## MARTIN MARIETTA

DENVER AEROSPACE

#### December 6, 1985 1

#### Number 24



At the recent dedication ceremonies are, left to right, Peter B. Teets, Denver Aerospace president; Louis Morine, pro-

gram manager, R2P2; Robert Strunce, SDIO; and Gen. Abrahamson.

# Gen. Abrahamson dedicates new strategic defense laboratory

A new simulation laboratory designed to test elements of space-based defense systems was dedicated Tuesday, Nov 19, by Denver Aerospace and Lt. Gen. James A. Abrahamson, director of the Strategic Defense Initiative Organization (SDIO).

"This building will house some of the most advanced technology, but the real genius is from the people here at Martin Marietta," said Gen. Abrahamson, "and that is something you should all be proud of—making all these marvelous things possible."

Gen. Abrahamson is responsible for developing the nation's research and technology programs relating to defense against ballistic missiles. He visited Denver Aerospace to participate in the dedication ceremony.

The Rapid Retargeting/Precision Pointing (R2P2) simulation facility was built by Martin Marietta under contract to the SDIO to provide a national test

bed for research under the SDI program of the Department of Defense.

SDI investigators nationwide will be able to use the facility to answer basic questions about rapid retargeting and precision pointing, and SDI contractors will be able to use it to evaluate control strategies for retargetable systems.

"With this simulator, we want to prove to the President and Congress that we have the strategy that will be nonthreatening and yet give us security and protection, and make the world a safer place," the general said.

Located on seismically stable bedrock, construction of the laboratory began in April of 1985 and the facility is expected to be ready for use in December, 1986.

Martin Marietta built the facility under a \$7 million contract to the SDIO. An initial study to develop designs for the facility was conducted under a \$2.2 million contract with the Defense Ad-

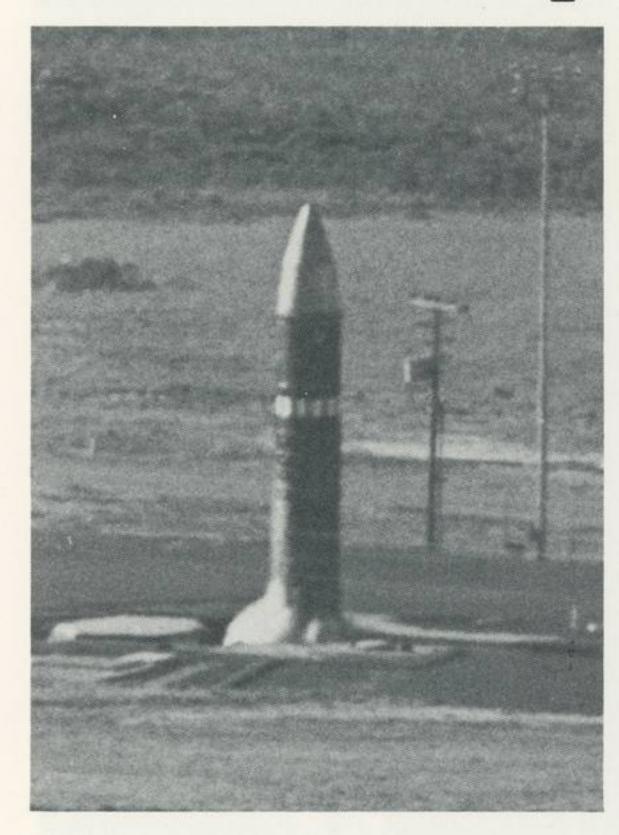


Gen. Abrahamson speaks to the media at the R2P2 facility.

vanced Research Projects Agency (DARPA).

The company is involved in a number of other projects related to SDI research, including studies of overall architectures for such a system, and studies of directed and kinetic energy weapons, and fine pointing techniques.

#### Air Force completes tenth Peacekeeper test flight



Peacekeeper begins second successful launch from underground silo.

The U.S. Air Force announced completion of the tenth test of the Peace-keeper missile from Vandenberg Air Force Base (VAFB), Calif. The missile was launched at 9:04 PST, November 13, to a target area 4,800 miles away in the Pacific Ocean.

This 30-minute flight marked the second time a Peacekeeper test missile was launched from a modified Minuteman silo. The first eight test missiles were launched from above ground canisters at VAFB. The remaining ten scheduled test launches will be from silos.

The missile carried four unarmed MK21 reentry vehicles. This flight was designed to analyze the functional performance of missile systems including propulsion, reentry, guidance and control, instrumentation and flight safety and launch facilities.

The fully-instrumented flight test missile demonstrated its capability to perform an operationally realistic test mission. The missile also carried a command destruct package to ensure the missile could be safely destroyed if it strayed from the planned flight path.

The Peacekeeper is a four-stage intercontinental ballistic missile (ICBM) designed to modernize the U.S. ICBM force. All of the Peacekeeper flight tests, managed by the Ballistic Missile Office, Norton AFB, Calif, have been designed to verify system performance. Test objectives for each flight have gradually shifted from component functional performance to systems and operational objectives. Initial operational capability of ten Peacekeeper missiles at F.B. Warren AFB, Wyo, is planned for December, 1986.



Tenth Peacekeeper missile begins 30-minute test flight.

# NASA, Air Force agree to delay first VAFB shuttle launch

The first space shuttle launch from Vandenberg Air Force Base, Calif., has been delayed until mid-July, 1986, by a joint agreement between the U.S. Air Force and NASA. The mission, STS 62-A, had been scheduled for launch no earlier than March 20, 1986.

"There are no major problems at the Vandenberg site," Under Secretary of the Air Force Edward C. "Pete" Aldridge, Jr., said. "We have repeatedly stated that safety and quality would not be sacrificed for schedule. Our decision reflects our continued commitment to this philosophy."

"We have had to make some facility modifications because of what we learned from routine Air Force/NASA operational readiness inspections," Aldridge said. "We have also added time to the schedule to allow for better preparation and evaluation of the operational systems tests, and we have extended the training period for the launch crew of this historic, first west coast shuttle mission."

"This revised schedule will permit us to complete on-going modifications, inspections, rework, and operational testing with higher confidence than could be permitted with the March 20 schedule. It also minimizes the potential for conflict with the NASA Ulysses and Galileo planetary missions scheduled in May," he explained.

Jesse Moore agreed with Under Secretary Aldridge. Moore, NASA Office of Space Flight associate administrator, added, "NASA concurs completely with the Air Force regarding Vandenberg. Our first commitment is to the safety of the crew and the reliability of the vehicle and launch systems. The development of the Vandenberg site is proceeding very smoothly. This readjustment gives us all more time to carry out our commitment to safety and reliability."

The decision to delay means the orbiter Discovery will be delivered to Vandenberg around March 1, 1986. Air Force and NASA officials will continue to evaluate the STS 62-A schedule and will establish a firm launch date after January 1.



#### Space shuttle flight crew visits Vandenberg

Members of the first space shuttle flight crew (to be launched from Vandenberg AFB, Calif, in 1986) visit the launch and landing sites. Mission 62A crew astronauts include, left to right, Edward C. (Pete) Aldridge, Jr., Under Secretary of the Air Force; Maj Jerry L. Ross, USAF; Comdr. Dale A. Gardner, USN; Col. Richard M. Mullane, USAF; Lt. Col. Guy S. Gardner, USAF; and Capt. Robert L. Crippen, USN. Inset: AF Under Secretary Aldridge, right, greets Peter B. Teets, Denver Aerospace president, during the crew visit to VAFB.

#### Volunteers needed to help Operation Santa Claus serve needy

Every Christmas for the past 26 years Operation Santa Claus has provided holiday cheer for needy children and families in the greater metropolitan area.

The donations and efforts of Denver Aerospace employees have made the holiday season brighter for more than 7,600 children during the past quarter century. Social services agencies throughout the area have recognized the employees' efforts as the largest single continuing volunteer program of its kind in the region.

This year, Operation Santa Claus, a nonprofit organization of employees with no formal ties to the Corporation, will provide food, clothing, and toys to about 700 children in 175 families on Thursday, December 19. That means raising about \$30,000, as compared to last year's \$22,500.

"If each of us gave only three dollars, the program could be fully funded," said Dwaine Schilling, the program's chairman and head of the delivery volunteers committee. "There are so many families that deserve help...selecting the families becomes a highly emotional job," added Schilling.

Floyd Teiffel, ext 7-6872, and Betty Purkey, ext 7-5265, are heading a group of volunteers who are collecting the funds for this year's effort. Employees should contact them to give a tax-deductible gift.

Once the selection committee, headed by George McCone, makes its decision, the toy committee, under James Spaulding, buys appropriate toys based on age and sex. "We emphasize educational toys and games to help childrens" growth," Schilling said.

The food committee, chaired by Kenneth Thompson, works with King Soopers to buy from five to ten boxes of groceries for each family. The groceries are all packaged by King Soopers employees.

This year those who volunteer to deliver the packages will meet at the Littleton Elks at 5749 South Curtis Street to select a family and wrap the toys.

Operation Santa Claus depends on the efforts of volunteers. Anyone may volunteer by contacting Dwaine Schilling, ext 3614. "We will need about 300 volunteers this year to package and deliver food and toys," Schilling said.

# Suggestion office clarifies program

Since the start of the Suggestion Program on November 1, the office has briefed many employees explaining the system. The office expects to continue holding briefings in 1986.

The suggestion office reports the following most commonly asked questions and their answers:

Q—As a supervisor, do I have the authority to hold back a suggestion because of content?

A—No, after you've completed your designated section, you are to return the form to the employee within two working days. Supervisors do, however, have an opportunity to agree or disagree on the form, and may attach further information.

Q—If implemented, do I get an award if the suggestion is within my "assigned job-scope?"

A—No, you will not receive a cash award. However, if your supervisor and the Suggestion Program office coordinate submission of the suggestion, and it is implemented, you will receive a letter of commendation.

Q—As a supervisor, I need a clear explanation of the "assigned job-scope" issue.

A—After reading the suggestion, ask yourself, "Have I assigned this particular job task to this employee for resolution?" If you have not, then the subject matter would not be considered to be within the assigned job scope. If you have assigned the task and feel the employee should submit the idea for implementation, contact the program administrator for further instructions. Upon implementation approval, the employee will receive a letter of commendation.

The suggestion office welcomes comments and questions, ext 7-IDEA.

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Editor Jan P. Timmons
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Call Ext. 5364 with information or suggestions for articles, or call one of the following coordinators.

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Vandenberg Operations Canaveral Operations

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DENVER AEROSPACE P.O. Box 179—Denver, CO 80201

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#### Environmental action update

Denver Aerospace has submitted to the U.S. Environmental Protection Agency (EPA) formal comments on the proposed inclusion of its inactive waste disposal site on the superfund national priorities list (NPL).

The list includes inactive or abandoned hazardous waste disposal sites that the EPA feels should have the high-

est priority for cleanup.

The written comments noted that Martin Marietta is taking appropriate measures to investigate and clean up the site, which consists of a series of ponds used for disposal of a variety of liquid wastes. Use of the ponds was discontinued in 1980.

Those measures include an investigation of ground and surface water around the site, installation of a ground water containment system, and treatment of the water either at a new plant or at an existing plant in the Filter Gulch area.

It is the company's contention that the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—which authorizes superfund cleanups—was designed for abandoned sites or sites at which responsible parties are unwilling or incapable of providing needed response. Since that is not the case with the Martin Marietta site, it should not be included on the NPL, the response said.

The company also said in its comments that it found several errors in EPA calculations used to rank the site for inclusion on the NPL.

"In our response, we reiterated our commitment to take appropriate response measures at our plant," said Richard E. Weber, vice president, personnel and facilities.

"Martin Marietta believes, however, that inclusion of the site on the NPL is inappropriate and urges EPA to reconsider the proposed listing and not include the site on the NPL. We will, of course, continue our cleanup efforts voluntarily."

Denver Aerospace has submitted an

Denver Aerospace has submitted an application to the Colorado Department of Health and the U.S. Environmental Protection Agency for a permit to treat, store, and dispose of hazardous wastes generated at its Waterton facility.

The application was submitted on November 1. It included more than 3,000

pages in seven volumes.

The company, along with other industries throughout the country, has conducted its hazardous waste operations under interim status since 1980. However, the Resource Conservation and Recovery Act required companies to apply for final status under new, stricter standards this November.

A final decision by the regulatory agencies concerning the permit application isn't expected for at least six months.

The application describes programs to analyze, treat, and dispose of hazardous wastes. It also contains key sections designed to address ground water protection, exposure information and health assessment, and a waste minimization plan.

"The company's goal is to reduce the quantity and toxicity of wastes produced on the site over the coming months," said Thomas J. Pharo, director, environmental management.

The application is a significant part of Denver Aerospace's expanding environmental management program.

# Strategic Systems starts unique supervisor training program

James A. Sterhardt, Jr., vice president, strategic systems, kicked off a new training program for badged and assigned supervisory and potential supervisory personnel on November 5.

James V. Merritt, manager of program support said, "the training will acquaint personnel with Martin Marietta's modes of operations, improve communication and supervisory skills, enhance interrelationships among program activities, and improve all job performance."

While the program is called supervisor training, it is different from what is traditionally viewed as supervisory training, Merritt said.

The training is being conducted in two parts. Part I is called Program Opera-

tions, and consists of 12 hours of the history of Martin Marietta, how the company is organized and functions to-day, what is expected of supervisors, and how program personnel should conduct themselves when working with customers and each other. The remaining portions of Part I are devoted to individual presentations explaining management functions.

Part II of the program consists of 20 hours of training and concentrates on people management. This part of the program is devoted to understanding and practicing sound principles of management, conducted in workshop form.

"I feel that training of this nature knits our personnel together into a stronger, more effective team," Sterhardt said. "I know the personnel who attend the course will be better informed, but we will have a better assessment of the overall program benefits after we conduct the first complete course." Sterhardt said they plan to repeat the program as frequently as feasible. Part II of the program will be completed February 4, 1986.

## Blood drive a success

The November blood drive at the Waterton facility resulted in 296 units of blood, the employee services department reports, making the drive a success. The blood was donated to the Belle Bonfils Blood Center.

The 1986 blood drives are scheduled for:

- May 28-29, Waterton facility;
- July 9-10, Denver Systems
   Center;
- August 28, Littleton Systems Center;
- November 12-13, Waterton facility.

# Lunch served on Saturdays

Increased activity at the Waterton facility has prompted food services to begin serving lunch from 11 a.m. to noon on Saturdays, in the first floor cafeteria of the Engineering Building. The new service begins December 7.

#### Micro/Wang starts new customer service

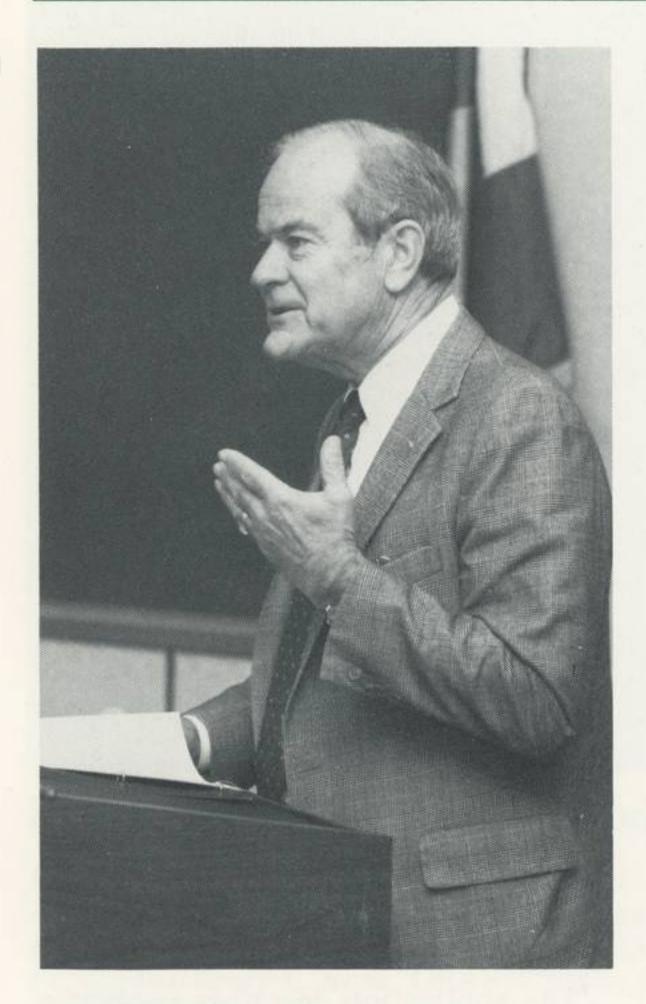
Starting January 1, 1986, two new telephone numbers are to be used for reporting hardware problems with Micros and Wang equipment.

For Micro users, Jim Donahue has implemented the Equipment Repair Information Center (ERIC) system, which will provide service call reporting and tracking at the local area. The ERIC phone number is 790-ERIC.

All Wang hardware problems should be reported to the Wang help line, 790-3730.

Hours of operation for ERIC and the Wang help line are 7:30 a.m. to 4 p.m. A voice recorder will be available for after-hours assistance. Employees are asked not to call customer service (790-3256) after January 1 to report Micro and Wang problems.

#### News briefs



Thomas G. Pownall

### Pownall addresses staff on ethics and integrity

Thomas G. Pownall, chairman and chief executive officer of the Corporation, addressed a large staff meeting on November 22 on issues relating to ethics and business integrity.

Pownall was accompanied by Laurence J. Adams, Corporation president, and Winant (Si) Sidle, head of the Corporate Ethics Office.

In a recent letter to employees on Corporate ethics, Pownall wrote, "We, all of us in the industry, expend public funds in servicing the common good. To be entrusted with the work we perform, our work needs to be the highest quality and our performance in all matters must be a model of propriety."

## Albrecht named VP production operations

Stanley F. Albrecht has been promoted to vice president, production operations, Peter B. Teets, president, announced.

Albrecht, who joined the company in 1957, had been director of the Peace-keeper program until assuming responsibility for production operations in October, 1985. Prior to taking over the Peacekeeper program in 1984, he held a number of key management positions on the program.

#### Junior Achievement: A smart investment

"If you enjoy working with teenagers, have knowledge and expertise in administration, sales and finance or production, we hope you'll want to share your skills as an adviser to a Junior Achievement company," said Lori Sharp, JA coordinator.

The JA program is designed to teach high school students about business through hands-on experience, Sharp explained. With the help of volunteer advisers, students establish and operate a small-scale business over a 15-week period, beginning in January, 1986. JA conducts adviser training sessions in December and January.

To volunteer, contact Lori Sharp, ext 7-6605, by December 9.



Rep. Beverly B. Byron

### Congresswoman addresses large staff

Congresswoman Beverly B. Byron, D-MD, visited Denver Aerospace November 4 to address a large staff meeting. The Maryland representative spoke of Department of Defense issues in Congress and then toured the facilities.

Byron, elected in 1978, is a member of the Armed Services committee.

### Jones named I&CS materiel director

Richard G. Jones has been named director of materiel for Denver Information & Communications Systems (I&CS). He also will oversee the materiel functions for the entire I&CS company. Jones assumes the position December 9, and will report directly to Albert E. Hawkins, vice president, Denver I&CS.

#### Company receives Senate award for tank program

Martin Marietta Corporation has received the U.S. Senate Productivity Award for the State of Louisiana for significant improvements and cost savings in the manufacture of external fuel tanks for the space shuttle.

U.S. Senator J. Bennett Johnston of Louisiana made the presentation in ceremonies at the Michoud Aerospace operation at New Orleans, where Martin Marietta is building the 154-foot-long, 500,000-gallon shuttle tanks for NASA.

In a joint statement, Senator Johnston and Senator Russell B. Long of Louisiana praised Martin Marietta for savings to "NASA and ultimately the American taxpayer" and for "a commitment to excellence" that is essential to the American economy.

"Estimates are that this increased productivity will save NASA, and ultimately the American taxpayer, more than a billion dollars over the long run," the senators said. "The truly amazing thing is that Martin Marietta did this without sacrificing the quality of its work in the least. That is borne out by the flawless performance of the fuel tanks in the shuttle missions to date."

Martin Marietta was cited for an innovative, across-the-board productivity program encompassing plant modernization, installation of automated production processes, and development of a model employee participation program that has led to a substantial number of improvements throughout the manufacturing process.

The giant external fuel tank produced at Michoud is the backbone of the space shuttle launch configuration, supplying fuel to the spacecraft until it enters Earth's orbit. Martin Marietta has delivered 34 external tanks to NASA, including 22 that have operated on space shuttle flights to date.

"Martin Marietta's performance is a perfect example of the high standards we should have in our sights. We applaud the company's management and its employees for their commitment to excellence," Senators Long and Johnston added.

Richard M. Davis, vice president and general manager of Martin Marietta Michoud Aerospace, said in accepting the award, "this award recognizes each of the 4,700 employees at Michoud, who through continuing attention to productivity and quality, have generated a shining record of ontime and below-cost deliveries of external tanks without sacrificing in any way the requirement for 100 percent mission success."

#### Company to study laser system

Denver Aerospace has been awarded an Air Force contract to develop a preliminary design for an active vibration isolation system that would be the component of a laser. The laser is one of the systems being studied as an antiballistic missile device under the government's Strategic Defense Initiative program.

The 14-month contract, valued at about \$500,000, will involve concept definition and preliminary

design. Parallel study contracts also have been awarded to two other companies by the U.S. Air Force Weapons Laboratory in Albuquerque, New Mexico. One of the three eventually will be selected to develop a detailed design, and then build and test a prototype.

Approximately five people will be involved in the program, under the direction of William J. Owen,

program manager.

#### Car care:

#### Auto emission testing will return

The mobile emission testing service will be available to Martin Marietta employees in December from 8 a.m. to 3 p.m. on the following days and locations (check the recreation racks for key-drop and pick-up points):

Monday, December 9
Annex C parking lot (SW corner of the Administration Building);
Tuesday, December 10
Heliport (NE of RDL);

Wednesday, December 11
Space Park (testing at EMF west parking lot);
Thursday, December 12
EMF west parking lot;
Friday, December 13
Greenwood Building 8100 (8100 south parking lot);

Friday, December 13 LSC east parking lot; Monday, December 16

DSC south parking lot (south of DSC I).

#### Recreation/employee services

Bowling—Men's bowling league still seeks bowlers to play each Wednesday at 8:30 p.m. at the Superbowl. If interested, call Dave Eldridge, ext 7-7668, or Mark Lajczok, ext 7-9182. The mixed bowling league still seeks female bowlers to play at 8:30 p.m. each Monday at the Superbowl. Call Susan Mayfield, ext 7-2375.

Skiing—Discount lift tickets (which save adults \$6) are available for Vail and Beaver Creek until April, 1986. The tickets are valid seven days a week except from December 26 through January 3, and February 15 through 17, 1986. Check recreation racks for employee representatives' locations.

Tournament—The Martin Marietta Masters' Bowling Tournament is open to all Denver Aerospace, Data Systems, and Air Force personnel, their dependent family members, and spouses. The tournament will be held Saturday, January 11, 1986, and/or Sunday, January 12, at the Green Mountain Bowling Center. All entry forms, available from the recreation racks, together with a \$10 entry fee, must be received by the recreation office, mail stop 1304, by noon, December 19.

Dining—Looking for a unique Christmas gift? The recreation department suggests the International Gourmets' Choice dining program, discounted for employees to \$25. The discount package may be purchased from the recreation office at the Engineering Building or from volunteer recreation representatives at DSC, S. Lincoln, Greenwood, and LSC. Call ext 7-6605 for more information.

Ballet—The Colorado Ballet presents The Nutcracker ballet at the Denver Auditorium Theatre December 19-30. Discount tickets are available until December 6 or until sold out. Check the recreation racks for order forms.

#### First intercom hardware delivered

The first set of hardware for a new digital intercom system has been delivered by Martin Marietta. The system will link NASA's space shuttle launch pad with the mobile launcher platform and other key operational facilities at Kennedy Space Center in Florida.

The initial hardware, built by Martin Marietta's Information & Communications Systems company, will be installed at the space center's new third mobile launcher platform.

The high-capacity, multichannel intercom system is designed to replace an existing 20-year-old analog intercom network, and is planned to be phased in throughout the space center.

"Using the latest technology for fiber optic cable communications, it will double the number of available channels, be less susceptible to noise, and have lower maintenance costs than the old system," said W. "Ray" Herbert, program manager of operational intercom system-digital (OIS-D). "When first operational in October 1986, the new intercom system will be able to handle 500 voices at once on as many channels," Herbert added.

Martin Marietta is scheduled to deliver an additional backup system for the mobile launcher platform to KSC in January 1986, and a system for the Centaur payload operations control center in March 1986. The contract calls for eventual delivery of 228 user instruments and related equipment to support prelaunch, launch, and post-launch activities and hazardous activities at the space center.

The company designed and is manufacturing and testing the intercom equipment at the Ground Electronics Production Systems (GEPS) facility in Littleton, Colorado.

## Marketing intern applications due

Candidates are now being accepted for the 1986-87 Corporate Headquarters marketing intern program. The program is open to all individuals who have technical, business, or marketing backgrounds. Corporate staff will interview one candidate from each location, and select the intern from those candidates.

Candidates should have at least three years experience as a Martin Marietta employee. Application forms can be obtained from Michelle Martin, human resources development, Eng. 209H, or ext 7-5698. Applications are due by December 13.