

September 26, 1986 Number 19

Hard Mobile Launcher

See ICBM modernization/page 5



Air Force completes 14th **Peacekeeper test flight**

The Air Force completed the 14th of 20 scheduled test launches of the Peacekeeper missile Sept. 18. The missile was launched from Vandenberg Air Force Base (VAFB), Calif., at 6:30 a.m. MDT and flew approximately 4,200 miles to the Kwajalein Missile Test Range in the Pacific Ocean.

The Peacekeeper carried six unarmed MK21 reentry vehicles and incorporated the deployment of active and passive decoys from a penetration aids deployment system (PADS) on its 30-minute flight. During the flight, Air Force personnel monitored the Peacekeeper's weapon systems performance as part of Phase III testing and evaluation.

Martin Marietta Denver Aerospace is responsible for multiple development tasks for the Peacekeeper system under a number of contracts, including assembly, test and system support; and additional contracts for launcher

and basing work, and transportation and handling equipment.

Personnel from the Air Force Operational Test and Evaluation Center at VAFB and F.E. Warren Air Force Base (AFB), Wyo., participated in the launch as part of the continuing Peacekeeper transition from a test to an operational system.

All Peacekeeper flight tests, managed by the Ballistic Missile Office at Norton AFB, Calif., have been designed to verify system performance. Test objectives of each flight have gradually shifted from component functional performance to systems and operational objectives. Continuing operational tests and evaluations are being conducted by the Air Force Operational Test and Evaluation Center, Kirtland AFB, N.M. Initial operational capability of 10 Peacekeeper missiles at F.E. Warren AFB is scheduled for December 1986.





Gen. Barry Gen. Casey **BMO's Casey, Barry** to take new posts

Maj. Gen. Aloysius G. Casey has been promoted to lieutenant general and reassigned as commander of the Air Force Space Division, Los Angeles Air Force Base, Calif. Brig. Gen. Edward P. Barry Jr. will assume command of the Ballistic Missile Office (BMO), replacing Casey.

Gen. Casey's promotion and reassignment will become effective upon the departure of Lt. Gen. Forrest S. McCartney, who was named as the next director of NASA's Kennedy Space Center Aug. 20.

Gen. Casey is currently commander of BMO and responsible for managing the research, design, development, and acquisition of Department of Defense intercontinental ballistic missile (ICBM) systems, which include the Peacekeeper and the Small ICBM. He is also program manager for the Peacekeeper ICBM. Gen. Barry is vice commander of BMO and also serves as the program director for the Small ICBM. He received his current rank on July 1, 1985, and assumed his present position at BMO in September 1985.



Wayne Plucheck Jr., seated, center, is congratulated for his cost-saving suggestion by, left to right, James A. Sterhardt, vice president of Strategic Systems: Dave Audi, Plucheck's supervisor; and Stanley F. Albrecht, vice president of Production Operations.

Plucheck's cost-saver idea saves Denver Aerospace \$1.2 million

Wayne Plucheck Jr. suggested a way to reduce material and machining costs in producing the Peacekeeper emplacer, and saved the company more than \$1.2 million.

Plucheck, a manufacturing engineer from

At Plucheck's suggestion, Peacekeeper materiel personnel, with the help of Industrial Engineering and Finance, compared the cost of procuring precut aluminum shapes directly from the supplier versus the cost of procuring standard plate stock and cutting the shapes inhouse. The suggestion office reports that the recommendation will be implemented for remaining emplacers and will significantly reduce material and machining costs.

Mile High United Way helps many

In 1897, the first United Way organization was formed in Denver by a priest, a rabbi, and a minister to raise funds to help thousands of families who came to Colorado during the Gold Rush.

Then called the Charity Organization Society and the Associated Charities, the organization sought to coordinate charitable services and seek financial support for 10 agencies in a combined fundraising campaign.

Today's United Way organizations are trying to respond to the government's funding reductions for human services and are taking greater responsibility for basic human services such as food and shelter. Like the 2,100 other independent United Ways across America, the Mile High United Way is a local, nonprofit organization. It is made up mainly of volunteers who work to support 97 human care pro-

central production operations, noted that the emplacer construction uses several aluminum shapes. Standard aluminum plate stock was procured and the shapes were cut inhouse. Forging, straightening, and reheat treatment added machining costs.

grams throughout the area. The 1986 Denver Aerospace United Way campaign is scheduled to begin Oct. 6. Richard E. Weber, vice president of Personnel and Facilities, will head Martin Marietta's campaign again this year.

COR review will include safety and housekeeping examination

(Editor's note: Stanley F. Albrecht, vice president of Production Operations, is the Martin Marietta lead for the Air Force contractor operations review (COR) scheduled for Oct. 27 through Nov. 7. In a continuing series of articles, Albrecht explains the importance of our understanding and compliance to procedures to ensure a successful audit.)

Martin Marietta is committed to providing and maintaining safe and healthful working conditions at all facilities, and we encourage all of our employees to join in this commitment.

Toward this goal, it is imperative that employees keep their work areas orderly and neat. Lasting impressions are made on visitors and on new employees by the first things they see in our departments and our buildings, and enhance productivity among all our employees.

Good housekeeping goes far beyond dusting and sweeping. It is an orderly arrangement of operations, tools, equipment, storage facilities, and supplies. Good housekeeping reduces safety hazards and improves working conditions. It is everyone's responsibility to see that housekeeping is effective in each area. Untidy work areas attract attention. Unfortunately, in the upcoming review, it is this kind of attention that may result in an unsatisfactory finding, or Form 3, issued by the COR reviewer. All of us can help by following some simple measures.

- Purge your area of unnecessary items such as excess paper and hardware.
- Do not stack shelves in such a manner that the load is top-heavy or can shift. If it looks shaky, it probably is shaky and unsafe.
- Put chemicals in proper storage containers, appropriately identified, and in designated storage areas.
- Use common sense when it comes to neatness. Your work area reflects your professionalism.

The Occupational Safety and Health department can guide you in keeping your work place clean, neat, orderly, and safe. The safety engineers for each area can be reached at Ext. 7-4444 or 7-3411, and are as follows:

- Manufacturing and **Operations (Factory) Bill Caille Kevin Guthrie** Doug Roseo Bob Cohan
- Space Park **Bill Papas** John Bengel Ike Rose Wally Hill III Test Area

GO BY THE CONTRACTOR OPERATIONS REVIEW

'Go by the Book' Hotline set up

In preparation for the upcoming contractor operations review (COR) by the Air Force Contracts Management Division, the need for all employees to be able to discuss their jobs in an honest, forthright, and knowledgeable manner is being emphasized. A "Go By The Book" Hotline has been established to answer questions, respond to employee concerns, or investigate any problem areas. "You're a member of a team that needs to work together to continue to be the best company-and to achieve 100 percent mission success," said Stanley F. Albrecht, vice president of Production Operations and COR team lead. "The 'Go By The Book' Hotline offers a direct line to information and action." The hotline number is 971-7611. Employees are asked to give their name, telephone number, department, and a brief statement reflecting their concern. The appropriate Martin Marietta COR team member will act on the call quickly. Hotline hours are from 7:30 a.m. to 4 p.m. Monday through Friday.

Offsite Facilities Bill Caille Harold Burchell

Robert Powell John Sutherland Steve Smetana

Housekeeping is a habit-good or bad. Housekeeping is also a reflection of one's nature and attitude. It indicates how well a group is supervised. An orderly, clean work place shows that we all care and take pride in Martin Marietta.

Manufacturing employees conduct audit and grade own work areas

A self-audit program begun recently throughout manufacturing has reinforced a "committed team approach among participating employees," according to Don Sutton, head of the manufacturing contractor operations review (COR) preparation team.

"Pride in workmanship is apparent in manufacturing. People are recommitted, informed, and dedicated to excellence," Sutton said.

Employees in a work area and their area supervisor conduct weekly walk-throughs to audit the work area for housekeeping, safety, and discipline. Each area has a prominently displayed progress chart to reflect audit findings and to identify areas needing improvement.

Progress is charted by green markings, for an excellent rating; yellow for some improvement required; and red for major improvement required. The work-area employees will take action to upgrade each rating to a green status. Manufacturing management is conducting both internal and crossaudits to concur with the findings and support improvement programs.

Statewide fire drill planned for October 9

The Littleton Fire Department wants you to teach your family a survival skill that will help

1. Place smoke detectors outside all sleeping areas.

'No parking' rules stressed by security

Among the items the Air Force Contract Management Division will look at during the contractor operations review (COR) in October will be compliance with established procedures.

"A disregard for 'no parking' signs would indicate to COR our disrespect for contractual regulations," said Paul Nordberg, director of security. "We are asking that all employees adhere to parking policies to demonstrate our unified team spirit at Denver Aerospacenot just during the review, but throughout the year."

protect them for the rest of their lives. Test the smoke detectors. Entitled "Plan to get out-alive," Colo-Know two ways out of every room. 3. rado's first statewide family fire drill is set for Select a meeting place outside the house. 4. Thursday, October 9. The fire department asks 5. Crawl low and go. employees to participate by doing the 6. Get out and stay out. following:

Inventions, new technology noted

Denver Aerospace employees were recognized recently for their creativity in documenting significant ideas that support new business endeavors, contribute to the company's technology base and fulfill contractual obligations.

The following Denver Aerospace employees received cash awards for their inventions as a result of decisions by the Denver Intellectual Property Review Board:

- Sam M. Dominick/engineering mechanics—"Series Tank Concept for Orbital Fluid Resupply Systems."
- Brent A. Cullimore and Curt B. Sorensen/ engineering mechanics—"Space Compatible Pressure-Controlling Accumulator."
- Dr. Patrick C. Hardee/electronics— "High-Speed Millimeter Wave Phase Shifter."
- Max E. Nielsen/electronics and Russell R. Mellon/test—"Electronic Processing Systems for Wide Dynamic Range, High Speed, Heterodyne Interferometric Optical Path Difference (OPD) Sensors."
- James C. Beblavi/engineering mechanics—"Method for Disposing of Excess Hydrogen during Space Shuttle Main Engine Tests and Launch Aborts."
- John J. Chapter and Chris J. Myers/ engineering mechanics—"FFNORM: A Technique to Normalize Form Factor Matrices."

The following employees were granted cash awards by the Denver Aerospace New Technology Evaluation Committee for their new technology disclosures submitted as a result of work on a NASA contract:

- Dr. Whittak H. Huang/electronics—"A Computational Drift Minimizing Technique for Spacecraft Onboard Attitude Quaternion Propagation."
- Dr. Whittak H. Huang, Dr. Narotham S. Reddy/electronics—"In-Flight Attitude Knowledge Accuracy Maintenance Scheme for Magellan Spacecraft"

For more information on the invention and new technology programs, call the patent office, Ext. 7-6500 or 7-6501.



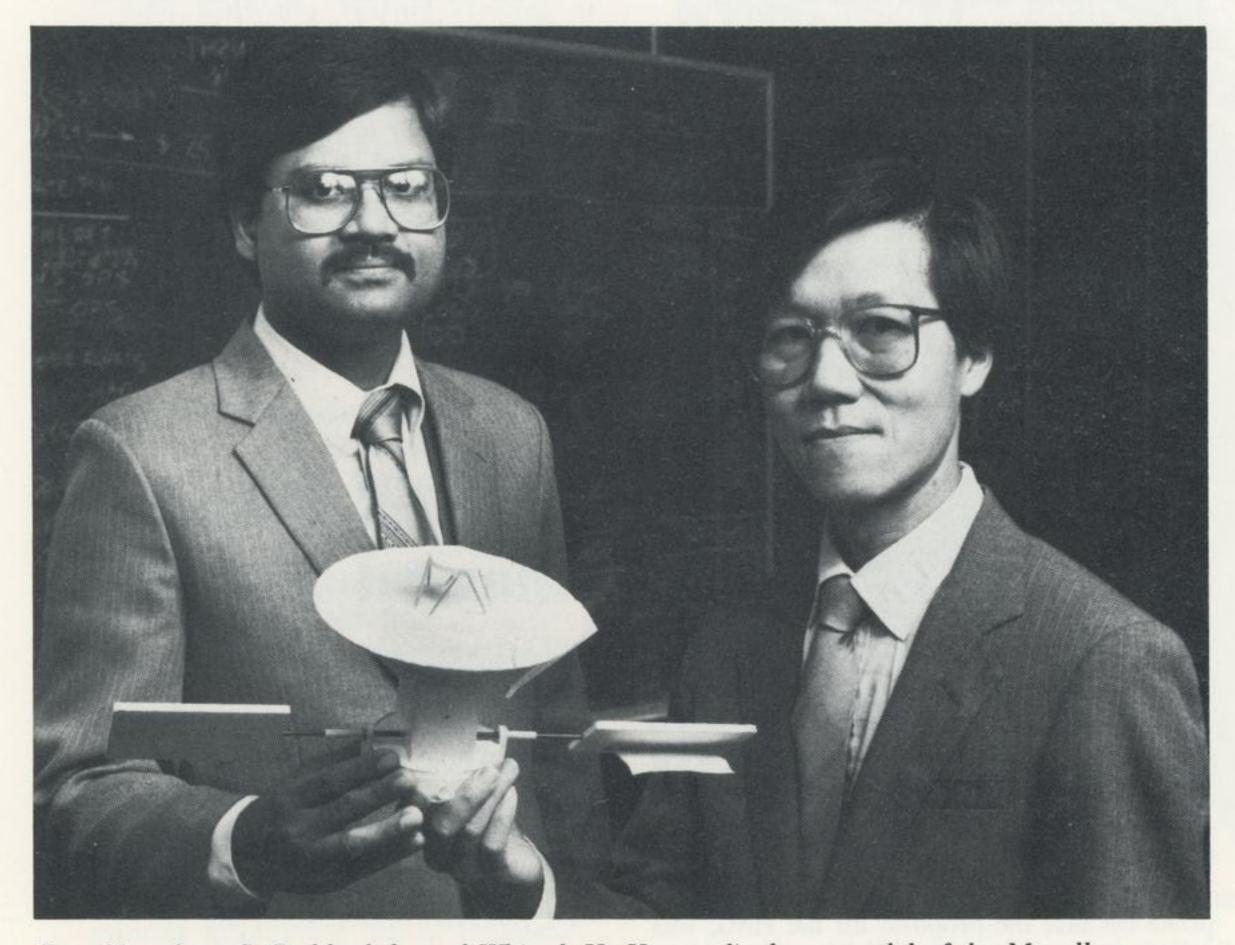


Rice wins Highline Triathlon

David B. Rice races toward the finish during the recent Highline Athletic Club's First Triathlon Aug. 17. Rice, a contract administrator for NASA Space Systems, swam 800 meters, biked 15 miles, and ran 5 miles, in one hour, 27 minutes, to place first in a field of about 50 athletes. Rice has qualified for the Bud Lite United States Triathlon Series (USTS) race at Hilton Head, S.C., in late September.

- John S. Hoover/electronics—"Improved Method of Coaxial Cable Support."
- Karyn S. Downs/engineering mechanics— "Glass Frit Coatings Used in Second Surface Mirror Construction."
- Thomas E. Elias/electronics—"Centrifuge Fixture for Constant Acceleration Screening."

Dr. Patrick Hardee holds a prototype of a new concept in high-speed phase shifting at millimeter wavelengths. The concept, developed by Hardee, uses mathematical prediction to combine several existing technologies.



New security badging hours announced

The government security office has expanded its badging hours. The new hours and locations are as follows:

- Greenwood Commons, Bldg. 6020, personnel lobby (Monday, 10:30 a.m.-1 p.m.);
- LSC, government security office (Tuesday, 7:30—11:30 a.m.);
- Waterton, government security office (Tuesday and Wednesday 1 p.m.-3 p.m.).

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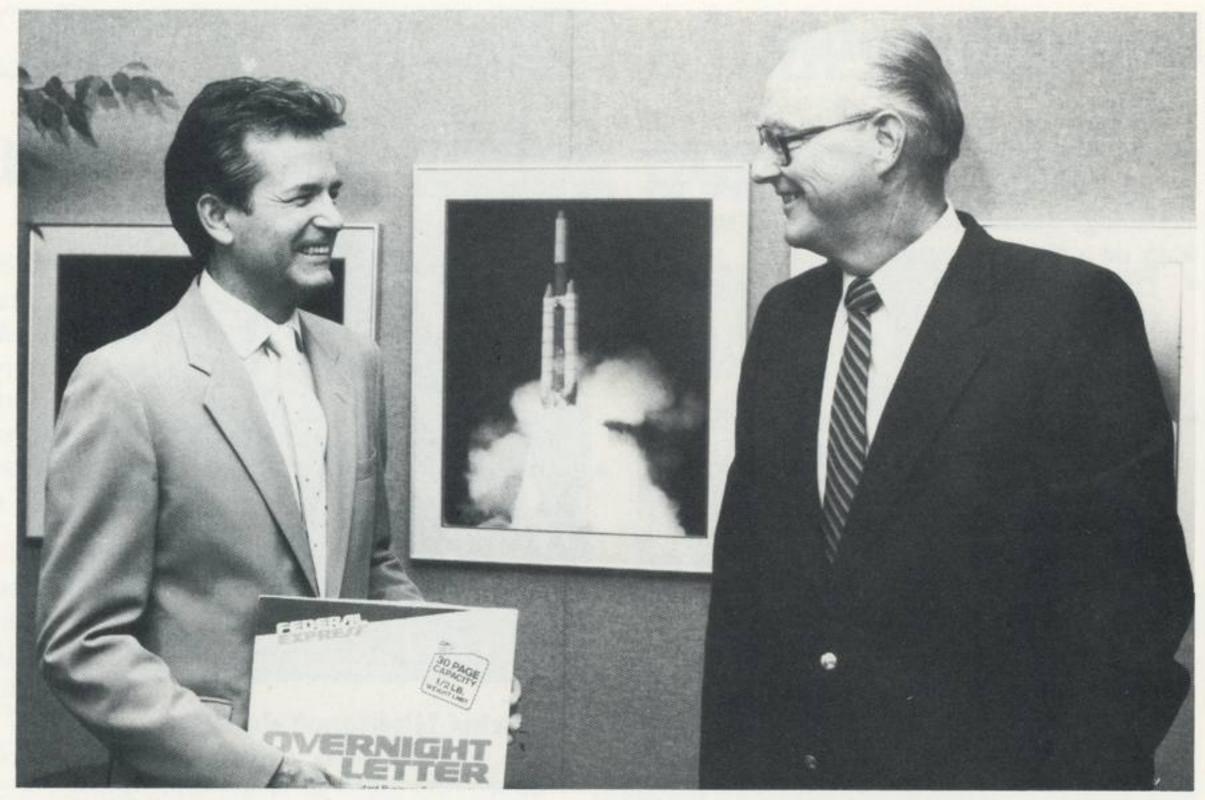
Call Ext. 5364 with information or suggestions for articles, or call one of the following coordinators.

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Canaveral Operations	Robert V. Gordon	9108

Drs. Narotham S. Reddy, left, and Whittak H. Huang display a model of the Magellan spacecraft. Their award-winning new technology has been implemented into the Magellan onboard attitude and articulation control system to maintain Magellan attitude knowledge.

Vandenberg Operations Robert L. Ruck 2202 Prepared and produced by the publications department DENVER AEROSPACE P.O. BOX 179—Denver, CO

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Martin Marietta receives check from Federal Express Corporation

Denver Aerospace President Peter B. Teets, right, accepts check and mailing package from Richard E. Brackeen, vice president of Space Launch Systems. Federal Express Corporation sent \$100,000 to Martin Marietta and signed a memorandum of understanding Sept. 4 that contains a launch reservation to fly the Expresstar commercial satellite on the Titan III.

Corporation awarded contract to increase Titan IV program

Counsel's Corner

The U.S. House of Representatives passed by voice vote a bill to toughen existing laws against computer crime. HR 4718, the Computer Fraud and Abuse Act of 1986, would establish three federal crimes for computer fraud, destruction, and password trafficking.

The Senate Judiciary Committee, by voice vote, approved a similar measure, S 2281. The bill would strengthen federal laws governing computer crime by making it a felony, punishable by five years in prison, to trespass into a federal interest computer with an intent to defraud. A "federal interest computer" is defined as any computer used exclusively by the federal government, financial institution, or one of a group of computers located in different states.

It also would make it a felony, punishable by five years in prison, to cause damage of \$1,000 or more by altering information or preventing access to a federal interest computer. It would make it a misdemeanor to display computer passwords. This provision is designed to discourage "pirate bulletin boards," in which hackers exchange secret codes to gain unauthorized access to computers. It is conceivable that the courts could construe the definition of a federal interest computer to computers dedicated to the performance of certain government contracts by federal government contractors. Also, the definition of "computers located in different states" is intended to include privately-owned computers used in interstate commerce (for example, Denver Aerospace's use of Orlando Aerospace's mainframe computer). Although the bill has not yet become law, passage is expected when the bill reaches the Senate floor.

Martin Marietta Corporation has been awarded a \$27-million letter contract by the Air Force to begin expanding the Titan IV expendable launch vehicle program from 10 to 23 vehicles.

Under the contract, Martin Marietta will initiate efforts required to build 13 additional Titan IV launch vehicles and activate a Titan IV launch site at Vandenberg Air Force Base, Calif. The company already is under contract for ten Titan IVs, the most powerful Titan launch vehicle for launching space-shuttleequivalent or heavier payloads.

The Titan IV is capable of placing a 10,000pound payload into geosynchronous orbit, 22,300 miles above the Earth, or a 39,000pound payload into low-Earth orbit from Cape Canaveral Air Force Station, Fla. The Air Force is scheduled to begin launching Titan IVs in late 1988, with launches planned from both California and Cape Canaveral, Fla.

Denver Aerospace is producing the Titan IVs at the Waterton facility, where the Titan space launch vehicle was developed.

The Titan IV is a growth version of the Titan III space launch system, which has been the Air Force's principal launch vehicle since 1966. The Titan III has recorded 129 successful flights in 134 operational launches for a 96.3 percent success rate.

ICBM modernization featured

The ICBM modernization program was featured in the Martin Marietta exhibit at the recent Air Force Association's 1986 National Convention and Aerospace Development Briefings and Displays in Washington, D.C.

The Sept. 15-18 event included highranking military personnel, congressional members and staffers, and Air Force delegates.

Each morning registrants signed up for scheduled briefings at various company exMobile Launcher (HML).

Displays in Martin Marietta's exhibit included a full-scale mock-up of the HML rubber belted tread, scale models of Peacekeeper, Small ICBM, HML, and the Titan family of launch vehicles; and a working model of a WCS console.

A large portion of the exhibit was devoted to the HML. Large rear-lit transparencies of the HML in action and a four-minute video on the rubber belted tread attracted large crowds to the exhibit.
The display's timing was especially appropriate because the proposal for the HML was delivered to the Air Force earlier this week, and the request for proposal (RFP) for WCS was received this week.

Revised security manual available

Revision 12 to the Denver Aerospace Security Manual (DASM) was published Aug. 29 and has been distributed to all document control stations for both Denver Aerospace and Information & Communications Systems (I&CS). Other employees who possess previous revisions of the DASM are encouraged to call government security, Ext. 7-3905 to receive Revision 12.

hibits. Visitors to the Martin Marietta exhibit saw a four-screen video presentation reviewing the company's role in the ICBM modernization program, including updates on Peacekeeper, Small ICBM, the Small ICBM Weapon Control System (WCS), and the Hard

Employee services/recreation

Chess—The Chess Club will meet at 6:30 p.m. Wednesday, Oct. 1, at DSC I, second-floor snack room.

Hunting—The Skyline Hunting and Fishing Club will meet at 5 p.m. Monday, Oct. 13, at the club meeting room in the recreation room.

Archery—The Red Rock Bowmen Club will meet at 4:45 p.m. Tuesday, Oct. 14, in the club meeting room at the recreation area.

Aeroriders—The "Aspen Watch" motorcycle tour to Cripple Creek, will start at 8:30 a.m. Saturday, Sept. 27, at the Village Inn West, Hampden Avenue and South Wadsworth Boulevard. The tour is open to all employees and their families. Call Walt Cooper, Ext. 7-5846.

Public Speaking—The LSC Toastmasters meet at noon every Thursday in Room 103 at LSC. **Parenting**—The Stepfamily Association of America is an educational and support group for stepfamilies nationwide. There are two chapters in Denver, each meeting monthly and offering several family events each year. For more information about activities, meeting times, and places, call (evenings only) Susan Bloomquist 973-1177, Vicki Wehling 688-0291, or Don Nye 427-9469.

Weight Watchers—Classes for Martin Marietta employees will begin at Goddard Junior High School, 3800 W. Berry Ave. on Oct. 15. A free information and registration meeting is scheduled at 4:45 p.m. Wednesday, Oct. 8. The eight-week session costs \$56. The \$19 initiation fee has been waived for the corporate program. Registration forms are in the recreation racks and need to be sent with payment by Oct. 8 to the employee services office, MS 1344.

Volleyball—Employees knowledgeable in USVBA rules of play are needed as volleyball referees for Wednesday night open league and Thursday night coed B semicompetitive league volleyball games. Officials will referee three to four games per night and will be paid per game. For details, call the employee services office, Ext. 7-6605 or 7-6750.

Discounts-A limited supply of Gourmet Choice Books is available, two for the price of one, until 10/15/86 or until sold out (whichever occurs first). The price is \$30 for two books and two cards. Cards are valid through November 1987. Checks are to be made payable to Martin Marietta. Include badge number. Purchase from the recreation office, Eng. Bldg., Room 124G, at Waterton, or from the following volunteer recreation representatives: DSC I, Room 167-Kay Shuey; S. Lincoln, Personnel Office-Lucy Winka; Greenwood Bldg. 6020-Melinda Pastore; LSC, Room 133C-Jamie McAnally; Terrace Towers, 8th Fl., east side-Jerre Chapman.

Riding—The Ridge Riders Saddle Club will meet at 7 p.m. Tuesday, Oct. 7, in the club meeting room at the recreation area.

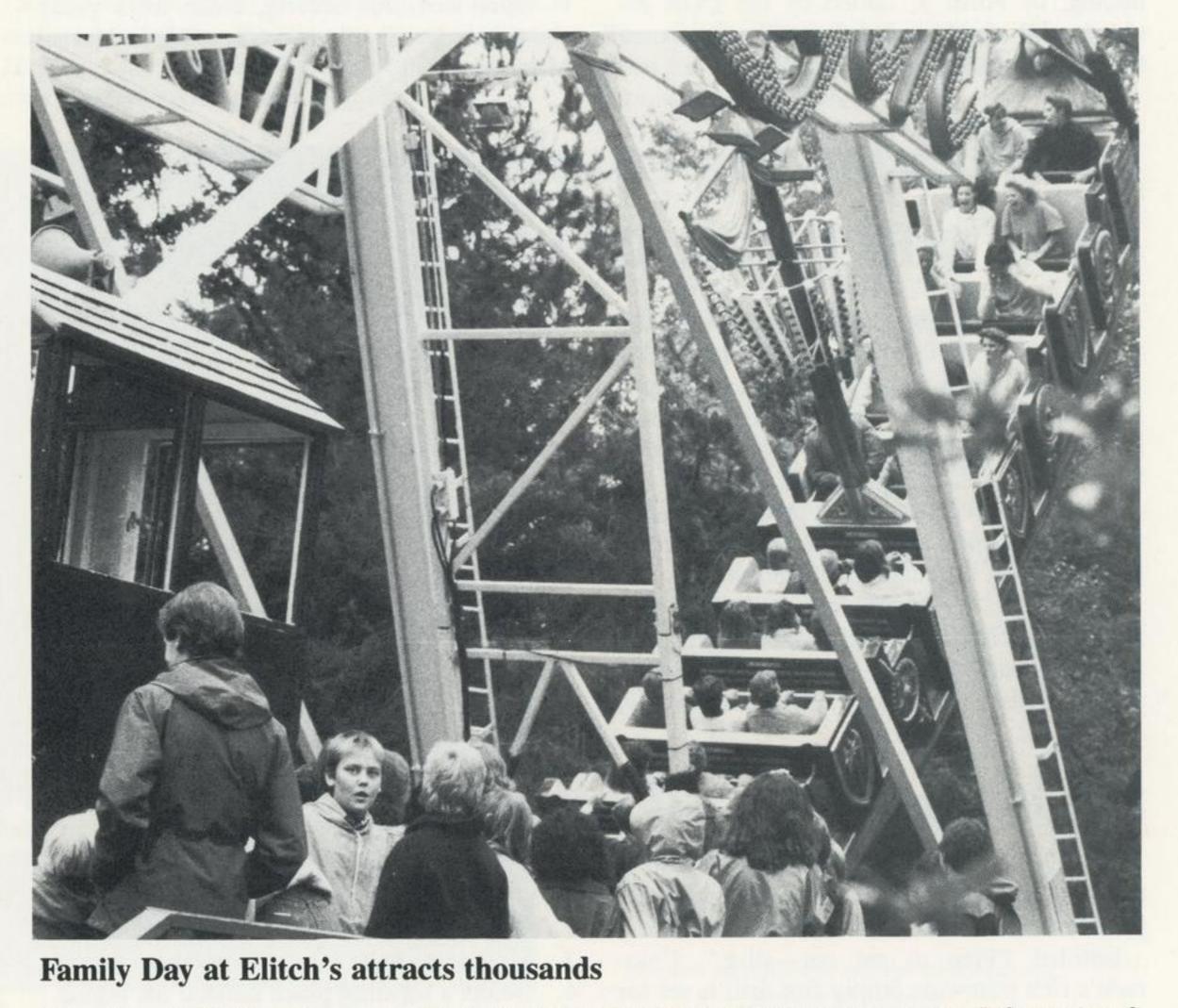
Amateur Radio—The Waterton Amateur Radio Society will meet at 5 p.m. Tuesday, Oct. 7, in the Hamshack, west side of the recreation area.

Auto Emission Testing—Testing at work locations will be Oct. 6, 7, and 8 at the following sites: Monday, Oct. 6, Waterton Facility; Tuesday, Oct. 7, Greenwood Commons and Littleton Systems Center (LSC); and Wednesday, Oct. 8, Denver Systems Center (DSC). Detailed schedules are in all recreation racks. Consult schedules regarding designated key drop points. Car keys must be left at drop points before 8:30 a.m.

Lodging Discounts—Keystone Resort offers discounts on lodging to Martin Marietta and other corporations belonging to the Denver Area Employee Services Recreation Association (DAESRA). To take advantage of the savings, follow these steps:

- Call the Keystone Reservation office on the Denver toll free number, 534-7712.
- State that you are an employee of Martin Marietta and that your employer is a member of DAESRA.

Lost and Found—A man's wedding band recently was found at the softball fields. Inquire at the employee services office, Ext. 7-6605 or 7-6750.



Upon check-in at the front desk, present your company identification or your most recent company paycheck stub.

More than 16,000 employees and their family members from Denver Aerospace, Information & Communications Systems (I&CS), and Data Systems attended Family Day at Elitch Gardens Sept. 6 and 20. The family days were the last company-sponsored events in 1986.