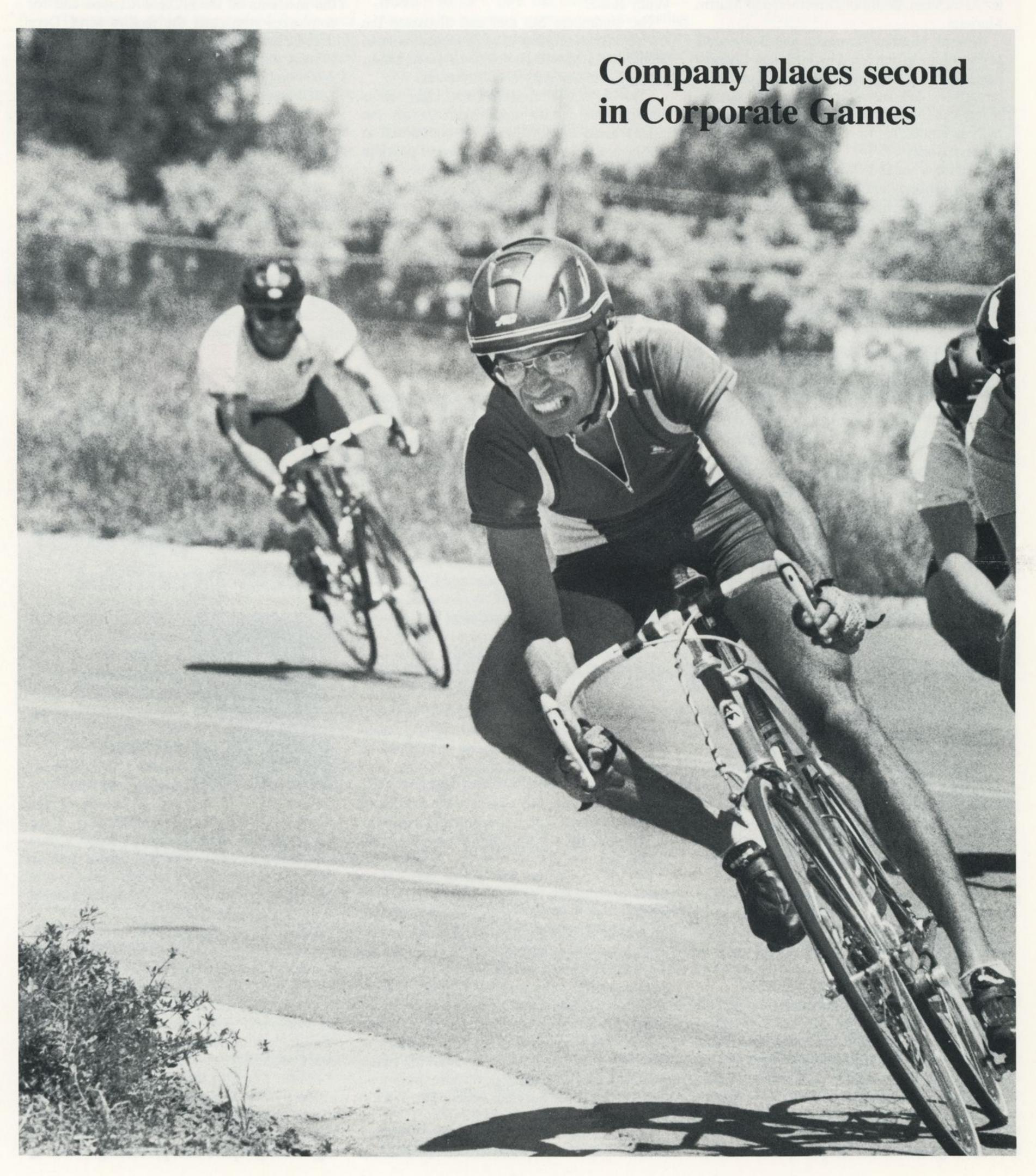
MARTIN MARIETTA

June 17, 1988 Number 12





New road planned for Deer Creek Facility

A citizens advisory committee, appointed by the Jefferson County Commissioners, is currently evaluating access improvements to the Deer Creek Facility. The committee is composed of representatives from the Deer Creek Mesa Protective Association, Ken-Caryl Master Association Board of Directors, and Martin Marietta.

Howard, Needles, Tammen, and Bergendoff (a consulting group hired by Jefferson County) has performed detailed analysis, evaluated alternatives, and made environmental assessments from which the committee will present recommendations to the Jefferson County Commissioners.

"We have walked through our Deer Creek Facility property and looked at several potential road alignments," said Stan Albrecht, vice president of Plant Operations and the company's representative on the citizens advisory committee. "We have also looked at Deer Creek Road and the difficulties associated with expanding it to three or four lanes. In addition, we have examined possibilities with the Ute and Owens roads that border the Manville research center. And we are actively examining improvements to the existing South Valley Road."

The committee has met and discussed the environmental impacts of all proposed roads to determine influence on deer, wetlands, water, geology, and a variety of other issues.

"The only major concern I have right now is timing. The county commissioners set the money aside in 1987, and are committed to putting a road in this year. Because of possible environmental impacts of the construction, it may be delayed until 1989. My objective is to convince the county commissioners to start the road as soon as possible in order to curtail the safety and traffic issues associated with the current limited access to our new Deer Creek

Facility," Albrecht said.

Martin Marietta's preference is for construction of a road that ties into the existing South Valley Road coming onto the company's access road.

This route would provide greater safety for the residents of Deer Creek Canyon and for employees who enter the facility using Deer Creek Canyon Road. When fully occupied, Martin Marietta will house approximately 3,000 employees at the Deer Creek Facility.

The South Valley Road route has been platted since the mid-1970s and received county commissioners' endorsement and support before Martin Marietta's acquisition of the former Manville property.

The citizens advisory committee will continue to meet and evaluate alternatives for the next several weeks before delivering final recommendations to the Jefferson County Commissioners this summer.

NASA awards \$496.1 million Space Shuttle external tank contract

NASA has awarded Martin Marietta a \$496.1 million contract to formalize additional preproduction efforts for the Space Shuttle External Tank Program.

The contract, awarded June 7 to Manned Space Systems in New Orleans by NASA's Marshall Space Flight Center in Huntsville, Ala., continues a preproduction effort that began in November 1984. The preproduction includes all the materials, subcontracts, and labor required before the basic structure fabrication of additional external fuel tanks. This effort supports the major program re-

structure that occurred after the Challenger accident.

The external fuel tank, one of the Shuttle's four major elements, serves as the backbone to which the Space Shuttle Orbiter and solid rocket motors are attached. It is 154 feet long and holds more than a half-million gallons of liquid propellants that fuel the Shuttle's three main engines.

External tanks are manufactured by Martin Marietta under the direction of the Marshall Center at the Michoud Assembly Facility.

Mile High United Way

Larizza appointed I&CS president



Martin Marietta
Corporation has appointed Rocco D.
Larizza to president of
Martin Marietta Information & Communication Systems, effective immediately.

Since March, Larizza has been acting president of the

Larizza ing president of the company, which is an operating unit of the Corporation's Information Systems Group with headquarters in Denver. Before that, he was vice president of Business Development and then vice president and general manager of its Denver-based operations.

Before joining Martin Marietta in 1985, Larizza spent 20 years with IBM where he was director of Space and Special Information Systems from 1983-85. In that capacity, he was responsible for the development of space vehicle command and control systems and the management of other data systems and aerospace contracts.

Martin Marietta Information & Communication Systems designs, builds, and integrates advanced systems in electronics, communications, command and control, signal processing, and high-speed data processing.

Employee smoking policy established

Martin Marietta Astronautics Group has adopted a new smoking policy that is now in effect for all Denver area employees.

The new smoking policy was created in accordance with the company's philosophy for providing a healthful, comfortable, and productive work environment. It applies to all personnel assigned to companies and functional organizations housed in Denver Astronautics facilities.

The policy states that smoking is now permitted in specifically designated areas to be established in all locations, in offices enclosed from floor to ceiling so long as there are no nonsmokers present, and in posted areas of cafeterias.

Smoking is no longer permitted in open office areas, hallways, and stairwells. Smoking continues to be prohibited in auditoriums, conference, and meeting rooms; lobbies; restrooms; medical and fitness facilities; elevators; areas containing explosives or flammable materials; or any other area designated as nonsmoking.

Employees will not be permitted to smoke

when traveling in company vehicles, including aircraft. In addition, off-site company meetings will adhere to the same guidelines as meetings held on the premises.

Off-site Martin Marietta Astronautics Group operations will adhere to the provisions of the Corporate policy with suitable modifications to comply with local regulations and conditions.

The success of the new policy depends on the thoughtfulness, consideration, and cooperation of smokers and nonsmokers. Signs will be posted at all building entrances to remind employees of the company's policy. Employees who experience a smoking-related concern should notify their supervisor or representative of the Personnel department.

Those employees interested in "kicking the habit" are encouraged to participate in company-sponsored, off-hours smoking cessation programs. To register for these programs, call the Employee Services office, Ext. 7-6750 or Ext. 7-6605.

It is the long-term objective of the company to achieve a totally smoke-free environment.



Martin Marietta donates \$50,000 to Colorado School of Mines

Dr. William Copeland (left), of the Materials Science program at the Colorado School of Mines, accepts a \$50,000 check from J. Richard Cook, vice president of Technical Operations for the Astronautics Group. Dr. Mohan Misra (second from right), manager of Materials and Structures for the Astronautics Group, and John Golden, vice president of Academic Affairs at the School of Mines, observe the presentation. The gift will help the School of Mines purchase a Scanning Tunneling Microscope.

School of Mines receives \$50K gift for microscope

Martin Marietta has given \$50,000 to the Colorado School of Mines to purchase a Scanning Tunneling Microscope (STM).

The STM will help the School of Mines to perform surface and interface materials research. That work is part of an interdisciplinary material science program that includes the school's chemical engineering, chemistry, engineering, metallurgy, and physics departments.

The STM is an advanced technique for atomic-scale resolution microscopy. This technique was invented by two 1986 Nobel Prize winning scientists in Zurich, Switzerland.

The new microscope will be incorporated with the School of Mines Ultra High Vacuum System and will be integrated with other high-quality surface and interfacial analytical capabilities. Installation is scheduled for mid-June.

Tom Furtak, professor of physics at the School of Mines, said, "This instrument, unlike any other, is capable of providing atomic-scale resolution in vacuum and air. It is the only device available to give that level of detail.

"It has revolutionized the world of interfacial science and its capabilities will put us on the frontier of surface science," Furtak added.

"I am impressed by the work the School of Mines is doing in a number of leading edge technologies." J. Richard Cook, vice president of Technical Operations for the Astronautics Group said. "We are fortunate, as a company and a state, to have such a tremendous resource here in our community."

In addition to purchasing the new microscope, the School of Mines plans to establish the Martin Marietta Particle and Surface Studies Laboratory.

"The addition of the STM and the Martin Marietta laboratory should help both professors and students as they seek a greater understanding of a number of materials and the interaction of those materials," Cook said.

The gift is part of the Corporation's Gifts and Grants program.

Drivers beware

As peak season begins for recreational activities, an increasing number of bicyclists and runners are using Deer Creek Canyon Road. The growth in employee and construction traffic makes passing extremely difficult.

All employees are asked to use caution when traveling to and from the Deer Creek Facility. Help prevent tragedy from striking this summer. Buckle up and drive within designated speed limits.

Company sponsors science scholars

Martin Marietta is sponsoring summer scholarships for three Colorado high school juniors to the Frontiers of Science Institute (FSI) at the University of Northern Colorado in Greeley.

The FSI program is designed to further educate students who have a high interest and aptitude in science, and have been outstanding in academic achievement. FSI activities are selected to give students a better understanding of the nature of scientific investigations and to encourage them to continue with advanced study toward a career in science, engineering, or research.

Thirty-nine students will attend the 8-week class, June 13 through Aug. 5 at the UNC campus. Approximately 125 students applied for the program this year.

Martin Marietta contributed \$3,500 to the FSI program to provide scholarships for three students: Rhonda Deen of Widefield High School, Elizabeth Knight of Green Mountain High School, and Eric Stuebe of Heritage High School.

Bob Gammill, Astronautics' chief of College Relations, said, "We are pleased to be part of this exceptional educational experience the Frontiers of Science provides to our future leaders in science and technology. As a company, we must continue to to support the ongoing education of today's youth to the best of our ability."

Sendel appointed to head Savannah River effort



Philip H. Sendel, has been appointed president of Martin Marietta Savannah River, Inc., the subsidiary competing for the management contract to operate the Department of Energy's Savannah River Plant.

Sendel Formerly president

of Martin Marietta Aero & Naval Systems at Baltimore, Sendel has held a wide variety of senior management positions.

In his new position, Sendel, 56, will head the corporate subsidiary that is teamed with EG&G Incorporated and United Engineers and Constructors, Inc., to win the management contract to operate the Energy Department's South Carolina facility.

Replacing Sendel as president of Martin Marietta Aero & Naval Systems is Martin M. Koshar, who was vice president of the LANTIRN program—one of the Corporation's largest and most sophisticated electro-optical systems produced by Martin Marietta Electronic Systems in Orlando. Murray W. Garbrick, formerly vice president of Tactical Interdiction Systems at Orlando, succeeds Koshar as vice president of the LANTIRN program.

Product Excellence—a new focus

Product Excellence is a new organization formed to modernize and simplify overall business practices at Martin Marietta Astronautics Group. Headed by John P. Murphy, vice president, the organization has consolidated the functions of Engineering Excellence, Project Challenge, Industrial Engineering, and several other functions targeting increased productivity.

Reporting to J. Richard Cook, vice president of Technical Operations, Murphy's group is working to establish partnerships with companies and functional organizations to complete the implementation of key initiatives for the Astronautics Group.

These initiatives include Manufacturing Resource Planning II; Product Definition System—computer-aided engineering/computer-aided design/computer-aided manufacturing; Engineering Excellence; Process Simplification and the Industrial Modernization Improvement Program; and the training activity needed to support these initiatives.

"In effect, we are a proactive consulting organization that will foster the transition of operating methods to the front-line business entities within Astronautics. Our job is to coordinate and develop new operating methods and technologies. Product Excellence will then hand off these methods and technologies to end users and assist them in implementation," said Murphy.

Astronautics' goals are to achieve a 50 percent increase in overall output in the next three years with a ten percent increase in work

Cadet receives award

Cadet Mark A. Clanton, son of Lt. Col. and Mrs. N.G. Clanton of Bethel, Maine, has been named the Outstanding Cadet in Space Operations for the class of 1988 at the U.S. Air Force Academy.

The award, sponsored by Martin Marietta Astronautics Group, is a bronze statue of an eagle and fledglings dedicated to the memory of Lt. Col. Robert C. Rounding.

Col. Rounding was a tenure associate professor of mathematics at the academy during the 1950s and 1960s. He was killed in an air crash in Palmdale, California, in 1968, while on a sabbatical from the academy for service in Vietnam.

Gary Flora, president of Martin Marietta Space Launch Systems company, presented Cadet Clanton with the award on May 31 in Colorado Springs.

MARTIN MARIETTA NEWS

Published by Public Relations MARTIN MARIETTA

Call Ext. 7-5364 with information for articles.

Prepared and produced by the publications department
ASTRONAUTICS GROUP
P.O. BOX 179—Denver, CO

June 17, 1988

force; to achieve competitive leadership in the aerospace industry through quality and productivity; and to modernize and streamline operations. "Product Excellence will be a key player in accomplishing these goals," said Murphy.

Another key function of the organization is monitoring and tracking the company's Annual Product Improvement Program (APIP). "We will status APIP initiatives targeted at cost reduction and make recommendations to senior management for improved management environments," Murphy said.

Murphy is excited by changes that are already taking place at Martin Marietta and is enthusiastic in his new role. "Changing things for the better cannot be accomplished by a single organization. It requires the involvement of our entire Astronautics team around the country," said Murphy. "This is an important process that will involve every Astronautics employee. We must all participate and drive to improve every aspect of each organization."



Denver Art Museum receives \$5,000 from Martin Marietta

Joseph Spencer (right) vice president of Business Development for the Astronautics Group, presents Fred Mayer, chairman of the board of the Denver Art Museum, with a \$5,000 check. Most of the donation will be used to ensure the classroom outreach program, "Bringing Art to the Classroom," will continue.

30-year service awards presented



Employees celebrating 30 years of service during April and May 1988 were honored recently at a recognition luncheon. Standing, left to right: John Shepard, Carl Anderson, Dick Berry, Marge Leiting, Ray Schmier, Dick Wood, and Harold Oxley. Seated, left to right: Don McKillican, Mel Fry, George Lawrence, Bill Salley, Lou Aldridge, Dwight Garrett.



Standing, left to right: Buddy Weidenfeller, Ralph Mueller, Robert Kapus, Thomas Tracey, Lester Clawson, Verne Coleman. Seated, left to right: Bill Sanders, Gordon White, Bill Kaelber, Colin Harrison, Lonnie Wood, Jim Gibb.

Company continues opposition to proposed Red Mesa Quarry

Martin Marietta has presented its formal requirements to the Jefferson County Planning and Zoning department as part of the county's evaluation of the proposed Red Mesa Quarry.

The quarry, which is proposed for an area adjacent to the northern boundary of Martin Marietta's Waterton property, has proven detrimental to the uniquely quiet seismic background at the Waterton Plant, based on the company's tests.

"We have actively utilized the innate benefits of our property's seismic stability since the mid-1960s when the Inertial Guidance Laboratory was constructed to test and evaluate instruments for Titan ICBMs and launch vehicles," said Stan Albrecht, vice president of Plant Operations.

Present and future space platforms will continue to require this minimal level of background noise to conduct meaningful ground tests before full-scale development and flight of complex spacecraft, instruments, and flight experiments.

"A naturally existing ambient seismic background level on the Waterton property of 0.25 micro-g (0.25 x 10-6 the force of gravity) is required to maintain current precision testing capabilities. Future technical advances requiring precision testing cannot be accommodated with the increasing disturbances presented by the Red Mesa Quarry," said Albrecht.

Martin Marietta plans to build additional laboratories with similar requirements in the future.

The Jefferson County Planning and Zoning department will continue to review technical cases presented by both Martin Marietta and the Denver Technological Center (DTC)—owners of the proposed Red Mesa Quarry site.

Public hearings have been postponed again by the DTC until the seismic impact issue has been resolved between Jefferson County, DTC, and Martin Marietta.

Space Systems wins contract that will enhance R2P2 capabilities

Martin Marietta Space Systems company recently won a competitive contract from the Air Force Weapons Lab (AFWL) called the Integrated Acquisition Tracking and Aimpoint System (IATACS). The program is a fourphase contract that calls for the conceptual design, preliminary design, detailed design, and integration and test of the IATACS experiment. Total value of the program is \$3.8 million.

By successfully completing the experiment, Martin Marietta remains on the forefront of acquisition, tracking, and pointing technology critical to the existing Rapid Retargeting/ Precision Pointing (R2P2) Laboratory.

The IATACS experiment will allow R2P2 to move from single-point targeting to extended image targeting using the existing hardware platform. Martin Marietta plans to design and build new sensors and optics to be hosted on the R2P2 that will demonstrate an end-to-end simulation of acquisition, tracking, pointing, and fire control for a directed energy weapon such as a laser or neutral particle beam.

"The program makes great use of the government's and Martin Marietta's investment in the R2P2 facility," said Mike McGee, IATACS program manager. "This win keeps us competitive for future SDI programs and can act as a risk-reduction test bed for the company's Zenith Star program."

Martin Marietta is involved in a number of other projects related to SDI research.

Whitehead receives Air Force trophy

Victor W. Whitehead, vice president of Operations for Martin Marietta Commercial Titan, Inc., and a retired U.S. Air Force Colonel, recently received the General Thomas D. White U.S. Air Force Space Trophy for 1987.

Col. Whitehead, the 26th recipient of the award, earned recognition for his service while assigned as head of the Air Force's expendable launch systems program at Air Force Space Division Headquarters in El Segundo, California. He retired from the Air Force May 1, 1988.

Edward C. Aldridge, secretary of the Air Force, presented Col. Whitehead a bronze plaque replica of the the trophy during cere-

monies at the National Geographic Society headquarters in Washington, D.C. The award is presented annually to a member of the Air Force, military or civilian, who has made the year's most significant contribution to progress in aerospace.

The trophy was established by Thomas W. McKnew, Chairman Emeritus of National Geographic's Board of Trustees, in appreciation of Gen. White's contribution to the development of space. Gen White was the fourth U.S. Air Force Chief of Staff. The original trophy, presented to John F. Kennedy, is on permanent display at the Smithsonian's National Space Museum in Washington, D.C.

On the cover

Dan Koellen, lead engineer in the Astronautics Groups' Failure Analysis Lab, competes in the bicycle criterium trials at the eighth annual Denver Corporate Games held June 3-4. More than 120 employee participated as Martin Marietta claimed second place in the "A" division.

P³ getting overhaul

The organizations that administer Astronautics Group Policies, Procedures, and Practices (P³) are currently examining and revising every procedural document of the Astronautics Group. Commonly referred to as command media, these critical documents reflect Martin Marietta's current organization, methods of operation, and are the points of departure for all auditors—both internal and external.

"Last year's reorganization necessitated a fresh approach to various aspects of the command media system," said Phil DeLeo, manager of Astronautics Command Media. "This process includes looking at the structure of the P³ hierarchy, the administration of the system at group and company levels, and the methods for generating, reviewing, and issuing command media documents."

Much of the rework process involves eliminating obsolete terminology and reflecting current work methods. In addition, the Astronautics Group has added several new elements to the P³ hierarchy system such as Corporate Operating Instructions, Company Standard Procedures, and an Executive Operating Instruction. "Each of these additions augments previous Astronautics policies and procedures that were already in place," said DeLeo.

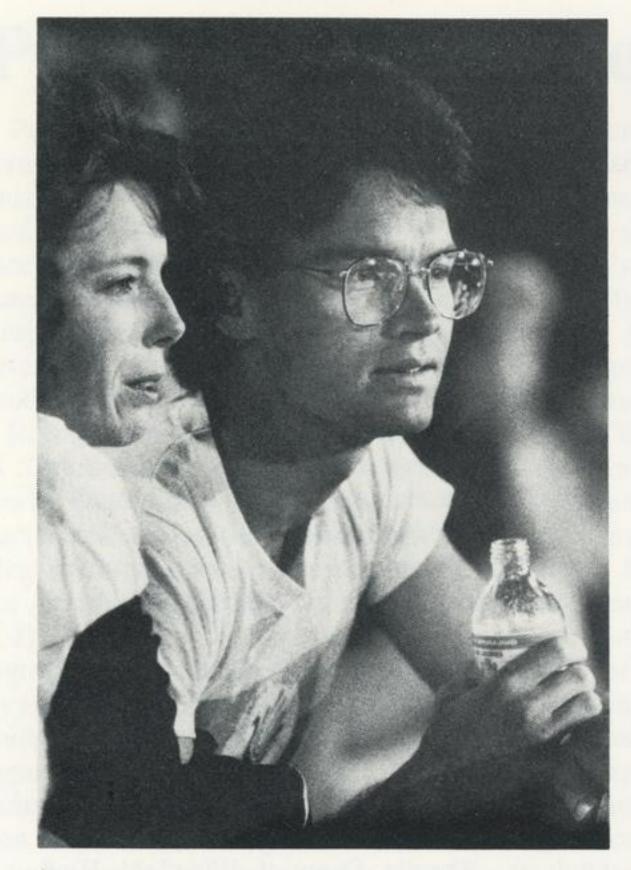
In addition, a revitalized concept of ownership has been put in place to ensure that all future documentation will be coordinated more efficiently.

To implement this new structure, organizations have been established in each of the four Group companies. Command Media focal points are as follows: Strategic Systems, Joan Hansen at Ext. 1-6020; Space Launch Systems, George Podrasky at Ext. 7-1346; Space Systems, Warren Miller at Ext. 7-6746; and Commercial Titan, Rod Stubbs at Ext. 1-1787. The manager for the overall Astronautics Group is Phil DeLeo at Ext. 7-9091.

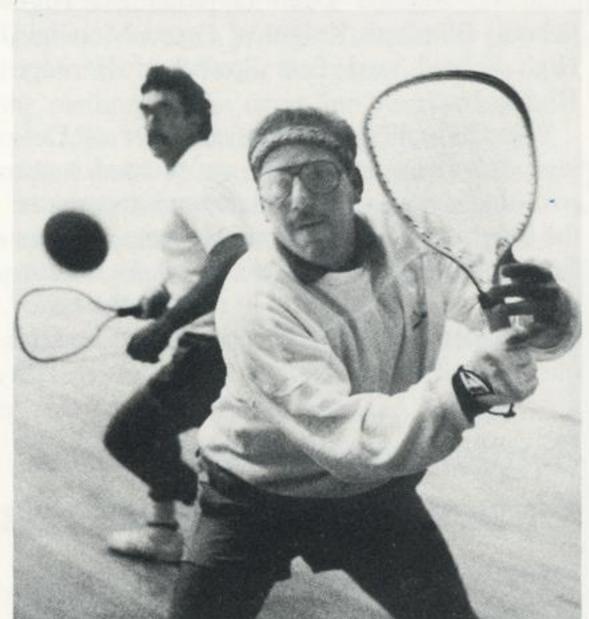
The scheduled completion date for updating all command media is June 30, 1988.

Don't feed the ducks

The decoys floating in the reflecting pool at the Deer Creek Facility are compliments of George Botsford, chief of Facility Operations. Early one morning, Botsford placed the plastic fowl in the pool as a gag for employees to enjoy. The fake ducks are fastened by cords and anchored by a weight. According to Botsford, the ducks are on a special diet so please don't feed them. Botsford plans to leave the decoys in the pool until they fly away.











Martin Marietta takes runner-up in Denver Corporate Games

Martin Marietta's team of athletes claimed second place in the "A" division of the eighth annual Denver Corporate Games held June 3-4.

More than 120 participants from Astronautics Group, Information and Communications Systems, and Data Systems battled to finish just 23 points short of first place Public Service Company. Martin Marietta's team accumulated 274 total team points. Athletes who placed in the first four places in the various events are as follows:

Track—men's 100 meters, Greg Haynie—4th; women's 100 meters, Denise Reeves—4th; men's 200 meters, Stacy Ming—2nd; women's 200 meters, Marlene Gunther—4th; men's 1500 meters, masters, Dick Croteau—3rd; women's 1500 meters, Diane Eckhoff—2nd; 1600-meter relay, James Dillinger, Max Atwood, Gary Dorsheiner, and Stacy Ming—1st place; 400-meter coed relay, Cheryll Lee, Cameron Joyner, Michelle Smith, and Greg Haynie—3rd place.

5K-men's (18-24 yrs), Steve Truitt-1st;

men's (25-29 yrs), Keith Golding—1st; men's (30-34 yrs), Doug Haas—1st; men's (35-39 yrs), Kalani Scott—2nd; men's (40-49 yrs), Dan Trujillo—1st; men's (50+ yrs), Joe Martin—2nd; women (24-29 yrs), Diane Eckhoff—4th; women's (30-34 yrs), Joyce Satchell—2nd; women's (35-39 yrs), Sally Cuffi—1st; women's (40-49 yrs), Vicki Testa—2nd.

Swimming—men's 50-meter freestyle, Derek Hansen—1st; men's 50-meter breast stroke—Doug Yager, 1st; men's 50-meter backstroke, Jeff Langus—1st; men's 50-meter fly, Dennis Casey—2nd; men's 100-meter free, Bob McKenry—1st; women's 50-meter breast stroke, Phyllis Halvorson—3rd; women's 50-meter fly, Yvette Stanley—3rd; 200 medley relay, Yvette Stanley, Doug Yager, Dennis Casey, Phyllis Halvorson—1st, 100 master relay, Chris Duncan, Dianne Mertz, Tom Acree, Ron Johns—4th.

Racquetball—men's, Mark Helton—1st place; women's, Donna Cassady—1st.

Bicycle—men's time trials, Rich Cramer—3rd; women's time trials, Clare Bena—1st.

Volleyball—John Shupe, Bob Brown, Jeff Shook, Roxanne Shook, Barb Bowmen, Julie Pullara, Lisa Arnold, Eric Manuel—1st.

Bowling—Kathy Johnson, Wendy Warren, Henry Rich, Chuck Winfield, Hank Wilmot— 2nd.

Golf-women's, Kathryn Leigh-3rd.

Employees also competed in tennis and trap shooting. Martin Marietta's second place exhibition trap shooting team members included Harry Russell, Ken Boettcher, Tom Cox, Jim David, and Lloyd Stamper.

Thanks go to all athletes, event coordinators, team coordinators, and volunteers. Proceeds from the Denver Corporate Games go to fund the Colorado Special Olympics.

Many of the company's track and field athletes will also compete in the Rocky Mountain Regional Corporate Cup Track and Field Relays to be held Saturday, June 18 in Boulder at the University of Colorado's Potts Field. Martin Marietta's team of employees will compete in 17 track and field events. Competition begins at 7:30 a.m. and spectators are encouraged to attend.