

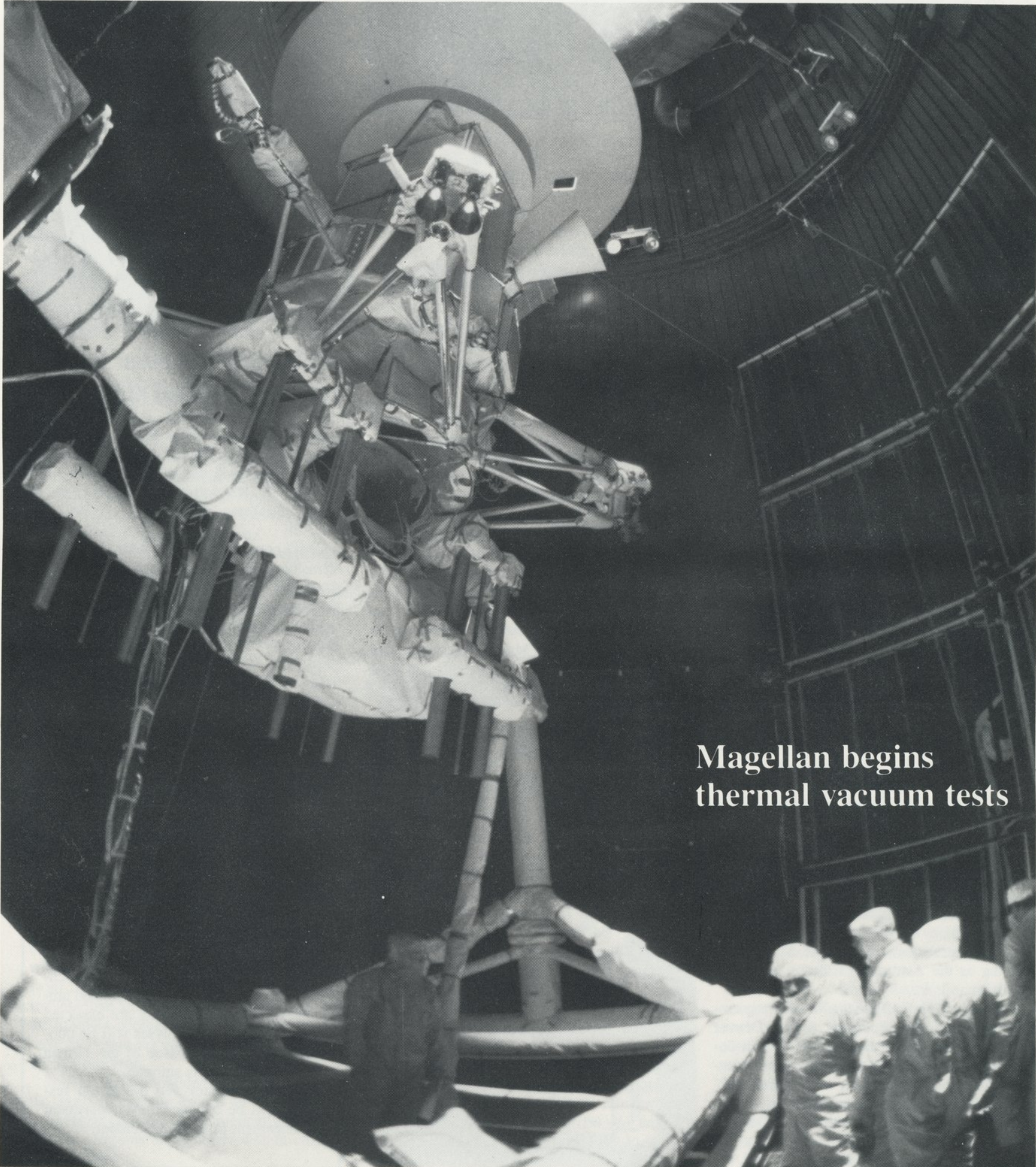
MARTIN MARIETTA

news

ASTRONAUTICS GROUP

July 15, 1988

Number 14



Magellan begins thermal vacuum tests



Local officials and Martin Marietta executives cut a ribbon to open the new Huntsville Operations office. Standing (left to right) are: John Thomas, assistant to the Huntsville Mayor; Mike Gillespie, chairman of the Madison County Commission; Sherman Schrock, director of Huntsville Operations; Peter Teets, Astronautics Group president; and John Stap, Martin Marietta vice president for the Southern Region.

Huntsville Operations expanded

The Corporation has opened a new office in Huntsville, Ala., to bid on the Science and Engineering Technical Support contract at NASA's Marshall Space Flight Center (MSFC).

Under the contract, the company would provide services to all of the center's science and engineering programs over a designated period. The contract is scheduled for award in early 1989. The new Huntsville Operations will also prepare for additional future business opportunities in aerospace engineering projects.

Sherman R. Schrock has been named director of the Huntsville Operations. More than 20 employees are currently working in the new office and that number will increase to about 100 this summer as they prepare for the proposal. If Martin Marietta wins the contract, additional employees would be hired or trans-

ferred to Huntsville. Employees interested in opportunities available at the Huntsville Operations should contact Tom Bailey at (205) 722-0015.

"Huntsville is the kind of town Martin Marietta likes to be a part of," Peter B. Teets, president of the Astronautics Group, told reporters and community leaders at a news conference. "The character of the Marshall Center job requires onsite support. We hope to be the successful bidder, and our Huntsville Operations will provide that needed support."

Schrock said city, county, and chamber of commerce officials have been extremely helpful in establishing the new office. Chamber chairman, Morris Anderson, said, "We are excited about this announcement and look forward to working with Martin Marietta as they increase their presence in Huntsville and Madison County." ■

1988 United Way campaign begins July 18

Martin Marietta's 1988 Mile High United Way campaign will begin with management meetings on Monday, July 18, and continue through August.

Peter B. Teets, president of the Astronautics Group, is serving as general campaign vice chairman for Mile High United Way's 1988 Denver campaign and will serve as chairman of the entire effort in 1989. James A. Sterhardt, president of Strategic Systems, is serving as the Astronautics Group campaign chairman.

Last year, Martin Marietta was the top employee contributing company in the Denver metro area with more than \$1.8 million in donations and 85% of all employees participating. This year, the company is a "Pacesetter" (designated to begin the campaign early in the year to set an example for the rest of Denver) with goals set at \$2 million in gifts and increased employee participation.

Brief meetings for all employees are scheduled to begin August 1 to view the new campaign film and answer any questions regarding United Way services and agencies. Key campaign staff members who will be coordinating Martin Marietta's effort are Jim Shafer and Dan Amerman. Company campaign directors are as follows: Jim Rowland—Space Launch Systems, Ed Sparhawk—Strategic Systems, Frank Durante—Space Systems, Nicholas VanDewerker—Central, Roy Gibson—Commercial Titan, and Al Schallenmueller—I&CS.

United Way, a nonprofit agency that provides funding to a wide variety of community service agencies, began in Denver in 1887 and has spread to more than 2,200 communities nationwide. Articles regarding Mile High United Way activities will be featured in future issues of the Martin Marietta News. ■

Aldridge named for new post

President Ronald Reagan recently nominated Maj. Gen. Donald O. Aldridge, 1st Strategic Aerospace Division commander at Vandenberg Air Force Base, Calif., for assignment as vice commander in chief, Strategic Air Command, Offutt Air Force Base, Neb.

Aldridge also was nominated for promotion to lieutenant general.

He will be replaced by Brig. Gen. Arlen D. Jameson, who is presently the commander of the 4th Air Division at F.E. Warren Air Force Base, Wyo. Change of command ceremonies will take place at Vandenberg Air Force Base on Aug. 31.

Aldridge, who assumed his present command in 1986, is a command pilot with military decorations and awards including the Defense Superior Service Medal, Legion of Merit, Bronze Star Medal and Meritorious Service Medal. ■

BMO commander Barry receives second star

The Commander of the Ballistic Missile Office (BMO), Maj. Gen. Edward P. Barry, Jr., officially received his second star from Gen. Bernard P. Randolph, commander of Air Force Systems Command (AFSC), on June 24.

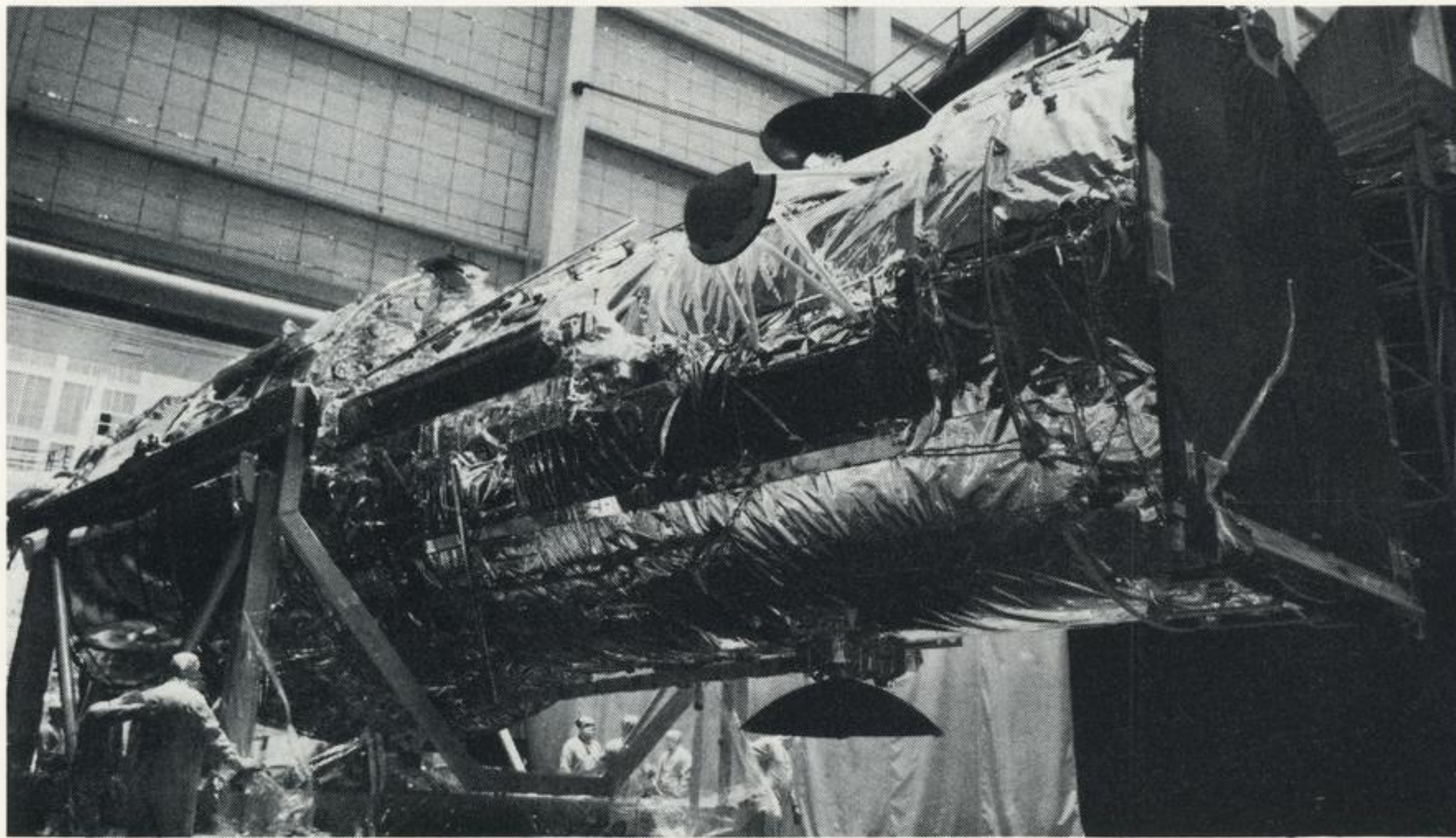
BMO commander since 1986, Barry is responsible for the research, design, development and acquisition of Department of Defense intercontinental ballistic missile (ICBM) systems. Programs under his direction include Peacekeeper missile and rail garrison development, the small ICBM, Minuteman ICBM modernization and advanced strategic missile systems. ■

Communications Survey completed

More than 73% of Astronautics Group employees participated in the 1988 Employee Communications Survey last month.

Survey results have been delivered to Genessee Computer Center, Inc., Rochester, N.Y., for data processing and tabulation. Statistical results are expected July 20, and final analyses will be published in a special issue of the Martin Marietta News this summer.

Survey feedback and evaluation sessions will be conducted by department management through September.



Workers in Sunnyvale, Calif., prepare NASA's Hubble Space Telescope for tests last month that included testing of Space Systems' Faint Object Spectrograph.

Space Systems' FOS takes a ride in Space Telescope ground test

Space Systems participated last month in a successful test of NASA's Hubble Space Telescope, scheduled to be launched by the Space Shuttle next year.

The test was designed to simulate almost a week of space flight operations. The telescope, located in Sunnyvale, Calif., was remotely controlled by NASA personnel located at the Goddard Space Flight Center in Greenbelt, Maryland, as if in a real space flight. NASA called it the most comprehensive ground test ever conducted with the telescope.

Space Systems built the Faint Object Spectrograph (FOS), one of six scientific instruments on the telescope. The FOS is a telephone-booth-sized instrument designed to observe objects 50 to 100 times fainter than

current Earth-based telescopes.

For the ground test, Space Systems staff engineer Kimberly Billitch traveled to California to monitor the status of the FOS. "Testing included having the FOS locate a simulated star," she said. "The FOS then commanded the telescope to move to bring the star into the instrument's field of view." Billitch said the FOS performed successfully for 36 hours during the test.

Once in orbit 370 miles above Earth, the telescope—as big as a boxcar—will be a self-contained remotely controlled space observatory. Unobscured by the Earth's atmosphere, the telescope is expected to provide clues about the origin and composition of the universe. ■

Corporate news

Directors of Martin Marietta Corporation have elected Marcus C. Bennett, vice president of Financial Operations, to be Chief Financial Officer. The appointment was effective July 1 on the retirement of Melvin A. McCubbin.

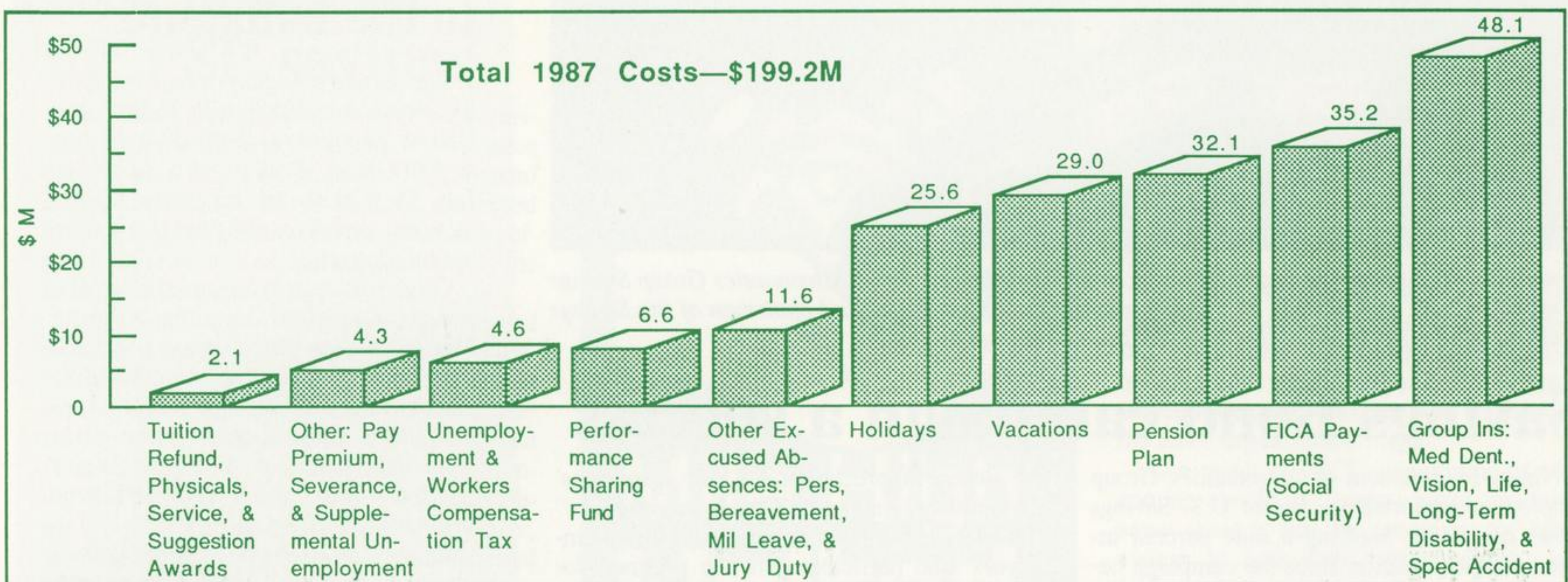
In a separate action, Richard G. Adamson, vice president of Business Development, was elected to be a corporate vice president.

The board's action formalizes the promotion of Bennett, who had been previously designated for the post on March 2. Bennett, who joined the company in 1959, has been a corporate officer and vice president of Financial Operations since 1984. He previously was controller of aerospace operations in Denver, corporate vice president of Finance, and vice president of Business Management.

Adamson joined the company in 1960. He has served as vice president of Finance and Business Management for the Corporation's aerospace and information systems businesses, and previously was controller and vice president of Business Management in Denver before assuming his current position. ■

On the cover

Space Systems workers in the Space Simulation Laboratory prepare the Magellan spacecraft for a three-week test that will duplicate the thermal and vacuum environment of space. This is the last major test of the spacecraft before it is shipped next fall to Florida for processing before launch. Launch on the Space Shuttle is set for late April 1989.



The hidden paycheck

For every dollar paid for work performed by an Astronautics Group employee, the company spends another 37 cents on benefits. During 1987, Astronautics spent almost \$200 million to provide employees

with comprehensive company benefits. This figure reflects the wide range of benefits programs offered by the company and the magnitude of Martin Marietta's commitment to its employees.



Keeley published in NASA Tech Briefs

Michael Keeley (left) was recently honored for his new technology disclosure, "Selected Tether Applications Cost Model (STACOM)," which was selected for publication in a NASA Tech Briefs magazine. Making the presentation is W.E. Pipes III (seated center), director of Engineering for Martin Marietta Space Systems. Other attendees include W.R. Woodis (right), program manager for Mars Rover/Sample Return, and J.M. Van Pelt (standing), staff engineer. Keeley, now an I&CS employee, developed STACOM to assess tether deployer system life-cycle costs as part of the tethered satellite system program under development by Space Systems for NASA. Tech Briefs are published by NASA as a result of Martin Marietta's contractual requirement to submit new technology disclosures under NASA programs.

Health Awareness Fair planned for August

The 4th annual Martin Marietta Health Awareness Fair is scheduled for Aug. 8-18 with a variety of employee health screenings slated. They include lung function testing, blood pressure, cholesterol level, percentage of body fat, posture evaluation, and mammography.

Martin Marietta received a Certificate of Excellence award from the National Employee Services and Recreation Association (NESRA) for outstanding planning and management of last year's health awareness effort. This year's effort will expand on past programs and provide more comprehensive services to all employees.

In addition to health screenings, an array of health-related literature will be available and lunch-time seminars will be conducted with briefings on diabetes, preventing sports inju-

ries, Alzheimers disease, osteoporosis, nutrition, and cholesterol.

Locations and dates for Health Fair activities are as follows: Aug. 8-9, Waterton, Engineering Building; Aug. 10-11, Waterton, SSB; Aug. 12, Deer Creek Facility; Aug. 15-16, DSC; and Aug. 17-18, LSC.

Agencies participating in the event include National Jewish Center of Immunology & Respiratory Medicine, American Red Cross, American Physical Therapy Association, Arapahoe Community College Fitness Center, American Cancer Society, Rocky Mountain Heart Institute, University of Colorado Medical Center, and others.

Further information and schedules providing room locations for screenings and seminars will be available in the Recreation racks after July 25. ■

Mammography education and screening offered

Female employees (ages 35 to 55) can take advantage of mammography screenings during the Health Awareness Fair Aug. 8-18. The service is offered in conjunction with Apollo MED Services, Inc.

Prior to actual screening dates, Apollo MED Services, Inc. will offer free educational sessions to discuss the screening procedures. These information sessions will be held from 11:00-11:30 and 11:45-12:15 on the following dates: July 25, Engineering Facility, Presentation Room; July 29, Deer Creek Facility, Auditorium; Aug. 1, LSC Facility, Room 107; and Aug. 2, DSC Facility, Presentation Room.

Appointments for the screenings can be scheduled during these information sessions.

Screenings will be performed by trained female technologists using state-of-the-art mammography equipment in a specially designed medical coach. Board-certified radiologists will interpret the results.

The special corporate rate for the actual screening is \$55.00 per person, which is well below the average fee of \$85.00. Brochures with further information and insurance details can be found in the Employee Services racks after July 19. ■

Microchip developed to track killer bees

Martin Marietta engineers at the Oak Ridge National Laboratory are working to take the "sting" out of Africanized "killer bees" by designing a tiny prototype silicon chip to be glued on bees' backs to track their migration from South America.

Since 1957, when an accidental release of African queen bees occurred in Brazil, hundreds of thousands of killer bees have been moving northward, destroying commercial beekeeping operations and fatally stinging both animals and humans. These bees are expected to reach the United States as early as next year.

Martin Marietta's bee-tracking microchip will emit infrared transmissions to ground-based receivers to help Department of Agriculture officials study the mating and foraging habits of the bees. Each 35-milligram chip is part of a custom-design very-large-scale integrated circuit about the size of a one-half carat diamond. This new technology will allow experts to attempt to control bee migration without using large quantities of pesticides.

"The bees pose a threat to the \$20 billion annual production of U.S. agricultural crops requiring bee pollination," said Diedre Falter, one of the chip's developers. "The microchip should be able to help combat this potentially very serious situation." ■

CATECS and SURGE briefing dates set

Orientation for University of Colorado Center for Advanced Training in Engineering and Computer Science (CATECS) classes will be held at 3:30 p.m. on Thursday, July 28 in the Deer Creek Facility auditorium (north end of the reception level). Registration will follow at 4:00 p.m., and the deadline to enroll is Aug. 11. All CATECS courses are administered live via microwave signal from CU's Boulder campus.

In addition, a briefing for Colorado State University's State Resources in Graduate Education (SURGE) classes will be held at 3:30 p.m. on Wednesday, Aug. 3, in the Deer Creek Facility auditorium. Registration for those courses will follow at 4:00 p.m., and the deadline to enroll is Aug. 8. All SURGE classes are administered via videotapes, which employees may view at their convenience.

For additional information, contact Educational Services at Ext. 7-3736 or Ext. 7-4050.

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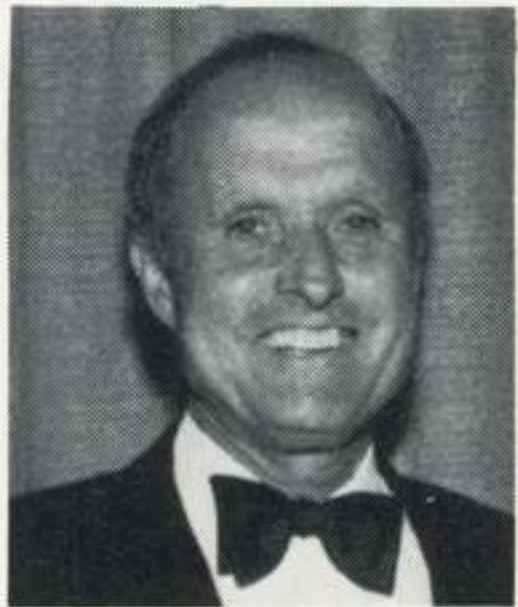
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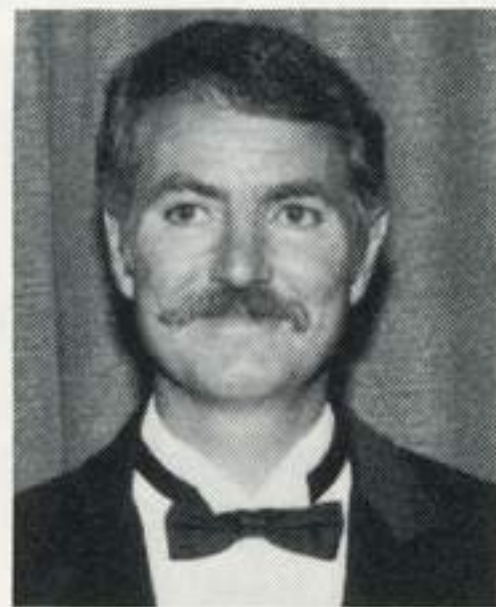
Jefferson Cup recipients honored in Washington

Ten Astronautics Group employees received the Jefferson Cup—Martin Marietta's highest employee award—at the Corporation's 1988 Honors Night June 24 in Washington, D.C., and two were singled out for special honors.

Robert F. Johns and **William Dwight Nygren Jr.** earned special recognition as Astronautics Group "Manager of the Year" and "Inventor of the Year," respectively. Each received a \$3,000 check and a plaque, in addition to Jefferson Cups—which are sterling silver replicas of one originally fashioned for Thomas Jefferson.



Johns



Nygren

Johns was named "Manager of the Year" for his outstanding leadership and management in contributing to the resumption of Titan 34D to operational status, while Nygren was selected as "Inventor of the Year" for design of a ceramic motor with major advantages over conventional motors. Potential applications include robotic systems, precision pointing devices and control mechanisms.

The other Denver honorees awarded Jefferson Cups and checks for \$1,000 were:

Roger A. Chamberlain—For exceptional performance and leadership in managing successful entry into the commercial launch serv-

ice marketplace in the face of substantial international competition.

Joe R. Donathan—For superior program management of the Small ICBM system support contract, which contributed significantly to an Air Force performance evaluation of "excellent."

Jesse Frank Garred—For outstanding leadership in proposal development and contract negotiations.

Robert J. Molloy—For outstanding leadership contributing to selection of Martin Marietta for the Zenith Star space-based laser optics experiment for the Strategic Defense Initiative.

Paul F. Nordberg—For sustained superior performance in heading the security organizations at Denver, particularly for developing and coordinating the logistics and security requirements for the 1987 visit by President Reagan and other distinguished guests.

John Edward Parker—For outstanding leadership in the Peacekeeper instrumentation and flight safety program, which has achieved high productivity and quality with excellent schedule and cost performance.

Robert James Przekwas—For exceptional technical leadership in defining and successfully implementing hardware tests that led to the resumption of launch operations and two successful flights of Titan 34D space launch vehicles in 1987.

Paul Laurence Shattuck—For technical excellence and extraordinary leadership in operation of the rapid retargeting and precision pointing simulator, improving retargeting time significantly while providing outstanding support to Strategic Defense Initiative projects. ■

New limits set for PSP savings

The maximum allowable before-tax contribution to the Martin Marietta Performance Sharing Plan (PSP) for employees who earned more than \$52,241 in 1987 will be decreased under Internal Revenue Service guidelines, effective the first full pay period after July 1, the Benefits office reports.

Beginning July 14 for nonexempt salaried employees and July 22 for exempt salaried employees, the maximum amount employees earning more than \$52,241 in 1987 can contribute to PSP before taxes will be reduced from 10 percent to 9 percent. Employees earning less than \$52,241 in 1987 can still contribute up to 14 percent before taxes. In any case, the total before-tax contribution cannot exceed \$7,313 per year.

Total plan contributions, both before and after taxes, still cannot exceed 14 percent.

Changes take effect automatically based on current elections or open enrollment changes made in May. ■

Corporate Ethics director to visit

Winant "Si" Sidle, director of Corporate Ethics, will visit the Astronautics Group on July 25-27 to meet with employees regarding the Corporation's ethics program.

Sidle, whose office is headquartered in Orlando, also will provide interpretation for Martin Marietta's "Code of Ethics and Standards of Conduct" and the recently distributed "Guidelines" to the code.

In addition, Sidle will be available to receive and take action on any ethical concerns or complaints presented by employees. All inquiries will be handled with maximum confidentiality.

During his visit, Sidle will be located in the Plant Operations visitor's office in the Engineering Building (2nd floor north end), Waterton, and can be reached at Ext. 7-7546 or Ext. 7-7556.

I&CS security assumes additional functions

Information & Communications Systems' (I&CS) security department will now provide many of the security services previously administered to their employees by the Astronautics Group. These services include employee badging, nonemployee (visitor) badging, security clearance processing, and classified visit clearance processing.

As a result, it is now necessary for Astronautics Group employees who transfer to I&CS to check out with Astronautics Group Security at the Deer Creek facility and then check in with I&CS Security at the Littleton Systems Center (LSC). Employees should comply with the procedures contained in SP 2.12.

Transferring employees with a Department of Defense clearance must have a completed Request for Clearance form at the time of transfer if they require a continued security clearance. If the Request for Clearance form is not completed, the transferring employee's clearance will be administratively terminated. (However, an administratively terminated clearance can normally be reinstated within five years.)

Employees should also be aware that, when transferring between Astronautics Group and I&CS, all current classified visit requests must be cancelled, regardless of whether the employee's security clearance was transferred to the other organization.

As a result of I&CS' assumption of the incoming classified visitor control function, in some cases it may be necessary for specific visitors to have their visit clearance on file with both Astronautics Group Security and I&CS Security.

For more information regarding these new security procedures, contact Jerry Scherer, Astronautics Group Security, at Ext. 7-6953, or John Major, I&CS Security, at Ext. 7-2677.



Employee services/recreation

Smoking Cessation Classes—This summer, quit for good! Free smoking cessation classes are available to all Martin Marietta and government personnel, their spouses and dependents. Classes consist of four meetings from 5-6:30 p.m., July 18, 21, 25 and 28, or Aug. 16, 18, 23 and 25, in Room 200C at the DSC I facility, Wadsworth and Mansfield. To register, phone the Employee Services office, Ext. 7-6605 or Ext. 7-6750.

Hunter Education Classes—The Skyline Hunting and Fishing Club will conduct hunter education classes July 19-22 and 25, 7-9:30 p.m. at DSC I and July 23, 8 a.m.-1 p.m. at the Skyline Hunting and Fishing Club Range. Those enrolled must attend all six classes, and a minimum of 10 students is needed at the first class to continue classes. Total cost is \$7, and there is no need to preregister. For more information, contact instructor Dick Benson at his home, 985-3728, or Recreation, Ext. 7-6605 or Ext. 7-6750.

Commodore Users Group—The club will meet at 5 p.m. Tuesday, July 19, in the recreation area clubhouse. For information, contact Dan Whittemore,

Ext. 7-6324 or Chuck Barton, Ext. 7-9950.

Parapsychology Club—The group will meet from 5-7 p.m. Thursday, July 21, in the LSC cafeteria. Non-employees are welcome to attend, but corporate policy requires a minimum age of 16. Employees must provide escorts for their guests and give names of guests to Janna Winkel, Ext. 7-7814, DSC or Helen Hussander, Ext. 1-6887, Deer Creek.

Funplex Discount—Coupons offering one free activity (bowling, skating, or miniature golf) with the purchase of the same activity at full price are available at the Recreation office from 10:30 a.m.-12:30 p.m. and 1-3:30 p.m. daily. Coupons are also available from volunteer recreation representatives at SSB, DSC, LSC, Greenwood, and Terrace Towers.

LSC Toastmasters—Improve communication skills and gain self-confidence. Attend Toastmasters Club meetings on Wednesdays at 4:30 p.m., Room 209G at LSC. For information, contact Jim Harrer, Ext. 7-4588, or Alex Hubert, Ext. 7-6520.

Parking rules to be enforced

Plant Protection is reemphasizing to employees the importance of following established parking rules, especially in areas where illegal parking may create a safety hazard.

Plant Protection will continue to tow away illegally parked employee vehicles that create fire/safety hazards or impair the movement of traffic or critical hardware. In addition, Plant Protection is considering the use of an outside towing service to take vehicles to an offsite location at the owner's expense.

Plant Protection also advises that it is illegal to park in reserved spaces without proper authorization. Because of the increase in these types of violations, Plant Protection is considering more stringent measures than tickets.

All drivers are urged by Plant Protection to demonstrate their concern for fellow employees' safety by parking in accordance with established policies and procedures. ■

Company sponsors "New Visions on Earth" exhibit

Martin Marietta is a major sponsor for the Denver Museum of Natural History's upcoming exhibition titled "New Visions of Earth," to be held from July 16-Nov. 6. The exhibit will feature hundreds of images, real and model spacecraft, hands-on displays, and videos portraying remote sensing and global perspectives.

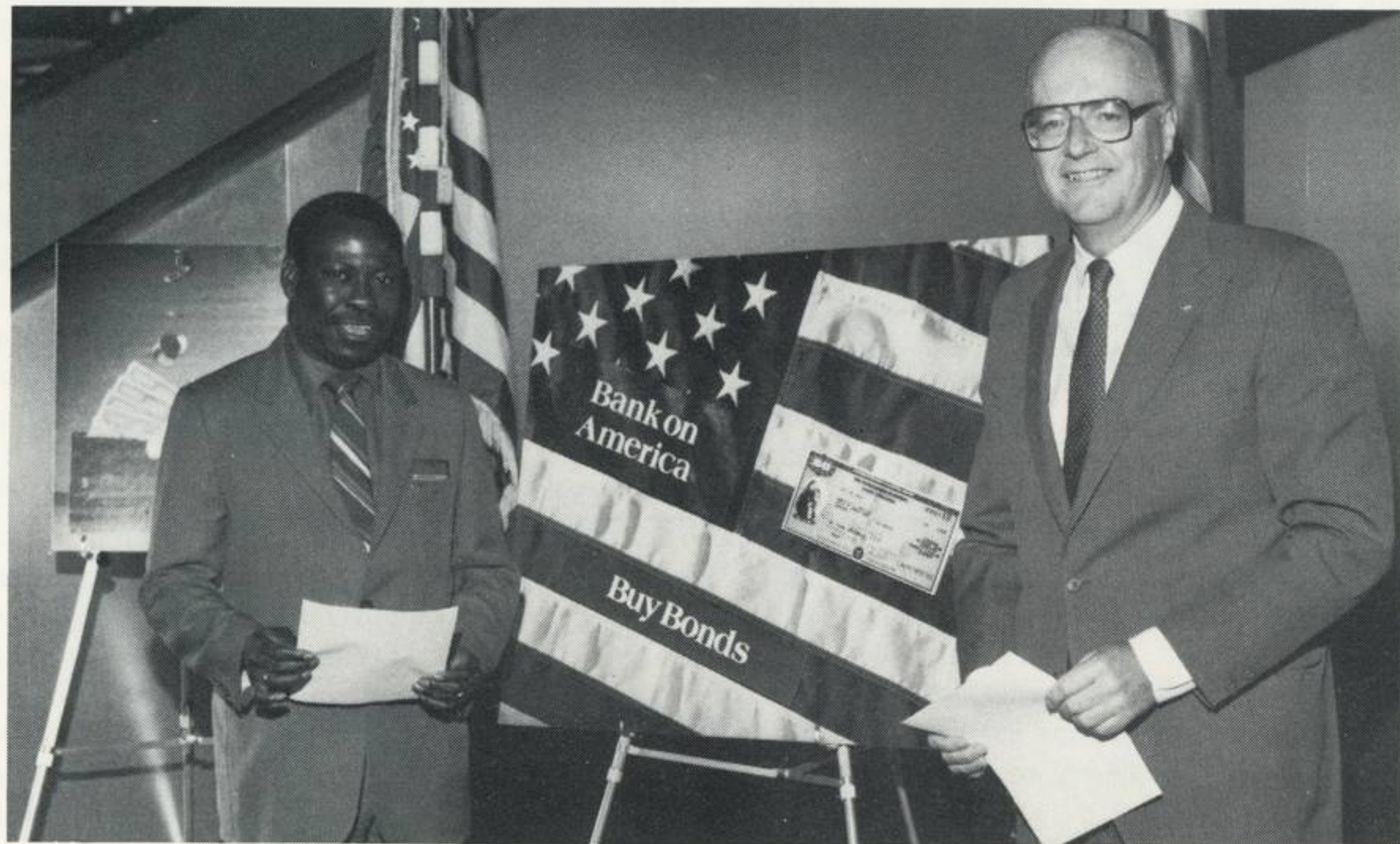
Many of the techniques and technologies on display were developed by Martin Marietta. ■

Company goes out to the ballgame

The second company-sponsored family event for 1988 will feature the Denver Zephyrs vs. the Buffalo Bisons at Mile High Stadium this Saturday, July 16. Tickets are necessary for admission, except for children three years old or younger.

Gates will open at 5 p.m. to kick off a variety of activities, including a Martin Marietta all-star game (players selected from the Wednesday night competitive league) from 5:30-6:30 p.m.; the precision lawn chair demonstration team from Vail, Colo., at 6:45 p.m.; color guard at 7 p.m.; and the baseball game beginning at 7:05 p.m.

Roving entertainers will include a mariachi band, El Jebel Clowns and Keystone Kops, a stilt man, a fire eater and a gorilla. Seating will be reserved by section, with open seating within each section.



Leroy Hollins, manager of Employee Services and coordinator of the Astronautics Group Savings Bond drive, left, and Peter B. Teets, Astronautics Group president and chairman of the Savings Bond campaign for Denver, check results from the campaign.

Savings Bond campaign a success

Ninety-four percent of Astronautics Group employees supported the recent U.S. Savings Bond campaign, marking a nine percent increase in participation since the campaign began in April.

"It's absolutely fantastic how Martin Marietta employees rise to the challenge," said Peter B. Teets, president of the Astronautics Group and chairman of the Savings Bond campaign for the Denver area. "I want to express

my sincere appreciation for our employees' commitment in support of the bond program."

A special drawing was conducted for all employees who participated in the program for the first time this year and 50 winners each received a \$100 Savings Bond.

Employees who did not sign payroll deduction cards during the campaign may do so at any time. ■