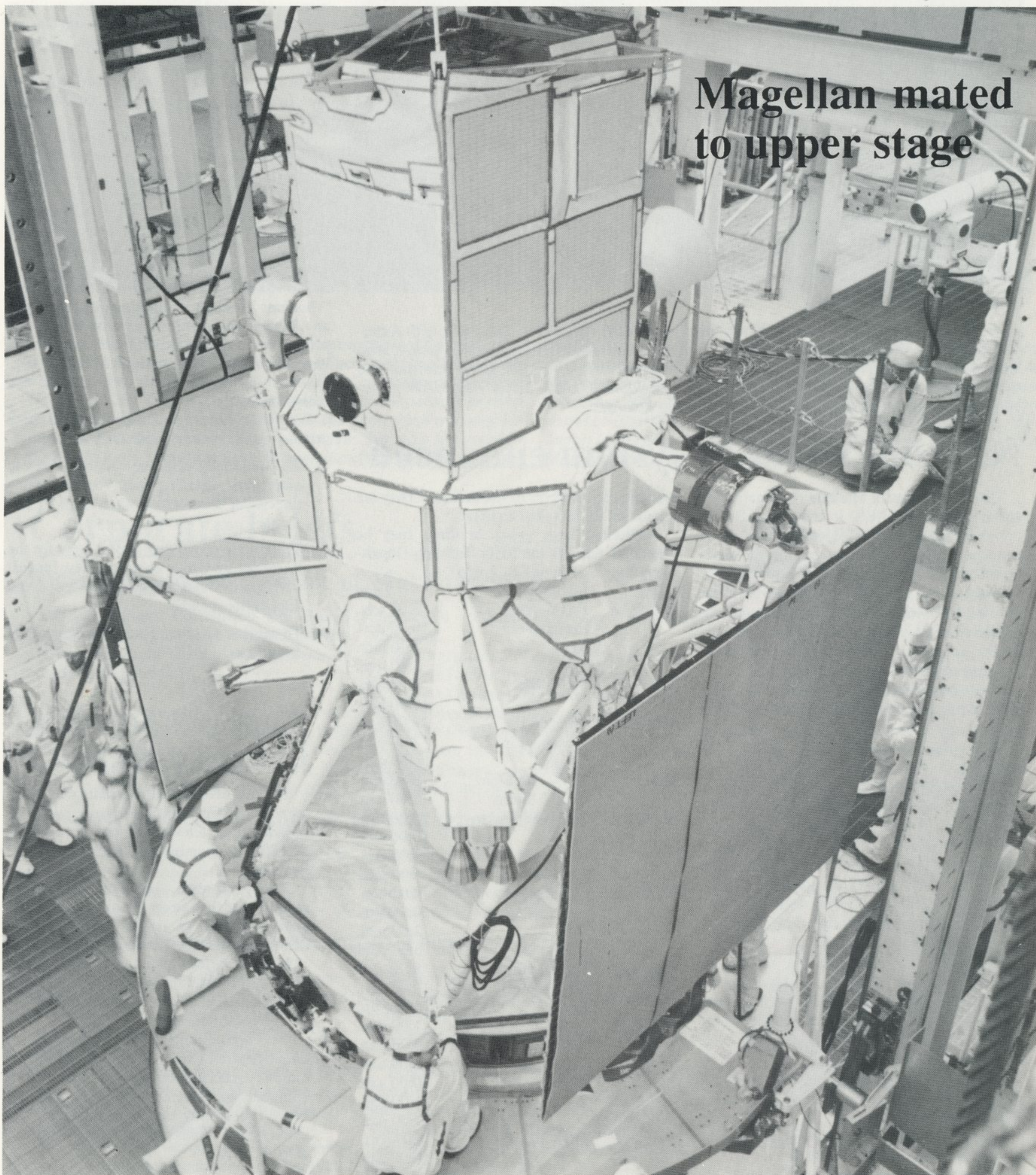


March 10, 1989

Number 6

Magellan mated  
to upper stage





**Union officials tour factory**

*Jerry Tucker, director of the United Auto Workers (UAW) region five, left, visits with Astronautics Group employee Alvin Jaufre, right, during a tour of the Titan factory. Tucker, who recently was elected region five director, also visited with R. D. Butler, UAW international representative, second from left; Bob Killian, president of UAW Local 766; UAW members; and Astronautics Group executives during his visit.*

**Nonconformance system enhanced**

The current Martin Marietta Automatic Reporting System (MARS) is being modified to improve definition of and reporting methods for nonconformances, which are produced materials that do not meet engineering requirements.

Walter Zorn, group quality engineer, said the revision of standard procedures governing MARS ultimately will provide a more streamlined, accurate approach to processing nonconformances.

In addition, the changes will help reduce the amount of nonconformances, while providing more timely information for taking corrective action before non-conforming material is produced.

"This modification is a major change in a Product Assurance 'cornerstone' system," Nick Van Dewerker, director of Product Assurance, said. "It is in line with our collective Annual Performance Improvement Program goals and reflects the Total Quality Management (TQM) concept by allowing process emphasis and correction when required, without a complex nonconformance reporting system."

He added, "Corrective actions are the responsibility of the 'doing organization' and the enhanced system will allow these organizations the opportunity to determine cause and implement permanent corrective actions within their own management framework."

Process emphasis and continuous improvement are the key elements to the new system, Van Dewerker said.

Specific questions about the changes should be directed to Zorn at Ext. 7-5976.

MARS briefing sessions will be held to

explain major aspects of the revision. They are scheduled for less than an hour.

Additional large group briefings may be scheduled through the Skills Training Department, Ext. 7-6166 or Ext. 7-6167.

Date	Location	Time
March 13	Engineering Presentation Room	8:00 a.m.
		10:00 a.m.
		2:00 p.m.
		3:30 p.m.
March 14	SPW-MIC	8:00 a.m.
		10:00 a.m.
March 15	Engineering Presentation Room	10:00 a.m.
		2:00 p.m.
		4:00 p.m.
March 16	TSB—5th Floor CACC Room	8:00 a.m.
		10:00 a.m.
March 17	SSB—6th Floor	8:00 a.m.
		10:00 a.m.
		2:00 p.m.
		4:00 p.m.
March 20	SSB 6th Floor	8:00 a.m.
		10:00 a.m.
		2:00 p.m.
March 21	Engineering Presentation Room	3:30 p.m.
		8:00 a.m.
		10:00 a.m. (make-up)
March 21	Deer Creek Facility Auditorium	1:00 p.m.
		3:00 p.m.
March 22	Deer Creek Facility Auditorium	8:00 a.m.
		10:00 a.m.
		1:00 p.m.
March 23	SSB—6th Floor	3:00 p.m.
		8:00 a.m.
		10:00 a.m. (make-up)

**Program produces savings for company**

Martin Marietta Astronautics Group enjoyed a total gross savings of more than \$11.1 million in 1988 from its "Success Through Suggestions" program, Carol Romero, suggestion program administrator, said.

"The \$11.1 million figure represents 90 implemented cost-savings suggestions, and does not include 200 suggestions that were categorized as intangible, non-cost-savings improvements," Romero said.

For the year, \$154,381 was paid to employees whose suggestions were approved for implementation.

A total of 1,497 suggestions were received from Denver, Vandenberg Operations and Canaveral Operations during the year, Romero said. This translated to 127 per month.

"Obviously, we had a very successful year," Romero said. "We hope to do even better this year as we continue to modify and improve our program."

The program's mission statement says, "(Success Through Suggestions is) to provide an efficient communications channel for employees and to share the tangible (cost-savings items) benefits that are derived from their suggestions in the form of cash awards and recognition."

For 1989, the program has identified three primary goals, Romero said. They are:

- 1) To continually communicate responses to employees regarding their proposals and to dispose of them within an average of 120 days;
- 2) To provide consulting and training for the Astronautics Group on how to look for cost savings, evaluate suggestions, and avoid duplications; and
- 3) To achieve an overall cost-savings goal of \$6 million.

**Employees help with Channel 6 telethon**

Twenty-seven Martin Marietta volunteers helped Channel 6, Denver's public broadcasting television station, gain \$19,000 in membership contributions recently.

The employees, including several members of the Career Women's Association, staffed an on-air phone bank during the "festival" telethon March 2.

Martin Marietta added to the total by contributing \$1,000. A number of employees also called during the telethon to pledge contributions.

The corporation will match gifts from employees to Channel 6. To have contributions matched, employees need to complete and submit a matching gifts form. Forms may be obtained by contacting Betty Hilton, Ext. 7-5698, mail stop DC1372.



### Florida vacation

Members of the major weld repair Productivity Enhancement Team (PET) take time out from their Florida vacation to be recognized as the Astronautics Group PET team of the year. Their vacation included visits to Martin Marietta Electronics & Missiles Group and to Cape Canaveral Air Force Station.

## Space Launch Systems names major weld repair 1988 PET team of the year

The major weld repair Productivity Enhancement Team is back at work on the second floor of the factory after a Cape Canaveral vacation, courtesy of the Astronautics Group. The team won the trip for being the 1988 PET team of the year.

While in Florida, the team visited Martin Marietta Electronics & Missiles Group and exchanged ideas with Orlando's productivity measurement teams. Orlando management hosts included Chuck Carpenter and Bob Keymont.

The Denver employees also visited Cape Canaveral Air Force Station, hosted by Wendy Fields, director of Canaveral Operations, and National Aeronautics and Space Administration facilities.

But the rewards of the PET program run deeper than a free trip to the Cape. In the six months the teams have existed (versus the previous four months measured), productivity on the factory floor has improved by approximately 15 percent, and hours of delay time have dropped by about 40 percent.

"The world knows that if you want products that are good quality, yet affordable, you have to ask the people (factory employees) to do the work," Hank Priebe, industrial specialist of Titan IV for AFPRO, said at the PET team of the year award ceremony Jan. 27.

The two major weld repair team shifts were named PET team of the month three times before taking top honors for 1988. The combined team improved its performance index by 38 percent compared to the four months measured before the PET program began. In November and December, the team didn't have any defects

based on its own work. Members of the team also completed 20 action items that initiated change and improved productivity.

"This team exhibits Total Quality Management more than any other team in the factory," said Larry Sundahl Jr., a Space Launch Systems manager of product operations quality assurance.

PET teams are made up of factory workers, supervision, manufacturing engineering, production control, industrial engineering and quality support members. Currently, there are 20 teams in the factory.

"The PET team program demonstrates a team approach to improvement of our processes and performance," said John Skifstrom, PET coordinator.

Each week, the teams are evaluated on a series of categories and rated on their performance. At the end of the week, teams meet with supervisors and other employees involved with the factory to discuss ways to improve.

Ed Peabody, a foreman with the winning PET team, said of the program, "We enjoy working with management. It gets us (factory workers) more involved with the whole process. The PET program definitely helped speed up (resolution of) action items, and upper management took more notice of the processes and problems on the factory floor."

At the award ceremony, John Adamoli, vice president of Production Operations for Space Launch Systems, thanked the PET team and said, "You (the members of the major weld repair team) are a great example that the PET program works." ■

## Interceptor program rated "excellent"

The U.S. Air Force Space Division has awarded Space Systems an "excellent" rating for the company's overall performance on the Space-Based Interceptor program. This marks the third consecutive "excellent" score the program has garnered.

The rating, part of the government award fee evaluation plan, covered the period of July 1, 1988, through the end of December 1988.

Space Division Maj. Gen. Robert Rankine Jr., in a letter to Space Systems vice president Morris Thorson, said that Space System's "support to the program office continues to be excellent" and pointed out a number of areas in which the company excelled:

"You have effectively advocated the program at numerous executive level meetings with many positive results. The periodic technical information briefings you provide to the SDIO staff is just one example of commendable effort that benefits the program. The management of the program continues to be excellent and is characterized by timely, reliable communications and the ability to respond quickly to programmatic and budgetary changes.

"In the technical area, you have consistently provided high-quality presentations and complete backup documentation. Progress in several of the Integrated Technology Demonstrations continues to be strong. Specifically, the successful demonstration of the communications antenna and voltage-controlled oscillator in a radiation environment is to be commended." ■

## Schaller appointed to quality board

Dr. R.C. Schaller, manager of Process Development, was recently selected to serve as a member of the 1989 board of examiners for the Malcolm Baldrige National Quality Award.

The award was established in 1988 by both industry and government as part of the National Quality Improvement Campaign. It is the highest level of national recognition for quality a company in the United States can receive.

The board of examiners is comprised of more than 100 quality experts selected from industry, and professional and trade organizations, Schaller said.

"A board of examiners reviews and evaluates all applications," the 1989 *Application Guidelines*, for the board, states. "Those selected (as board members) meet the highest standards of qualification and peer recognition. Examiners take part in a preparation course based upon the examination items, the scoring criteria and the examination process."

"We are pleased to have Bob representing us on this very prestigious board," Nick Van Dewerker, director of Product Assurance, said. "This appointment speaks very well to Bob's excellent credentials and supports our Astronautics Group goals to better understand the selection process for this valued award." ■



### Trout aid

*Van Bliss, a retired Martin Marietta employee, left, Cindy Starnes, center, and Dave Smiley from Defense Systems, help place rocks in the South Platte River. Martin Marietta recently contributed \$3,000 to help the Cutthroat Chapter of Trout Unlimited (TU) improve the fish habitat in that section of the river. A number of employees are members of the TU chapter and assisted with the habitat improvement in cooperation with the U.S. Army Corps of Engineers and the Colorado Division of Wildlife.*

## Mail system continues to improve, expand

The Astronautics Group mail system has consolidated its mail sections from the three main facilities into one, and is now offering consolidated pouch mail service, Pat O'Connell, chief of Reproduction/Distribution, said.

The consolidation of the mail sections into the Littleton Systems Center mail room enables the U. S. Postal Service to pick up all Astronautics Group's outgoing mail from that facility. It also allows overnight express mail pickup three times a day—at 12:30 p.m., 3:45 p.m. and 5:10 p.m., O'Connell said. Before the consolidation, mail was taken directly to the Post Office by Martin Marietta employees.

In a related issue, consolidated pouch mail service is now available to 30 different Martin Marietta facilities located outside the Denver area, he said.

Pouch mail senders should prepare items for mailing in the same secure fashion as usual, while remembering several guidelines, O'Connell said.

Pouch mail can include interoffice envelopes, small packages and all types of regular mailing envelopes.

To facilitate the processing of outgoing mail, the words "Pouch Mail" should be displayed on all items for that particular system.

Employees needing additional wrapping or sealing of outgoing mail should contact the nearest mail room, O'Connell said. ■

## On the cover

NASA and Space Systems workers mate Magellan to the Inertial Upper Stage at the Vertical Processing Facility (VPF) at Kennedy Space Center in Florida. The mating occurred Feb. 17, two days after it was moved from the planetary checkout facility to the VPF. The spacecraft is now undergoing final tests before it is moved to the launch pad in mid-March in preparation for launch April 28.

## Free blood pressure checks offered

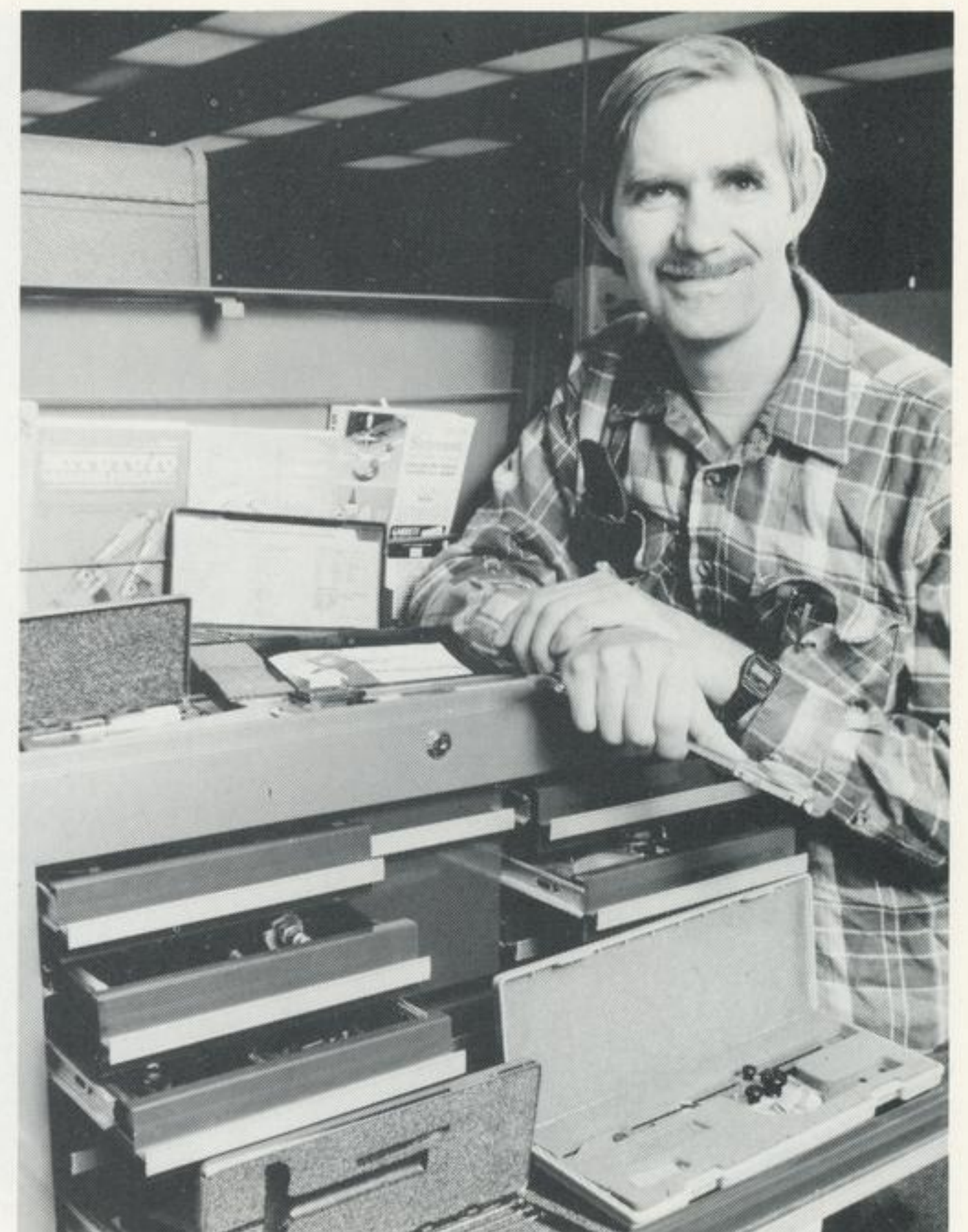
HealthMark staff members will provide free blood pressure checks for employees from 11 a.m. to 1 p.m. at the following locations:

Monday, March 13, at the Engineering Building executive dining room II; March 14 at the Deer Creek Facility cafeteria; March 16 at the Littleton Systems Cafeteria; and March 20 at the Space Support Building cafeteria. Call employee services/recreation for additional information. ■



### Engineers honored

Space Launch Systems honored 126 product integrity engineers (PIE) recently for their contributions to the company. The engineers completed an intensive training and certification process conducted by a board comprised of the SLS technical operations vice president, as well as technical operations and program personnel. Presenting the awards, left to right, are Ed Reed, manager, SLS Continuous Improvement Program; John Murphy, vice president, SLS Technical Operations; and Ralph Marcuson, SLS PIE program administrator. Kevin Johnston, SLS product integrity engineer, accepts his award.



### COR ends today

Ed Clint, top right, earned praise from management for the highly professional manner with which he handled a question from an Air Force auditor during the just-concluded Contractor Operations Review (COR). Clint is a dimensional inspector who works second shift on the first floor of the factory. His question dealt with why he used his own tools on the job. His response: "My tools are very important to me. I know how they've been handled, and that I can get

the job done with them. When I sign off on a piece of work, I want to know it's right. It's a matter of pride." Almost every facet of work at the Astronautics Group was looked into by COR auditors. Dwayne Laramore, left, an Air Force COR auditor, listens as Dan Caughran (hand on board) explains wire harness fabrication procedures. Between Laramore and Caughran is Chris Peterson, a facilitator for Manufacturing. Glenn Boldman is at far right.

## Corporate briefs

### Alexander elected director of Martin Marietta

Martin Marietta Corporation has elected Lamar Alexander, president of the University of Tennessee, to its board of directors, raising board membership to 14.

A native of Tennessee, Alexander, 48, was governor of that state for two terms, from 1979 to 1987, and chairman of the National Governors' Association in 1985 and 1986. He also served in 1985 and 1986 as chairman of the

President's Commission on American Outdoors.

He is a graduate of Vanderbilt University and New York University Law School. In 1988, the Education Commission of the States awarded him its James B. Conant Award for outstanding national leadership in education.

Alexander is a director of First Tennessee National Corporation and helped found Corporate Child Care, Inc.

### Martin Marietta continues 27 1/2 cent quarterly dividend

Martin Marietta Corporation's Board of Directors authorized a quarterly cash dividend of 27 1/2 cents per share on the company's common stock, payable March 31 to holders of

record at the close of business on March 6. The action continues the rate on Martin Marietta common, effective in the third quarter of 1987, of \$1.10 on an annual basis.

### Hall appointed vice president of Technical Operations

Martin Marietta Energy Systems, Inc. has announced the appointment of Dr. Charles A. Hall as vice president of Technical Operations.

Hall, who joined Martin Marietta in 1959, was vice president of Technical Operations for Martin Marietta Aero & Naval Systems at Baltimore from 1982 to 1984 and has been vice president of Engineering for Martin Marietta Corporation at Bethesda since 1986.

He held various technical operations positions at Astronautics Group from 1959 to 1982.

In his last position at Denver, he served as director of Mechanical Engineering, where he was responsible for the test areas and had technical oversight for groundwater pollution abatement.

In his new position, Hall will have overall responsibility for the Computing and Telecommunications Division and the Engineering Division at each of Energy Systems' five facilities, as well as the Hazardous Waste Remedial Actions Program.

### "Visions of Flight" shown in Huntsville

"Visions of Flight," an exhibit of paintings commissioned by the National Aeronautics and Space Administration (NASA), is currently on display at the Huntsville Museum of Art. The exhibition, which runs through April 16, is underwritten by a grant from Martin Marietta.

"The subject matter depicted in this exhibition has a very real connection to the Huntsville community through the work of the Marshall Space Flight Center and its associated contractors," David Robbs, director of the museum, said. "Martin Marietta is prominent among these, and I am pleased that they are joining us in presenting 'Visions of Flight'."

NASA has conducted an active art program for more than 25 years. Through commissions from NASA, artists ranging from Norman Rockwell to Robert Rauschenberg have provided a visual record—and a fuller understanding—of American aerospace achievements.

"Visions of Flight" includes 70 watercolors, oils and acrylics depicting Space Shuttle launches, Apollo lunar landings and a wide variety of other scenes from NASA's space and aeronautics activities.



### Astronaut visits Waterton

W. William Bollendonk, right, explains the operation of the Tethered Satellite System to National Aeronautics and Space Administration astronaut Vance Brand, center, and Robert Bates and Peter Webb, left, from the Colorado Engineers Council. Bollendonk is program director for the Tethered Satellite System. Brand toured Martin Marietta's Waterton facilities during a visit to Denver in late February to promote Colorado Engineers Week.



## COLORADO VETERANS MEMORIAL TRIBUTE



**The Time Has Come to Say Thank You!**

Bob Hope helped. You can too. It's easy. Simply use the check-off on your 1988 Colorado Tax Return! This is a ONE TIME opportunity for you to honor Colorado's veterans.

Your donation will be used to build a Veterans Memorial Tribute west of the State Capitol. It's for our veterans, and it's for you. Not in this century has Colorado honored those who have paid the price of freedom. Whether you owe taxes or expect a refund, you can donate. Look for the check-off on your State Tax Return.

Contributions can also be sent directly to: Veterans Memorial Tribute, Office of House Speaker, State Capitol, Denver, CO 80203.

## Employee services/recreation

**Ice Capade Discount**—Employees can save \$3 off \$12 and \$10 tickets for the 7:30 p.m. performances on April 12, 13 and 14, and the 6:00 p.m. show on April 16. Mail order forms can be found in the employee services/recreation racks and must be returned to the specified address four days prior to the designated performance.

**Denver Nuggets Discount**—Employees can order two \$14 side balcony tickets for the price of one for the San Antonio game at 7:30 p.m. Thursday, March 16. Mail order forms can be obtained from the recreation racks and must be returned with payment by March 13 to the Nuggets office.

**Scuba Club**—Fathom Dive Club members, guests and prospective members will meet at 6 p.m., Friday, March 10, at the A1 Scuba Center, one block west of Santa Fe at 1800 W. Oxford Ave. Upcoming dive trips are scheduled for Bonne Terre Mine, St. Louis, Mo., April 28-30 and Cozumel, Mexico, May 19-26. For details, contact Bob Rowe, Ext. 7-6589, or Carol Claypool, Ext. 7-4194.

**Hunting and Fishing Club**—The group will meet at 5 p.m., Monday, March 13, in the clubhouse at the recreation area. For more information, contact Mel Smith, Ext. 1-8655, or Roger Guinn, Ext. 7-3161.

**Archery Club**—The Red Rock Bowmen will meet at 4:45 p.m., Tuesday, March 14, in the clubhouse at the recreation area. Contact Rich McNutt, Ext. 7-3324, or Dave Unruh, Ext. 7-0477, for additional information.

**Ski Club**—Cross-country ski trips include: March 18, St. Johns trail, intermediate level, contact Rich Nicholson, Ext. 1-6982; March

25, Mayflower Gulch, contact Frank Farrell, Ext. 1-1576.

**Commodore Users Group**—The club will meet at 5 p.m., Tuesday, March 21, in the recreation area clubhouse. Amiga users are welcome. Contact Dan Whitemore, Ext. 7-6324, or Chuck Barton, Ext. 7-9950.

**Parapsychology Club**—Will meet from 5-7 p.m. on Thursday, March 23, in the Littleton Systems Center cafeteria. Florence Michael, field investigator for Aerial Phenomena Research Organization, will present a "UFO Update," specifically aimed toward recent cases in Colorado. Non-employees are welcome to attend, but must be at least 16 years old. Employees must provide escorts for their guests and give names of guests to Helen Hussander, Ext. 1-7344, prior to the meeting.

**Running Club**—The Waterton Shepherders running club will begin its spring race series in Waterton Canyon on March 30th. For information, contact Brad Eckhoff, Ext. 7-7102.

**Discount Movie Tickets**—Employees can purchase movie tickets for \$3 for Mann, United Artists and AMC movie theatres from the employee services/recreation office at Deer Creek; the branch office, Room 200 ORB building at Waterton (open noon to 4 p.m. Monday and Friday), and from volunteer representatives at SSB, Greenwood, LSC, Viewpoint I, and South Park III. The tickets are redeemable every day of the week. Some restrictions apply to films designated as special engagements. Payment is by check only, payable to Martin Marietta. Tickets are non-refundable.

**Deer Alert Sirens**—The Skyline Hunting and Fishing Club is selling "Deer Alert" sirens, which have been proven effective in preventing deer/auto collisions. The units work at any speed over 30 mph, and cannot be heard by pets or occupants within the vehicle. The cost is \$14.61 per pair in black finish and \$18.79 in chrome finish. Orders, payable by check to Skyline Hunting and Fishing Club, should be sent to Rick Webb at mail stop 5507.

**Volleyball referees needed**—USVBA-certified volleyball referees are needed for the Martin Marietta spring leagues. Call Fred Little at Ext. 7-9345 for details and information on referees' payment.

**Career Women's Association**—Dr. Terry Reynolds, Professor of Anthropology at Denver University will speak on "Context of Generations: Industrialization's Continuing Impact on Women," 6:30 p.m., Monday, March 20, at the Half-Moon Room, Arapahoe Community College. Social time begins at 5:15 followed by a brief business meeting. Tickets are \$7/members, \$12/non-members.

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