

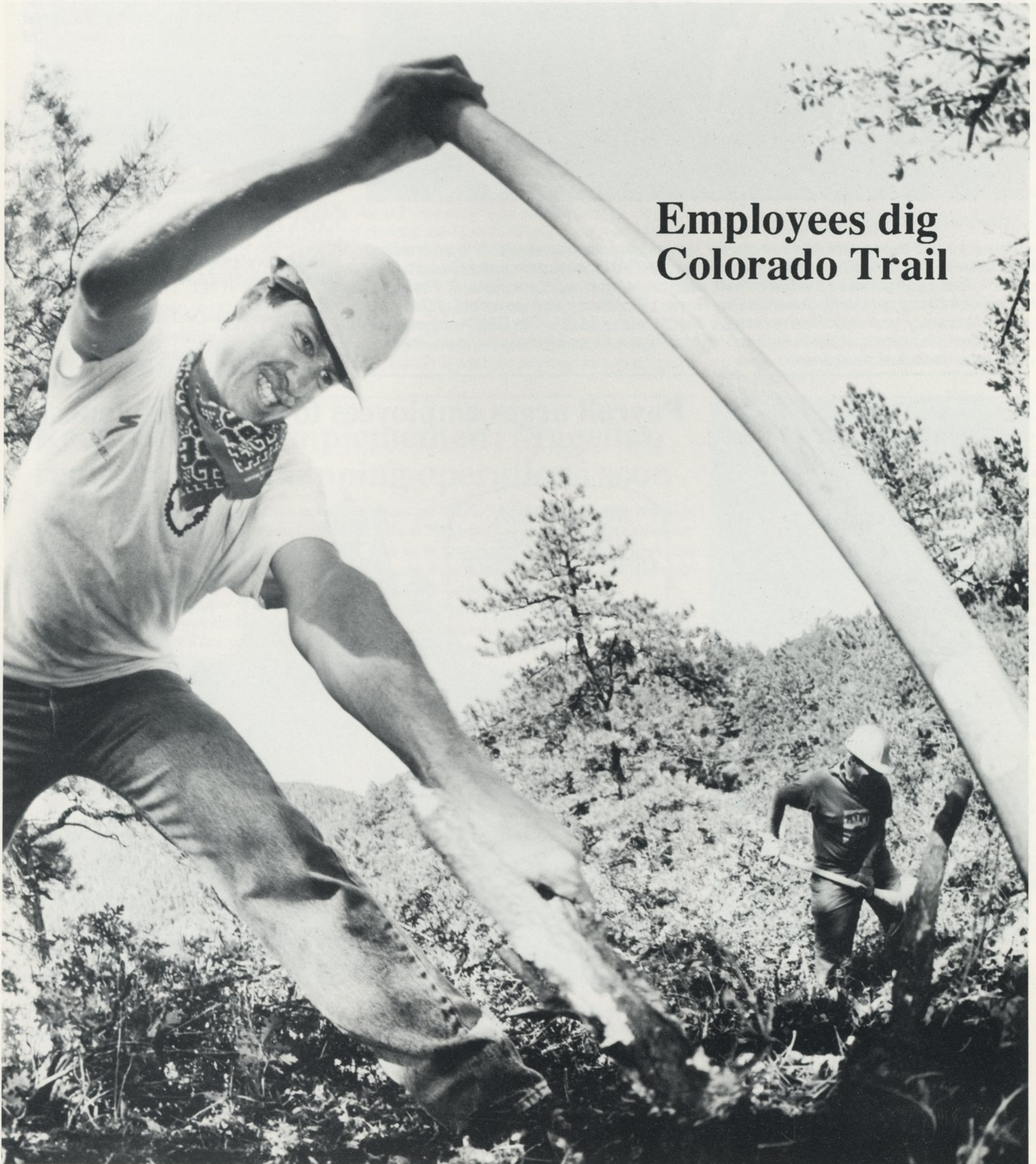
MARTIN MARIETTA

news

ASTRONAUTICS GROUP

September 14, 1990

Number 18



**Employees dig  
Colorado Trail**



### Astronautics Group hosts CMEA

More than 200 supporters and community leaders recently attended a dinner benefiting the Colorado Minority Engineering Association (CMEA) at the Astronautics Group's Deer Creek Facility. Pictured on the Deer Creek patio, from left to right, are: Peter B. Teets, Astronautics Group president; Governor Roy Romer; Dr. Albert Yates, president of Colorado State University; and John Rael, executive director of the CMEA. The CMEA helps minority students in junior and senior high schools to prepare for college studies in engineering and other technical disciplines.

### Foundation scholarship applications available

Martin Marietta Foundation scholarship applications are available for employees' sons and daughters who will graduate from a secondary school in the 1990-91 academic year.

Applicants must have academic records that unconditionally qualify them for admission to a regionally accredited college or university.

The scholarships are for \$3,000 and are renewable annually for three years if the scholar maintains a satisfactory level of accomplishment.

For an applicant to be eligible, his or her parent must have been a full-time employee of Martin Marietta for at least two years as of Jan. 1, 1991, and be on the active payroll at the time of the award.

Applications and all supporting evidence must be in the hands of the Scholarship Selection Committee in Bethesda no later than Feb. 1, 1991. They will be evaluated by the Selection Committee, comprised of three non-Martin Marietta Corporation employees. Winning candidates will be notified as soon as the final decisions are made.

Application forms and information about the program may be obtained from Ann Foster, Human Resource department, at the Deer Creek Facility, 3B-506, Ext. 7-4699. ■

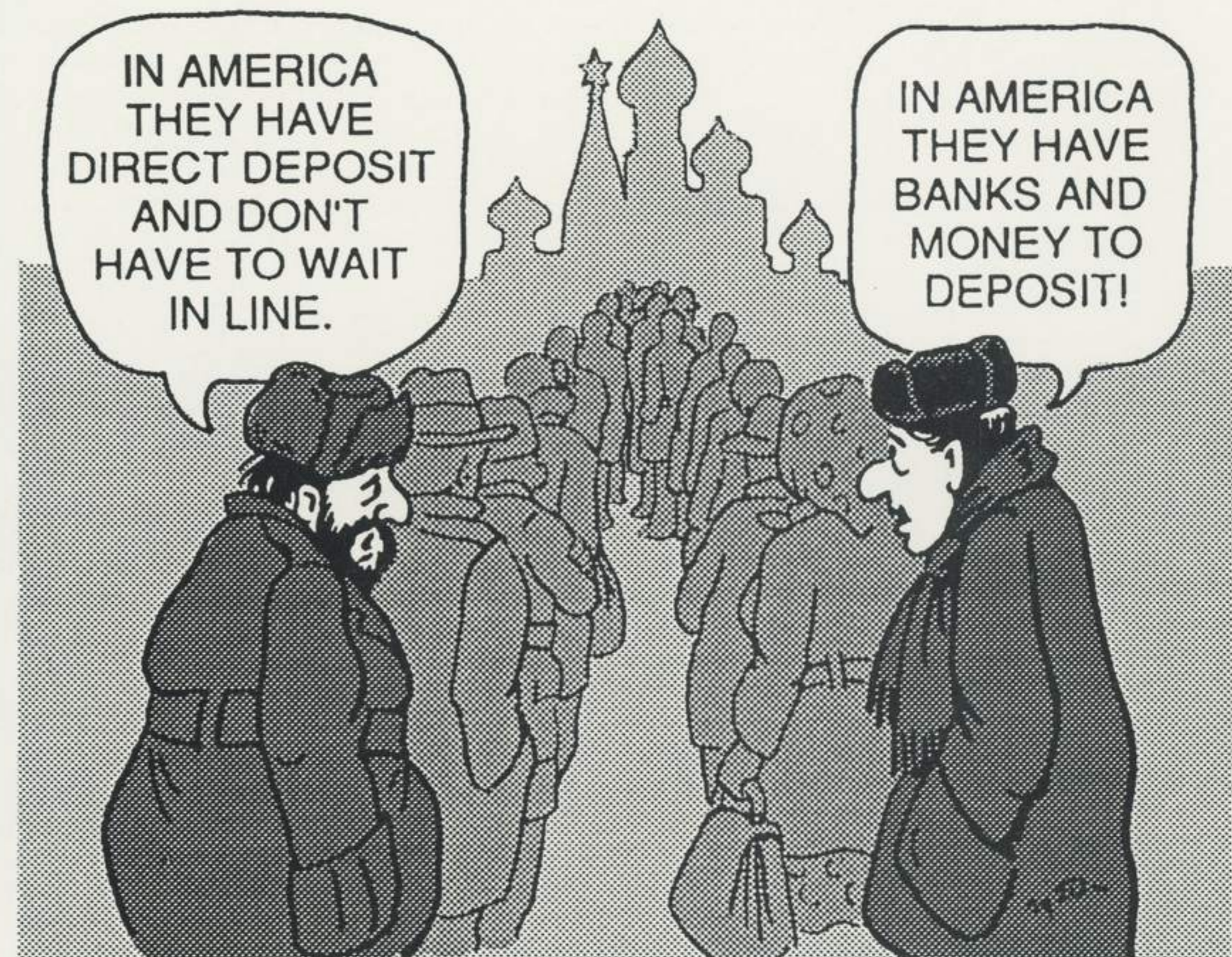
### Company sponsors supplier forum

More than 30 firms from Colorado and throughout the United States will gather from 8:30 a.m. to 2 p.m. Sept. 26 at the Deer Creek Facility for the fifth Minority Supplier High-Technology Business Exposition. The Astronautics Group is sponsoring the event.

The exposition will provide a forum for Martin Marietta engineers, buyers, subcontract administrators, and other interested parties to meet and discuss potential business opportunities with representatives from high-technology minority business firms, J. E. Kimpton, director of Materiel Operations, said.

"The firms that have been invited are excellent sources capable of providing some of our current and future procurement and subcontracting requirements," Kimpton said. "Also, this is an opportunity to demonstrate our corporate and business commitment to maximize opportunities for the minority business community."

### Payroll urges employees to use direct deposit



### New services offered by Your Employee Store

A full color catalogue of sportswear and accessories now is available for Martin Marietta leagues, clubs, and departments to order volume purchases at substantial savings. For details, contact Paul Scheurer at Ext. 7-4372 or 7-4373. In early November, a family portrait and Christmas card program will be offered.

The Payroll department recommends that employees participate in the direct deposit program. Following are several reasons why this program is beneficial for all employees.

- Money is in the bank on payday, even if the employee is not at work;
- Checks are never lost, stolen, or damaged;
- Direct deposit is not affected by holidays or

vacations;

- Money is available on payday—cashing a check may mean funds are not available for three banking days;
- Almost all banks, savings and loans, and credit unions participate.

Contact Payroll at Ext. 1-5200 for more information about the direct deposit program. ■

# Corporate news

## Corporation gets contract for jet engine thrust reversers

The Corporation has received a \$185-million contract to produce an additional 400 jet engine thrust reversers for GE Aircraft Engines' CF6-80C2 turbofan engines.

Thrust reversers redirect the flow of the jet engine fan exhaust to provide braking action after landing.

Under the contract, Aero & Naval Systems at Baltimore will produce the fan reversers, with

delivery scheduled to begin in 1992. This order brings to 1,200 the number of CF6-80C2 thrust reversers the company is under contract to produce for GE Aircraft Engines through 1996.

The CF6-80C2 engines are installed in the Boeing 747 and 767, McDonnell Douglas MD-11, and Airbus Industries A300 and A310 airliners.

## Army selects Corporation for GBI contract

The Corporation has been selected by the U.S. Army Strategic Defense Command to negotiate a contract to design and test a Ground-Based Interceptor (GBI) concept and technology integration.

A kinetic energy system concept for the Strategic Defense Initiative, GBI will be designed to destroy enemy ballistic missiles by force of impact during the mid-course phase of flight or just before they re-enter the atmosphere.

The contract, which is expected to exceed \$100 million, calls for the design, fabrication, and test of Martin Marietta's concept for the

GBI, which is a derivative of the company's Space-Based Interceptor (SBI) developed for the Strategic Defense Initiative.

"The GBI will meet the difficult challenge of distinguishing between the re-entry vehicles and the decoys that could be dispensed from ballistic missiles," said Richard B. Caime, vice president for SDI at Missile Systems in Orlando, where the work will be performed. "We have demonstrated the technology necessary to accomplish that task, significantly reducing the risk involved in this development."

## Corporation receives funding for Navy systems

The Corporation has been awarded \$11 million in advance funding by General Electric Company to begin work as the dual manufacturing source for sophisticated electronic diagnostic equipment for the U.S. Navy.

Martin Marietta and GE both will produce the Consolidated Automated Support Systems (CASS), a self-contained diagnostic unit designed to test operational Navy electronic and avionic systems for optimum efficiency and reliability.

GE Automated Systems is CASS prime contractor and recently received Navy funding totaling \$35.9 million, which it shared with

Martin Marietta under the program's procurement guidelines.

Martin Marietta Technical Services, Inc., a wholly owned subsidiary of the Corporation, was selected by GE in 1988 as the CASS second-source supplier and will manufacture the system at a new Americus, Ga., facility.

As a result of the GE funding, construction of the Americus facility will begin shortly and is scheduled for completion in seven months. CASS production as Americus will begin in 1991.

GE's full-scale engineering contract with the Navy includes three annual production options for a total of 327 CASS test sets. ■

## Customer service week slated for October 1-7

Colorado Governor Roy Romer has designated the week of Oct. 1 through 7 as "Customer Service Week" for the state.

The effort, coordinated with the Rocky Mountain Council for Service Excellence (RMCSE), was made official by honorary proclamation on July 11. The theme for this year's effort is "C.A.R.E.—Customers Are Really Everything."

RMCSE is an organization of customer service professionals headquartered in Denver and dedicated to developing and advancing customer service processes. Founded in 1987, the council helps meet the challenges of providing customer service through educational programs, management development opportunities, interaction between customer service professionals, and enhancement of senior management awareness of customer service in the marketplace.

Martin Marietta is a member of RMCSE and will be participating in special events during "Customer Service Week." For more information regarding the company's involvement with the group, call Kathy Stanwyck at 790-3610.

## Employees needed for tutoring at Littleton High

Employees interested in assisting in a fall semester tutoring program at Littleton High School should call Steve Carson at Ext. 1-1946 or Dan Steeples at Ext. 1-8981. Tutors are needed one night a week for math, chemistry, or physics students. Carson and Steeples hope to start the program on Sept. 24. ■

## JAS and Recreation to temporarily relocate at Deer Creek Facility

The Employee Services and Recreation department and the Job Availability System (JAS) temporarily are relocating from the south end of the A level to the south end of the R level at the Deer Creek Facility. This move is effective Sept. 17.

JAS applications and work with the recreation department should be conducted at the new location. All current phone numbers for these organizations will remain the same for this move.



## Littleton celebrates birthday

Stanley F. Albrecht, vice president of Human Resources, left, and Susan Thornton, mayor of Littleton, lead about 200 dinner guests in singing happy birthday to the city of Littleton. The guests attended a recent dinner, sponsored by Martin Marietta, to celebrate Littleton's centennial.

## United Way benefits community, employees

The local community and employees both have benefited from the Astronautics Group's 1990 Mile High United Way Pacesetter campaign.

Currently, \$1.9 million annually has been slated for contributions to the United Way by Martin Marietta employees in Denver. Since the start of the campaign, 563 new contributors have joined and 1,343 employees have increased their giving.

Thirty-three employees won incentive awards for their participation in the campaign. They are:

### Hot air balloon ride

John M. Geisler

### Littleton travel certificate

Leonard Everette

Richard J. Janda

Richard Wiese

Barbara J. Smetana

### Antlers at Vall lodging

James Wassinger

### Jewelry certificate

Ronald D. Lujan

David C. Oberle

### Ascot Dinner Theatre tickets

Steve A. Richardson

Kathleen G. Moses

Robert Herk

Michael J. Kramer

Jim D. Brown

### Movie theater tickets

Marjorie A. Baty

Dan T. Cheezum

Kyria L. Joyner

Barry D. Power

Bill Rimbey

Amy L. Carda

Ernest Chamberlin

Paul E. Hogan

Daniel Elek

John Martinez

Joseph A. Ruiz III

Sally M. Cuffin

Ernest A. Roybal Jr.

Gary R. Hoople

Charles W. Box

Wayne E. Peck

Christene S. Hefkin-Wall

Russell J. Rendler

Grady L. Romine

Byron E. McLendon

## Exploring program registration underway

Martin Marietta is sponsoring again this year a Career Exploring Post in Aerospace Engineering.

The Career Exploring program is cosponsored by the Boy Scouts of America to provide boys and girls ages 14 through 19 the opportunity to get first-hand exposure to careers in various fields. Post activities begin late this month, and children of Martin Marietta employees are invited to participate. For more information, contact Mike Lockwood, post advisor, at Ext. 7-8386.

## Long-term service honored



Several employees were honored recently at recognition luncheons for 30 years of service. They include, standing, left to right: Hazel Chapman, Paula Vedral, Bob Mueller, John Ernst, Bob Boyce, Harold Jones, and Chuck Towne. Seated, left to right: Ruben Vigil, Walt Livezey, Ken Thompson, Jim Parham, and Carl Bodley.



Employees also honored for extended service are pictured above. They are Lee McKenna (35 years); Dick Weber (40 years); Stan Albrecht, vice president, Human Resources, master of ceremonies; Bob Adcock (35 years); and Gordon Sholes (35 years). Seated, left to right, all with 35 years service: Fred Michel, Joe Tutchton, Bob Worrell, and Bob Wertz.



Other honorees include, standing, left to right: Bob Gammill, Ted Housley, Roy Bell, Bobby Bolton, Jim Decker, Harry Goering, and Gerry Ortiz. Seated, left to right: Herb Duran, Ed Rodgers, Rita Bodine, Dave Leck, and Bill Mielke. Not pictured: Ernie Berliner and Decker Westerberg.



### Payload team gets award

The "Titan IV Outstanding Performance Award" recently was presented by John P. Murphy, center, vice president and program director for Titan IV. The award was given for outstanding performance to the Titan IV payload fairing (PLF) resident team and the McDonnell Douglas PLF team for outstanding performance for taking the PLF off the critical path for the first Titan IV launch at Vandenberg Air Force Base, Calif. From left to right are: Clarence Quan, program manager, Titan IV PLF, McDonnell Douglas Space Systems company; Lt. Col. Harry Gatanas, defense program office commander, McDonnell Douglas; Murphy; Don Magill, vice president and general manager for space products division, McDonnell Douglas; and Dean Murphy, Martin Marietta's payload fairing program director.

## Recovery plan implemented; Magellan ready to start mapping operations soon

Magellan pointed its main antenna at Earth Wednesday to send back information from the spacecraft's tape recorders that could give controllers some clues about what caused signal losses in late August.

The action was part of a recovery plan implemented by the Jet Propulsion Laboratory (JPL) and the Martin Marietta spacecraft team during the past two weeks to "turn Magellan back on" and ready it for mapping operations this month.

*"We have decided that it is not necessary for us to understand in detail what those root causes were in order to proceed with our main objective—mapping the planet."*

—Steve Wall

By turning the spacecraft to point its high-gain (or main) antenna to Earth, the team can play back engineering data that was recorded on the spacecraft's on-board tape recorder at the time of the first signal loss on Aug. 16. The data, which was scheduled to be analyzed late this week, may tell controllers what the spacecraft was doing at the time of signal loss.

"We still do not understand the root cause of the signal losses," said Steve Wall, deputy

manager of JPL's science and mission planning office. "We have decided that it is not necessary for us to understand in detail what those root causes were in order to proceed with our main objective—mapping the planet."

The investigative team, composed of JPL and Martin Marietta engineers and headed by Magellan Program Manager Frank McKinney, has not yet determined the cause of Magellan's earlier problems. Analysis of the engineering data played back Wednesday was not complete at press time.

Currently, Magellan is traveling at 18,000 mph and has completed about 275 orbits around Venus, an average of 7.5 per day.

According to Ken Ledbetter, Martin Marietta's deputy program manager for Magellan, the spacecraft is doing well and has successfully completed star calibrations that have updated the spacecraft's knowledge of its position in space.

Tuesday night, controllers sent the spacecraft a sequence of commands that will operate the spacecraft through tomorrow morning.

Today, Magellan's synthetic aperture radar is scheduled to be turned on and stored image data recorded during the second mapping test orbit on Aug. 16 will be played back through the high-gain antenna. That data could not be returned to Earth earlier because of the communication losses.

Plans call for Magellan to resume mapping operations at 10 a.m. tomorrow. ■

## Team assembled to study SRMU incident

Shortly before 11 a.m. PDT last Friday, an industrial accident occurred during the movement of a solid rocket motor segment at the Astronautics Laboratory. Portions of a heavy-lift crane and the rocket segment fell into the test area hillside.

The incident occurred at an Astronautics Laboratory contractor operated test site being prepared for development testing associated with an improved solid rocket motor for the Titan launch vehicle. The operation was being conducted to evaluate procedures in preparation for future motor testing later in the year. The test hardware is not part of the present flight-proven hardware of the Titan IV system and does not affect any anticipated launches of that system.

The 30-foot-long and 10-foot-diameter solid rocket motor aft segment dropped below the static rocket test stand and into the stand's flame containment bucket. The segment was damaged and ignited, burning its contents. A smoke cloud typical of rocket firings rose to high altitude and dispersed at 12,000 feet above ground level. The cloud contained exhaust products normally associated with solid rocket motors, the most hazardous of which is hydrogen chloride gas.

Previous test experience, actual atmospheric measurement, and analysis determined the concentration of this product to be significantly below the acceptable minimum exposure limits for this substance allowed by federal and state agencies for public exposure, and less than that of a smoggy day in Los Angeles. The cloud did not pose any danger to people in surrounding communities at any time.

The accident caused one fatality, two injuries requiring overnight hospitalization, and six minor injuries consisting of cuts, heat exhaustion, and medical checkups (and release) for smoke inhalation. The one fatality was caused as the crane's counterweights fell to the ground.

All damage was confined to the immediate test area and is not considered extensive. The area is secure and poses no health or safety hazards to the community. The specific nature and cause of the equipment failure now is under investigation. A formal Air Force investigation, headed by Brig. Gen. Ralph Tourino, commander of the Ballistic Missile Organization at Norton Air Force Base, Calif., has been chartered to look for the cause of the accident and no further information will be released pending the completion of this investigation. ■

### On the cover

Merk French, electrical engineer, left, and Glenn Ward from Production Operations recently spent a weekend working on a new segment of the Colorado Trail. This alternative route connects the Roxborough State Park Ranger Station with Strontia Springs Reservoir, on the first segment of the Denver to Durango trail.

## Free HealthWalk clinic offered during Wellness Fair next Tuesday evening

Employees, spouses, and family members can learn how to walk for health from 5 to 7 p.m. on Tuesday, Sept. 18, in the recreation area at Waterton. Bob Carlson, one of the most prominent healthwalk leaders in the country, will demonstrate and teach the technique.

The 6th annual Wellness Fair continues today at Deer Creek and will be at Littleton Systems Center Sept. 17 and 18, and at Waterton, Engineering Building, Sept. 19 and 20.

In addition to a variety of health screenings and therapeutic massage, lunchtime

seminars also are scheduled. The topics today at Deer Creek are Myths and Truths About Allergy, and Chronic Fatigue Syndrome. Next weeks' topics are: Teen Intervention—Living Happily Ever After with your Teenager, Tuesday at LSC; Smart Move, an information session for those considering smoking cessation, Wednesday at Engineering; and the Problems of Dual-Career Families, Thursday at Engineering.

Complete details of daily events may be obtained from the Wellness Fair schedules located in the information racks.

## Company supports Elitch's 'Ride for the Future'

An evening of fun to benefit Colorado's youth is scheduled from 5 to 11 p.m. Sept. 21 at Elitch Gardens.

The event costs only \$6 per person, and proceeds from the evening will be donated to "Ride for the Future," a Colorado non-profit organization that grants funding to selected youth programs, except for \$1 from each ticket that will go to the Urban League.

The Astronautics Group currently has C. Reaux working as a loaned executive to the Urban League and Nicholas J. Van Dewerker, director of Product Assurance, serves on their board.

Employees can purchase special tickets with cash or check from the employee stores at the Engineering Building, Littleton Systems Center, South Park West I and III, and Deer Creek; or from the Employee Services/Recreation offices at Waterton and Deer Creek. Each ticket is good for gate admission and unlimited rides.

## Employee services/recreation

**Satellite Ski Club**—The annual fall picnic is from 5 to 9:30 p.m. today at the recreation area pavilion. The event is free for members and \$5 for guests. Contact Bob Foglia, Ext. 7-7122, for membership information.

**Hunter Education Classes**—Classes are set for 7 to 9:30 p.m. Sept. 17, 19, 20, and 24 at the VFW Hall, 3860 S. Jason St., in Englewood. The range date is from 8 a.m. to 1 p.m. Sept. 22 at the club's shooting range. Students must attend all class sessions. Registration will be taken at the first class, and a minimum of 10 students is required to continue meetings. The cost is \$7. Employees, family members, and friends are welcome to attend.

**Commodore Users Group**—The group will meet at 5 p.m. Tuesday, Sept. 18, in the clubhouse on the west side of the recreation area. For more details, call Dan Whittemore at Ext. 7-6324.

**Martin Marietta Ada Working Group—Ada/Softball Engineering**—Interested employees will meet at 5 p.m. Wednesday, Sept. 19, at Littleton Systems Center, Presentation Room. Contact Robert Lewis at Ext. 1-6731 for information.

**Mile High L5**—The group has changed its meeting day and location to 7 p.m. the third Friday of every month at Mile High Cablevision, east end of the McNichols Sports Arena parking lot. The Sept. 21 meeting will feature Wil McCarthy, who will discuss his recent visit to Japan's space facilities, the current space activities of both the Japanese government and private industry, and their ambitious plans for the early 21st century. For more details, contact Cyndi Bissett, Ext. 7-5844.

**Photography Club**—Platte Canyon photo club members, guests, and interested employees can attend the meeting at 7 p.m. Monday, Sept. 24, at the Public Service building, 10001 W. Hampden Ave.

Professional photographers Don and Steve Emmerich will present a slide show of their recent travels through Europe and the Orient. Contact Bill Privratsky, Ext. 7-4969, for details.

**Running Club**—The Shepherders Running Club's next race is at 5 p.m. Thursday, Sept. 27, in Waterton Canyon. A handicapping system is used so all runners, slow or fast, have an equal chance to win. For this race, runners may choose a 2.5- or 5-mile race. Races also will be conducted Oct. 11 and Oct. 25 at the same time and place. Cost is 50 cents per race. Contact Corrina Perrone, Ext. 1-7112, for more information and to have your name added to the mailing list.

**Hunter Education for 2nd Shift Employees Only**—Classes are set for 9 a.m. to 4 p.m. on Saturday, Sept. 29, at the VFW Hall, 3860 S. Jason St., Englewood, and from 9 a.m. to 4 p.m. Sunday, Sept. 30, at the recreation area clubhouse. Students must attend both days. Registration will be taken at the first class. The cost is \$7. The next session will be offered Oct. 6 and 7.

**League Bowlers Needed**—Additional bowlers are needed for the 6 p.m. Tuesday night league at Green Mountain Lanes. To participate, call Betty Leach at Ext. 7-3686.

**Wellness Works Wonders**—Employees can begin fitness classes at any time at the Wellness Center in Deer Creek. In addition to aerobics, one class uses "step-up" benches to work the cardiovascular system. The ski fitness class incorporates sport movements, weights, rubber-bands, and dyna-bands to prepare skiers for the upcoming season. A 20-use class card can be purchased for \$27, and a 10-use card is \$15. These cards can be purchased at the Wellness Center between 11 a.m. and 5:30 p.m., Monday through Friday. Questions can be answered by calling the center at Ext. 7-7575 or 7-7576.

**Child Care Selection**—A complimentary copy of "Choosing Child Care" is available from the Employee Services and Recreation office. The brochure, published by Arapahoe Community College, is a parent's guide to important issues to consider when selecting child care. To obtain a copy, contact the Employee Services office at Ext. 7-6605.

**Barber/Styling Shop Hours**—Convenient, professional, low-cost haircuts are available to all employees and Air Force personnel at the following locations: Deer Creek Facility, A-level, by south elevators, Monday and Friday, 6:30 a.m. to 3 p.m., and Tuesday through Thursday from 6:30 a.m. to 5 p.m., Ext. 7-9157; Waterton, Engineering Building basement, Monday through Friday, 6:30 a.m. to 3 p.m., Ext. 7-3029; and Littleton Systems Center, west and south of cashier, Tuesday through Thursday, 6:30 a.m. to 3 p.m., Ext. 7-0560.

**Fall Volleyball Teams**—Roster forms are in the recreation racks for competitive, semi-competitive, open, and recreation level teams. Details about fees and nights of league play are on the forms. Rosters and fees must arrive by 4 p.m. Wednesday, Sept. 26, at the Deer Creek Recreation office, mail stop DC 1344, or the Waterton ORB branch, Room 200.

### MARTIN MARIETTA NEWS

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R. Christopher Talley Editor

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