



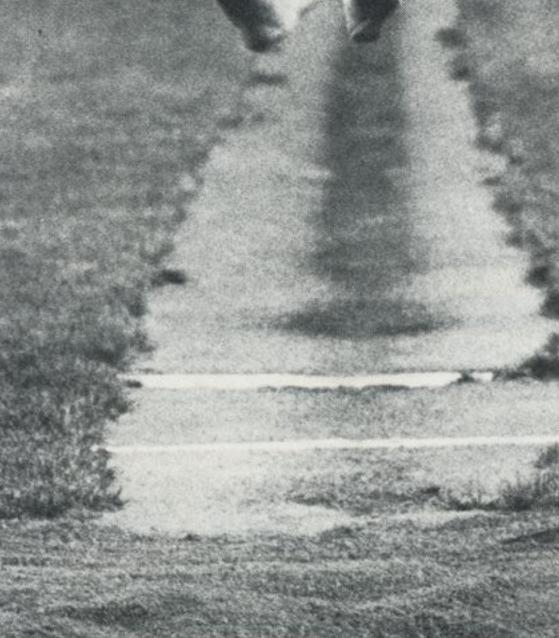
DENVER AEROSPACE

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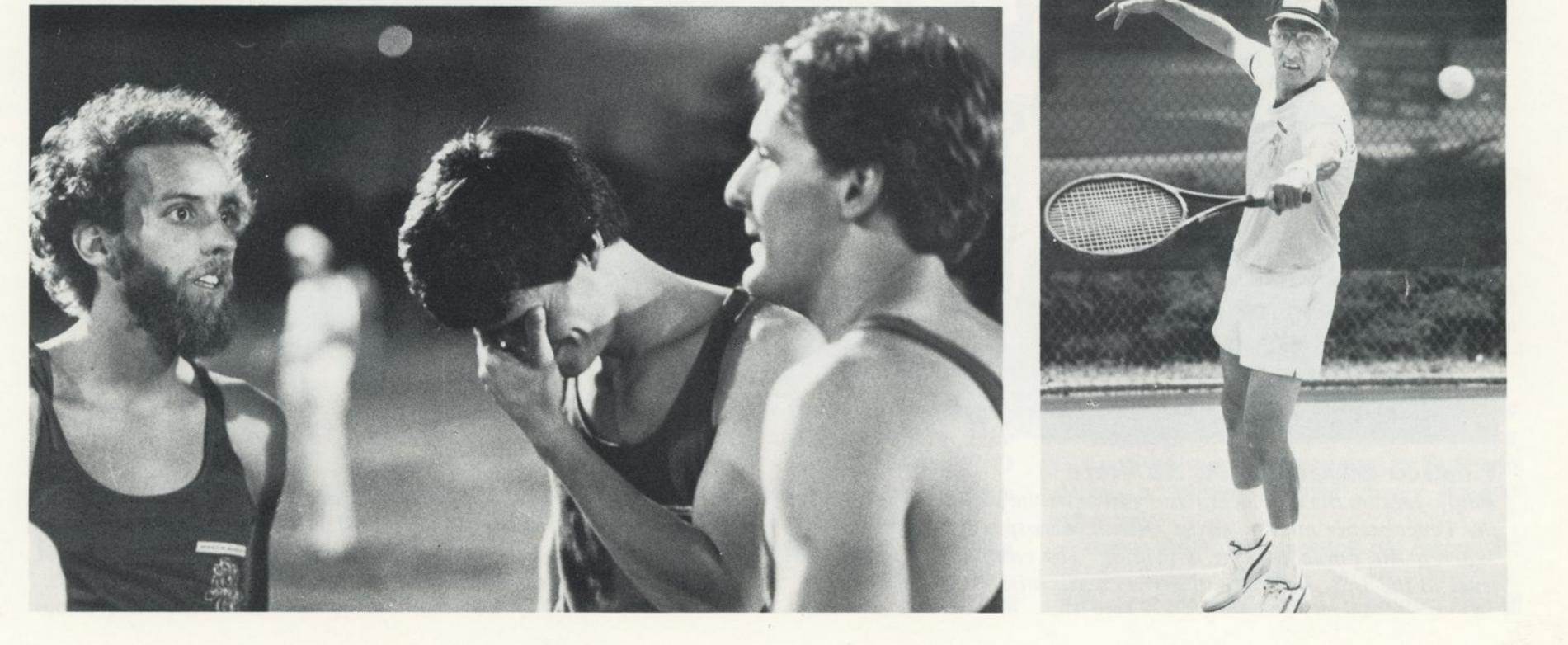




Company athletes score high in Denver Corporate Games

Martin Marietta athletes placed a close second to Public Service Company of Colorado June 5 and 6 in the seventh annual Denver Corporate Games.

Athletes from Denver Aerospace, Information & Communications Systems and Data Systems competed in track and field, a 5-K road race, swimming, golf, bowling, tennis, volleyball, cycling and racquetball. Specific results will be reported in the next issue of the *Martin Marietta News.*





Martin Marietta contributes \$100,000 to Space Camp

Thomas G. Pownall, Martin Marietta Corporation chairman and chief executive officer, fourth from the left, watches as Sandi Everette of Hillsboro, NJ., practices in a mockup of a manned maneuvering unit at the U.S. Space Camp in Huntsville, Ala. Martin Marietta contributed \$100,000 to support the Space Camp of the Alabama Space Science Exhibit. A section in the planned 300-bed camp dormitory will be named for Martin Marietta and a Space Camp team will be designated as the Martin Marietta team. Touring the Space Camp are, left to right, Alabama Gov. Gary Hunt; Edward O. Buckbee, Space and Rocket Center director; Harry Pennington; chairman of the Alabama Space Science Exhibit Commission, and Pownall.

Seifert recipient of scholarship

Daniel P. Seifert has been selected to receive the Martin Marietta Foundation Scholarship after one of the original scholarship winners, Jeanne Anselmi, accepted a Boettcher scholarship.



Seifert, the son of Philip M. Seifert, Jr., a staff engineer in Defense Systems, will attend Westmont College in Santa Barbara, majoring in business and economics.

A graduate of Heritage High school, Seifert was involved in concert choir, show choir and dramatics. He participated in a summer mission project in Italy with Teen Missions International.

Badging hours newly revised

The government security office has modified its badging hours. The new badging hours are Monday, Tuesday and Wednesday, from 1 p.m. to 3:30 p.m.. All badging and rebadging functions will be done at the Waterton facility, government security office, Room 520, Technical Support Building.



Emplacer delivered to the Air Force

Employees on the emplacer team gather as the seventh emplacer for the Peacekeeper missile leaves Denver Aerospace, headed for F.E. Warren Air Force Base in Wyoming. The company is under contract to the U.S. AirForce to deliver eight missile stage emplacers

for the Peackeeper missile. The emplacers, which resemble truck trailers, are a key element in the missile's handling and transportation system. They are being used for the Peacekeeper flight test program which involves launches from modified Minuteman silos.



2nd Lt. Joesph H. Donohoe, Air Force Plant Representative's Office, far right, watches as Mike Fry, IBM specialist, demonstrates the CATIA system. Also watching the demonstration are Denver Aerospace employees Don Bristol, left and Brian Easom.



computer-aided manufacturing (CAM) me- on the mainframe at Inverness and is chanical, and Joe Pohlen, manager of computer-aided engineering, computer-aided design, and computer-aided manufacturing (CAE/CAD/CAM) for Project Challenge, explain changes to the computer systems.) Recent additions to computer-graphics aided three--dimensional interactive application (CATIA) and Crystal Corporation (XTAL) equipment have given manufacturing greater versatility and an integrated tool capable of a wide variety of manufacturing and engineering activities. CATIA is IBM-marketed software used with existing computer-graphics augmented design and manufacturing (CADAM) work stations that allow for a powerful method of generating surface definitions for two-orthree-dimensional parts. Therefore, creation of numerical control programs, tool designs and pictorial process plans offer a significant cost reduction. In addition, the system will improve hardware quality and shorten the product design and manufacturing cycle. XTAL is a work station consisting of a terminal and keyboard linked to the CATIA work station for numerical control. Upon completion of the numerical control program, the programmer can transfer it electronically to the XTAL work station directly from CATIA. The machine operator will be able to monitor electronically the numerical control machining equipment. During this machining cycle, the terminal will display the actual machine tool cutter path and enable changes to the cutting geometry. This system allows a direct electronic link to drive the machine and will assure the integrity of the hardware cost effectively

(Editors note: Fred Hahn, manager of and within engineering design data resides entered through inputs on computer vision CADDS 4X work stations. CATIA is being evaluted as a primary design tool CATIA is a powerful tool that can meet all the CAE/CAD/CAM needs of today. A full set of features will meet our future needs and can be used very effectively throughout the entire engineering, design, and manufacturing cycle.

News briefs Brown honored by NASA/JPL

Charles D. Brown, Magellan program director, was recognized by NASA recently for his many years of participation in Jet Propulsion Laboratory (JPL) flight projects, culminating in Magellan.

Brown and his wife, Jane, were "distinguished guests" of JPL for a week of festivities in Washington, D.C., in conjunction with the NASA Manned Flight Awareness Program. There were 22 guests from JPL and Cal Tech, and the Browns from Martin Marietta. It was JPL's first participation in the Manned Awareness program and first time the event was held in Washington.

Under contract to JPL, Denver Aerospace is responsible for development, assembly and testing of the Magellan spacecraft, using a new low-cost design. Magellan will be launched from the space shuttle on a 466-day mission.

Masters program

offered on site

Colorado School of Mines representatives will discuss the school's material science masters program at 11 a.m. on Tuesday, June 30, in Room 502 of the Technical Support Building (TSB) at the Waterton facility.

Employees interested in learning about this program or other courses from Colorado School of Mines are invited to attend.

For additional information, contact educational services at Ext. 7-4050, 7-3736 or 7-5698.

Credit Union Clips

Credit union to offer special used car sale

The Red Rocks Federal Credit Union is sponsoring a special used car sale in conjunction with the Budget Car Sales agency.

The sale will be held from 9 a.m. to 5 p.m. on Friday and Saturday, June 26 and 27 at two Budget Car Sales locations: 833 S. Havana (4 blocks south of Alameda on Havana), and 8125 W. Colfax (5 blocks west of Wadsworth on Colfax).

"A large selection of domestic and foreign cars will be available," said Susan Webb, loan officer. Additional approval and call a loan officer at 797-2900 for more information.

In addition, the Home Equity Loan fixed rate will increase to 12 percent, with no points, effective July 1. The variable rate is 1.5 percent above the prime lending rate, and is subject to change each July 1 and January 1.

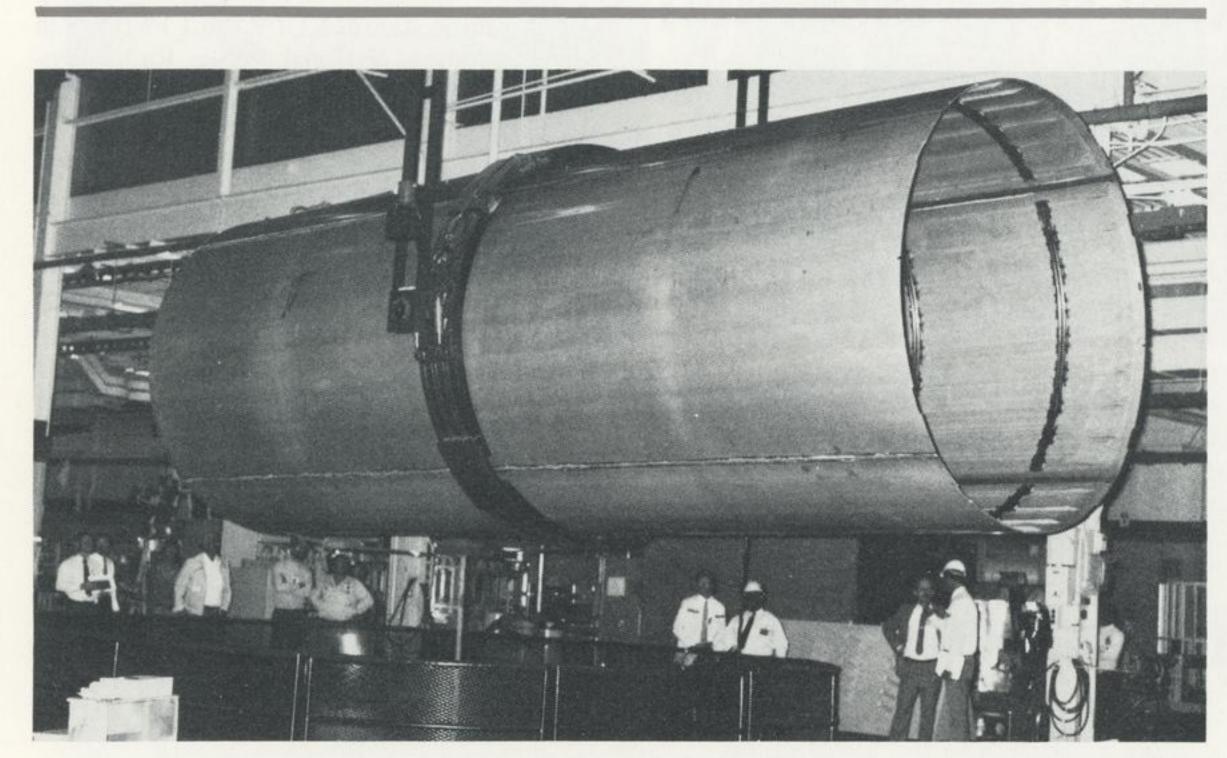
Quarterly statements will be mailed the early part of July. The credit union can no longer "hold" statements, Webb said. The hold on each statement will be released and the statement mailed to each member of the credit union at their home address in the credit union's files. If an address change is necessary, please notify either of the credit union offices.

savings will be offered by the credit union, and 10.5 percent for up to 36 months will be offered on all used cars purchased through the sale, Webb said. Submit a loan application for pre-



Company donates \$10,000 to Denver Art Museum

Richard Teitz, director of the Denver Art Museum, right, accepts a \$10,000 donation presented by Arthur E. Koski, director of public relations, on behalf of the Martin Marietta Corporation. The contribution helped support the "Art in New Mexico" exhibit organized by the Smithsonian Institute National Musuem of American Art.



New MARS report form set for July

A new form for the Martin Marietta Automatic Reporting System (MARS) will be implemented and in use by the end of July. Instructions also will be provided.

From July 13 through 27, a number of training sessions, each less than two hours, on the new MARS form will be held in the following areas: Engineering Building, Space Support Building, Southpark West, Denver Systems Center and Greenwood Commons Facility.

A detailed training schedule will be distributed by July 6. Additional areas desiring training should contact training and certification at Ext. 7-6166 and 7-6167.



Bob Garcia and His Titan rigging crew lift the welded Stage I oxidizer barrel from the vertical weld tool.

A Titan tradition lives on with Titan IV

(Editor's note: This article by George Lawrence, manager, Titan programs manufacturing, is the third in a series of articles following a Titan IV through production.)

As each piece part of Titan launch vehicle is completed in detail manufacturing, it must undergo rigid inspection by quality control personnel. Once these parts are accepted, they are delivered to assembly operations for the initial phases of assembly.

The second floor factory has been dedicated

Program (EREP), and recently Peacekeeper, Defense Systems and the Transfer Orbital Stage.

Some of the first Titan IV parts to be delivered for assembly were the large Stage I oxidizer barrel panels. Curved panel, 8 feet wide and 27 feet long are lowered into a three story vertical weld fixture. Here, major weld manager, Vern Selby, and his experienced weld team, will spend many hours forming these quarter panels into cylindrical barrel sections. More than 11,000 inches of aluminum welding will go into Titan IV before it's completed. Each part is trimmed to size, fitted and prepared for welding by skilled technicians, many of whom have worked with pride on the entire family of Titan launch vehicles.

Food service offers variety

In addition to offering daily Health Mark specials, Denver Aerospace cafeterias feature new selection such as a variety of seafood from the International Bar. Food services has extended lunch hours for the first-floor cafeteria in the Engineering Building until 1:15 p.m.

> MARTIN MARIETTA NEWS Published by Public Relations Editor Jan P. Timmons MARTIN MARIETTA

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

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Technical Operations	Floyd R. Tegiffel Jr.	7-6872
Canaveral Operations	Robert V. Gordon	7-9108

primarily to fabricating Titan launch vehicles for more than 30 years. It has shared its home with some prestigious spacecraft programs during its long tenure. These include Skylab, the multiple docking adapter for Skylab, Viking, XSM-24B, Earth Resources Experiment

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Robert L. Ruck 7-2202

Vandenberg Operations



Volunteers help to construct a wilderness trail for the disabled.

Employees sought to help disabled

Volunteers are needed to help complete a model wilderness wheelchair-access trail

said the 20-acre area, located near the summit of Kenosha Pass, offers a way to let a handi-

Savings bond drive exceeds 1987 goal

Denver Aerospace employee participation in the 1987 U.S. Savings Bond drive reached 95.6 percent, exceeding the 95 percent goal set for the drive.

Thirteen thousand sixty of 13,656 employees, including those at Canaveral and Vandenberg Operations, now participate in the payroll deduction program, according to Joseph C. Spencer, drive chairman and vice president, Business Development.

Employee participation in the payroll deduction program was called a tremendous success by the company.

A drawing for fifty \$100 bond prizes will take place at 1 p.m. on Monday, June 29. Winners will be notified immediately.

Company contributes to local radio station

Martin Marietta contributed \$5,000 to help support radio station KCFR (90.1 FM) which airs Colorado's National Public Radio programs, during the station's recent membership drive.

through pristine forest, with special picnicking, fishing and camping.

How can a person who loves the wilderness, but who is disabled, experience a wilderness environment? Answering that question led to the formation of the Wilderness on Wheels Foundation (WOWF)—an organization that seeks volunteers to complete a seven-mile trail in the mountains.

Denver Aerospace employee Ken Storey and his wife, Linda, who has multiple sclerosis, visited the area last summer. Storey, a space vehicle technician on tethered satellite, capped person enjoy the wilderness.

Established in 1986, WOWF is a Colorado based, publicly supported, nonprofit corporation. WOWF's purpose is to develop access for disabled persons to wilderness environments.

There are currently more than 30 million disabled persons in America. "Give a day" activities will be scheduled this summer and fall to help continue the path. Those who would like to help on one or both of the days, may contact Ken Storey or Tom Floyd, Ext. 7-3932.

The annual spring membership drive was extended by an extra week to meet the goal necessary to continue.

With the company's donation and that of listener-members, KCFR raised the amount needed to continue regular scheduling, a spokesman for the station said. KCFR carries new programs such as "Morning Edition" and "All Things Considered", in addition to classical, jazz, bluegrass, folk and new age music.

Mile High United Way celebrates

When the Mile High United Way campaign begins in a few months, it will barely resemble the United Way that began 100 years ago. Today, the Denver area has been totally transformed from the poineer boom town of the 1880's, and so has Mile High United Way.

The charity federation that once catered to indigent miners, tuberculosis patients, and even animals in a town of 80,000, now serves a city of 1.5 million people.

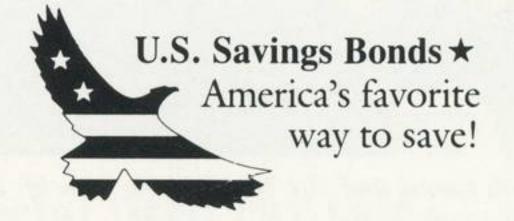
But one thing has not changed, reported a spokesman for the United Way: the metro area's willingness to reach out to friends and neighbors in need through the United Way method of giving. In the finest pioneer spirit, the Denver area, and Martin Marietta in particular, continue to display generosity and compassion, he said.

Denver's United Way movement has

With much enthusiasm, Mile High United Way looks forward to a bright future, and another outstanding campaign at Denver Aerospace, the spokesman said. Last year, Martin Marietta employees contributed more than those at any other major company in the Denver region.

Conifer residents seek new bus route

Employees interested in a bus route from Conifer to Hampden and Wadsworth and the Main Plant are being sought to petition RTD to add a new bus route. Conifer residents should be willing to use the bus daily. "Take the Ride" and sign up by calling Tom Paul, Ext. 108087, or Cindy Orr, Ext. 1-8378.

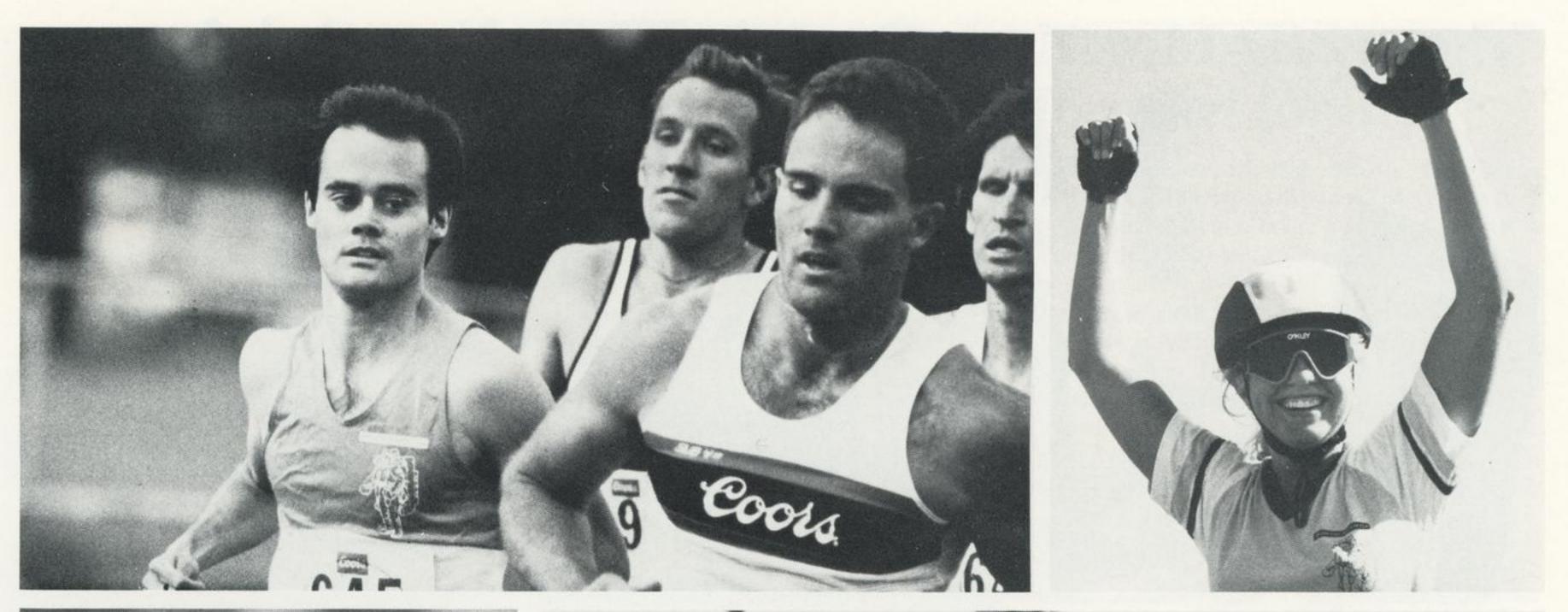


Company to study deployable shield

Martin Marietta has been selected by Sandia National Laboratories, Livermore, Calif., to conduct a study of technical feasibility and design concepts for the development of a deployable shield for Strategic Defense Initiative (SDI) assets.

The \$200,000 study will concentrate on the development of deployment mechanisms for a composite armor shield designed by Sandia to deploy a selected directed energy weapon spacecraft. The study will be headed by Arthur H. VandenBurgh, reporting to Dr. David A. Nichols of the Advanced SDI product area.

proved a great success, the spokesman said. It has weathered. The Great Depression, two World Wars and rampant inflation. Public support is unmistakable: Mile High United Way now boasts more than 200,000 local contributors.







Employee services/recreation

Golf Tournament—The results of the 1987 Partner Best Ball Golf Tournament held at Raccoon Creek Golf Course recently are as follows: Low gross-Rick Burris, Kathryn Leigh; Peoria-Scott Bristo, Sharon Brooks; Best ball winners-Rick Burris/John Pauley. John Keiser had a hole-in-one, #17. The afternoon round had to be called because of bad weather. Sign up early for the Martin Marietta Open in August.

Biking-The Race Across America (RAAM), a 3100-mile, trans-continental race from San Francisco, Calif., to Washington, D.C. begins at 11 a.m. on June 20, and will take eight to 12 days. The Race Across America will be coming through Denver on Tuesday, June 23, at approximately 6 p.m. Martin Marietta's Mile High Rollers Velo Club will be maintaining and operating time station 31, which is located south of I-70 at El Rancho. El Rancho is 1,313 miles into the race. Spectator support will be appreciated, as the time station will operate from 5 p.m., Tuesday, June 23, 24 hours a day, through the early hours of Thursday, June 25. For more information, contact Jim

Pulliam, Ext. 7-0789.

Hiking-The Alpine Club plans a day hike from Roxborough Park to Stroncha Springs Saturday, June 20. Bring a light pack, lunch, and plenty to drink. Call Gary Shapiro, Ext. 1-9060.

Backpacking-A weekend backpacking and camping trip is planned for White River National Park on Saturday and Sunday, June 27-28. The overnight backpacking trip will cover scenic trails throughout the park. Call Larry Espelage, Ext. 7-6156.

Discounts-Tickets for the \$5 thirdlevel, reserved grandstand are available for \$4 for a July 4 fireworks and Denver Zephyrs game at 6:35 p.m. on Saturday, July 4. Tickets are available through June 29, or until the supply is exhausted, whichever comes first, at the recreation racks. Make check payable to Martin Marietta.

Singles-The Martin Marietta Singles Club plans a "fun in the sun" family day with horseback riding, volleyball, and picnic Saturday, June 27, 10 a.m.-2 p.m. picnic area. Equipment and charcoal will be provided. Bring your own food and beverages. Reservations are required for horseback riding. For more information, contact Shirley Munsey, Ext. 7-4167, or Kim Parker, Ext. 7-3865.

Denver Zephyers-Coupons offering two adults' reserved grandstand tickets for any Sunday game, for the price of one ticket, are available from the recreation representatives.

Archery Club-The Red Rock Bowmen took first place in a team competition May 31 in Boulder. Team members were: Rick McNutt, 300; James Gilmore, 290; Ed Forester, 260; Bob Dunn, 260; Jim Wills, 250; Barb Forester, 220. Rich McNutt won second place over all in the meet.

Diver-The Fathom Divers Scuba Club is planning a dive trip to Cozumel Sept. 6 - 13. Air fare, hotel accommodations for eight days and seven nights, four boat dives, unlimited beach diving, beach buffet, lunches on boat dives, taxes and tranfers, all for \$750. Non divers may pay only \$650. A \$100 deposit is required. Contact Marty Chrastil, Ext. -7075, for trip details or to register for scuba diving classes. Prospective club members can contact Bob Rowe, Ext. 7-6589.