employee discounts on weekends and some week nights at either Ramada Hotels, the Radisson Inn, Holiday Inns, Sheraton Inns, and the Marriott in ten cities. Membership cards are available from recreation racks.

Smokers—The Presbyterian/Saint Luke's Medical Center offers the smoking cessation program selected by Martin Marietta. Those employees who successfully complete the program become eligible for reimbursement; other programs are not reimbursable. Attend a free introductory seminar from 5-6 p.m. on Tuesday, January 21, or Wednesday, January 22, at Goddard Junior High, 3800 W. Berry Avenue. Preregistration is not required.

No-smoking signs for individual desks and departmental areas are now available. Managers should poll their employees to determine the number of signs needed before ordering the signs from facilities, ext 7-4144.

Soccer—The Martin Marietta Soccer Club will be forming both men's and coed teams for indoor soccer leagues beginning in February. Fill out the questionnaires available in the recreation racks and send to recreation, mail stop 1344.

continued next page

Employee services/ recreation

continued

Alpine skiing—The Rocky Mountain Alpine Club will hold a beginner/intermediate cross country trip to Montezuma on Saturday, January 18. Call Larry Espelage, ext 1-8928.

The club is planning an intermediate/advanced cross country overnight trip to South Park on January 25-26. Contact Steve Ahman, ext 7-9672.

A tubing trip is planned for Saturday, February 1, at Fraser Valley. Call Brian Gallagher, ext 1-8706, for details.

Skiing—Discount coupons for lift tickets and ski lessons at Breckenridge are available from the recreation office or the following volunteer recreation representatives:

-Waterton—Marge Losey, SSB, room 400, (1-3:30 p.m. only);

-DSC II—Kay Shuey, room 167, (8-11 a.m. and 1-3 p.m., Mon-Thurs; 8-11 a.m., Fri);

-West Point—Nadine Holder, room 340;

-LSC—Melinda Pastore, EEO office - enter through personnel lobby, (2-4 p.m.);

-Greenwood—Jerre Chapman, Building 6130, (1-3 p.m., Tues, Wed, Thurs, only);

-South Lincoln—Lucy Winda, personnel representative office;

-Inverness—cashier, Building 108;

-Southpark—Cynthia Schultz, north side of building, (2-4 p.m., Mon, Wed, Fri, only).

Condos—The Antlers condominiums in Vail, Colo. offer employees a 15 percent discount per night off seasonal rates, and a savings of 20 percent on ski rental equipment. Call 476-2471 in Vail and 825-8445 in Denver for rates and availability.

Notes from security

Use proprietary envelopes—those with green or orange stripes—to send Martin Marietta-use-only documents or information.

Send regular interdepartmental mail in standard yellow inter-office envelopes.

For guidance, see standard procedure 6.1.



Years of service recognized

Employees who attained 30 and 35 years of service during the second half of 1985 were honored by the company at a luncheon in November. Those with 30 years with the company, photo at left, include, standing left to right, Thomas Cook; Richard E. Weber, vice president, personnel and facilities, officiating; and H.C. Hirst. Seated are Arnie Carvill and Curt Pinckernell. Not



shown: Joseph Westgate and John Kneuer. Those with 35 years of service include, photo at right, standing left to right, Thomas Watson; John Pond; Richard E. Weber, officiating; William Canby; and George Sammeth. Those seated include James Cosby, William Hunter, Charles Reynolds, and Robert Martell. Not shown: Howard Marvelle and Gene Walsh.

SUCCESS THROUGH SUGGESTIONS

For more information, phone the suggestion office, 7-IDEA.

