

MARTIN MARIETTA

news

DENVER AEROSPACE

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Engineering Bldg
Mural

Martin Marietta 2nd quarter net \$2.06 vs \$1.80

Martin Marietta reported record second quarter net earnings of: \$74,123,000—or \$2.06 per common share (\$1.93 fully diluted), compared with \$1.80 per share (\$1.67 fully diluted)—or \$56,975,000 in the same period last year.

Second quarter sales increased to \$1,175,985,000 from \$953,475,000 a year ago. Both earnings and sales were at record levels for any quarter. Per-share earnings were calculated on a higher average base of 34,704,131 common shares outstanding, compared with 30,055,073 in the same 1983 period.

Six-month net earnings were \$98,964,000 on sales of \$2,243,985,000—or \$2.70 per share (\$2.57 fully diluted)—compared with net earnings of \$70,786,000—or \$2.27 per share (\$2.16 fully diluted)—on sales of \$1,755,397,000 for the first half of last year.

Thomas G. Pownall, chairman and chief executive officer of Martin Marietta, said: "The primary elements of the strong sec-

ond quarter performance were excellent gains by the Aerospace and Basic Products companies and a swing in aluminum from a second quarter loss last year to a modest quarterly profit. However, the persistent weakness of metal prices worldwide, coupled with noncompetitively high energy costs in the Pacific Northwest, lead us to a less optimistic view of aluminum prospects for the full year. All other operations look strong for the remainder of the year."

The Corporation's earnings from operations of \$92,752,000 in the second quarter were more than double the \$39,972,000 recorded a year ago.

Long-term debt continued to decline to \$525 million at the end of the second quarter, and has been reduced further to a current level of \$455 million, a debt-to-capital ratio of 33 percent. Second quarter interest expense was \$16,217,000 compared with \$27,477,000 in the same period last year.

Corporation declares 33 1/2 cent dividend for Sept 28

Martin Marietta Corporation's Board of Directors authorized a quarterly cash dividend of 33 1/2 cents per share on the company's common stock, to be paid September 28 to holders on record at the close of business September 4. The action continues the rate on Martin Marietta common, established in the fourth quarter of 1983, at \$1.34 on an annualized basis.

The board also authorized a quarterly cash dividend of \$1.2188 per share on the \$4.875 Convertible Exchangeable Preferred Stock. That dividend is payable September 14 to holders on record at the close of business August 13.

Martin Marietta names Davis to head New Orleans operations

Richard M. Davis has been named vice president and general manager of the Martin Marietta Aerospace Michoud division at New Orleans. The external fuel tanks for the space shuttle program are built at Michoud and, with its 4800 employees, Martin Marietta is the largest industrial employer in that city.



Davis

Davis replaces Kenneth P. Timmons who has announced his retirement at the end of this year. He is being transferred to Denver on special assignment to Norman R. Augustine, Denver Aerospace president. Timmons headed Michoud for more than five years and during that time oversaw the production and delivery of the first 20 external tanks and the successful flight of 11 of those tanks on the early shuttle missions.

"The Michoud division has enjoyed an impeccable record under Ken's leadership," said Augustine. "The external tanks have been delivered on time or ahead of schedule, below cost, and they

perform flawlessly. We are confident that Ric Davis will continue that kind of leadership as we increase tank production rates."

Robert W. Smith has been named to succeed Davis as divisional vice president, external tank project, a position Davis has held for four years. Smith has been director of development for the New Orleans operations since January 1983.



Timmons



Smith

Davis is a 1951 graduate of the Massachusetts Institute of Technology in aeronautical engineering. After graduation, he was commissioned in the U.S. Air Force, stationed at Wright-Patterson Air Force Base where he developed elevated-temperature testing techniques for advanced aircraft.

Denver Aerospace defense business outlook for 1984

Denver Aerospace, coming out of a record-setting business year during 1983 with almost \$2.8 billion in orders, had second quarter 1984 figures equally as encouraging.

The company's business base includes a backlog of \$3.67 billion as of June 30. That compares to \$1.19 billion at the same time a year ago. New growth and follow-on orders for the first two quarters of 1984 totaled \$1.7 billion, as compared to \$730.4 million for the same 1983 accounting periods.

Forms due for reimbursed study

Educational Services has issued an urgent reminder that its "Application for Study under Company Auspices" form must be submitted for approval at least three weeks before university/college classes start. Those forms also are the first necessary step in the process of applying for company reimbursement of tuition and other academic fees.

Starting dates vary widely from school to school, but Monday, August 6, is the last date to meet the deadline for those interested in University of Colorado programs. Those intending to enroll in SURGE courses must turn in their registration forms to the Educational Services office in module 209, Engineering Bldg, ext 5689, by Friday, August 10.

June PSP unit values set

Unit values for the Performance Sharing Plan (PSP), as of June 30, 1984 were: (May's figures are shown in parentheses for comparison.)

- FUND A (indexed equity), 2.1825920917 (2.1414011491);
- FUND B (fixed income), 1.9268591769 (1.9089613523);
- FUND C (Martin Marietta stock fund), 2.1124064101 (2.1055080821);
- FUND D (TRASOP), 0.8350167830 (0.8318217424).

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DENVER AEROSPACE
P.O. Box 179—Denver, CO 80201

July 26, 1984

Something for all ages at family open house Aug 25, first since 1980



Denver Aerospace's fire truck at the main plant and firemen's gear were among the show-stoppers for these unidentified youngsters during the company's last family open house in 1980.

The family open house Denver Aerospace has scheduled for Saturday, August 25, is being billed as the event with something for everyone, including an appearance by Vance Brand, the NASA astronaut and Longmont, CO native.

- Clowns distributing balloons for the youngest set.
- "Rare Moment," the musical group that does it all, from pop to country-western, for the in between.
- Airjazz, the trio on unicycles that can juggle just about any item their audiences offer.
- Four-color booklets on the manned maneuvering units (MMU) Martin Marietta designed and built for NASA. Astronauts Bruce McCandless and Bob Stewart used the MMUs last February to become

the first humans to fly in space without benefit of a lifeline, followed by George Nelson and James van Hoften during April.

- Commemorative pens. And, of course, hot dogs, soft drinks and cotton candy for all.

The day will kickoff at 9 a.m. in the front lobby of Engineering Bldg at the main plant for employees, their immediate family members, retirees, and Air Force Plant Representative Office (AFPRO) personnel and their families. A special issue of the Martin Marietta News, containing detailed tour route information will be distributed at that time. From the lobby, visitors will proceed to the second floor cafeteria in that building to view audio-visual presentations. The tour then continues to the the factory and a display of products and equipment. Bus transportation will be provided from the factory to other tour areas.

No cameras or tape recorders are allowed during the open house, but visitors will have ample time during the approximately 2 1/2-hour tour to see, among others, such areas as the space opera-



tions simulation (SOS) laboratory—where the astronauts trained for the MMU flights—and the clean rooms at the space support building (SSB) the company's showplace of exhibits and models highlighting 27 years of Denver Aerospace accomplishments.

Employees working at the Waterton facility will be able to visit their work areas with their families, except those areas listed as off limits for security or safety reasons, in accordance with schedules established by their supervisors. Those working at off-site locations may visit their areas with their families between 8:30 and 10:30 a.m., except where prohibited by security regulations.

Suggested arrivals for open house

The following schedule, by employee work areas, is recommended for arrival at the Waterton main plant for the family open house, August 25:

Factory and cafeteria, 9 a.m.; Inventory, GPL, VTF, and vibration and Acoustics Lab, 10 a.m.; EMF, Engineering Bldg, 11 a.m.; Administration Bldg, RDL, SSL, and SDF, 12 noon; DSC, West Point, and GEPS, 1 p.m.; SSB, LSC and Greenwood, 2 p.m.; all others, 3:30 p.m.

People behind the 1984 family open house

An undertaking as logistically complex as the August 25 family open house works only because of the hundreds of individuals involved in its planning and execution. Heading up the various committees for the 1984 event are:

Advisory committee: Dennis Cook, personnel; Arthur Koski, public relations; and Robert Snodgrass, facilities; **Operations and tour route:** Leroy Hollins, recreation; and Fitzroy "Buck" Newsum, public relations; **Exhibits and displays:** David Whitaker and David Welch, public relations; **Operations and services:** Robert Smith, maintenance; **Entertainment:** Lori Sharp, recreation; **Security:** Al Sulzer and Bill Barnish, both from plant protection; **Safety:** Ron Halcomb and Bob Hillyard, both from personnel; **Food service:** Phyllis Montgomery and Chris Nelson, both from facilities; **Medical:** Dr. Leonard Kowalski, personnel; **Transportation:** Ken Betz and Jim Sanford, facilities; **Communications/publicity:** Bill Vaile, public relations; **Plant operations:** Betty Purkey, Bud McAnally, Tom Marsh, and Nolan Pass, all from manufacturing; and **Protocol:** Irma Jean Guire, business development.

August CPR classes scheduled by skills training

Skills training, in conjunction with the Colorado chapter of the American Heart Association, has scheduled another round of classes in the lifesaving technique of cardiopulmonary resuscitation (CPR).

The first class will be from 5:30 to 8:30 p.m., August 13-15; the second will be from 8 a.m. to 5 p.m., August 18. For registration information contact exts 6166 or 6167.

An estimated 42,750,000 persons in this country have one or more forms of heart or blood vessel disease. As many as 1.5 million may have a heart attack this year, and about 550,000 of them will die. CPR training can cut those statistics.

STOP PRESS

Martin Marietta organizes new \$200 million information, communications company; Polutchko named president



Martin Marietta Corporation has announced the formation of Martin Marietta Information & Communications Systems, a new operating company to focus the Corporation's resources and expertise in various information technologies on a rapidly growing market.

Robert J. Polutchko, elected a vice

president of the Corporation July 26, 1984, will be president of Martin Marietta Information and Communications Systems. He will be located at Bethesda and will report to Caleb B. Hurtt, senior vice president of the Corporation. Mr. Polutchko has been General Manager of Denver Aerospace's space and electronics systems division for the past two years.

The new Information and Communications Systems organization begins with a projected 1984 sales base of approximately \$200 million and has current employment of 2000, mostly in Denver and Washington, D.C. It will apply resources from Martin Marietta Aerospace, to the design, development, production, and operation of systems that employ advanced software, hardware, and man/machine interface technologies for information and communications systems, worldwide, both for defense and non-defense. Its formation is another step in Martin Marietta's strategic plan to create new growth opportunities by bringing the Corporation's extensive technological resources and experience to bear on selected markets.

"We see attractive growth opportunities in the field of electronic in-

formation management and communications systems," said Thomas G. Pownall, Martin Marietta chairman, and this concentration of common systems and technologies will enable us to better integrate existing capabilities to the benefit of our present customers and to identify future strategies in an expanding military and commercial marketplace."

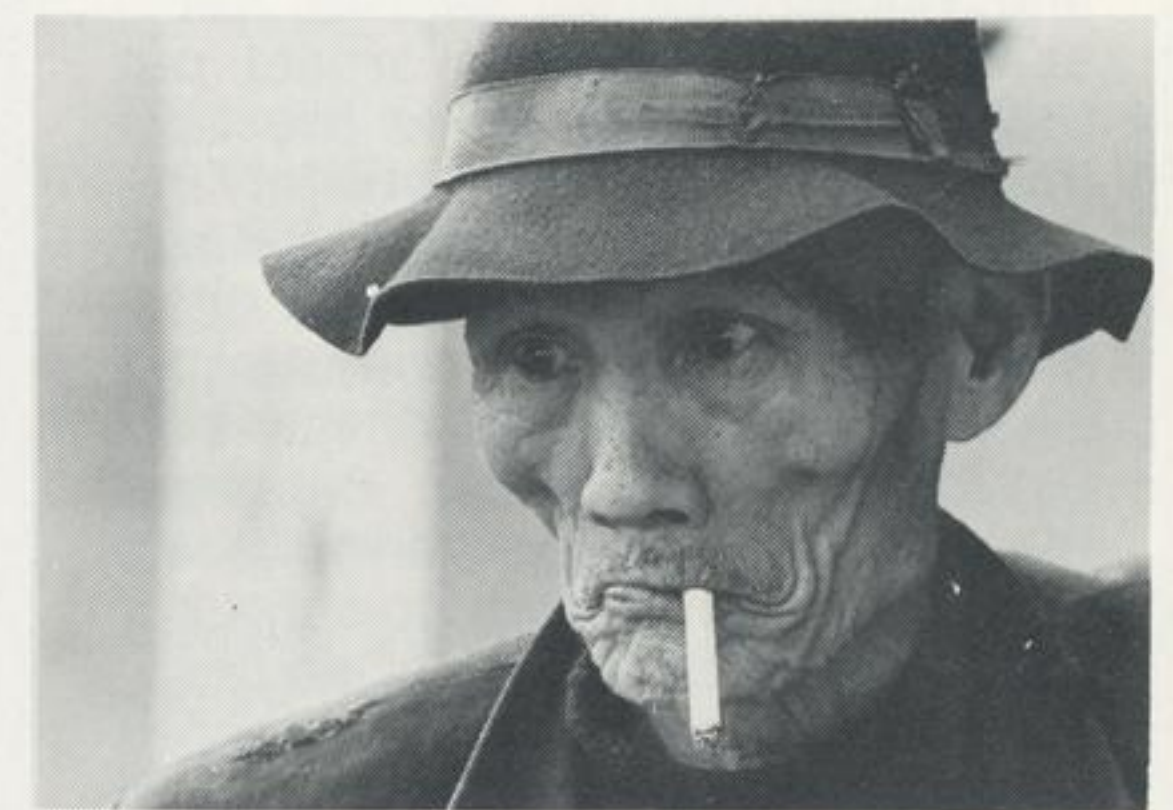
Included in the new company will be the Air Traffic Control division located at Washington, DC; command, control, communications, and intelligence (C³I) programs of Martin Marietta Aerospace at Denver, CO including ORB and C&IS special projects; a tactical command and communications system (CNCE) under development at Orlando Aerospace; and the Corporation's communications satellite element at Bethesda, MD.

"These moves recognize the importance of these information-related technologies and our penetration of these business areas," said Norman R. Augustine, President of Denver Aerospace. "The new company enhances the growth potential of the Corporation and career opportunities for our people."

Employee wins, places and shows in NESRA photography contest



"Interlude," by Janice Stephenson, computer librarian for Denver Aerospace's information systems, recently won first place in the color open-prints category of the 1984 National Employee Service Recreation Association (NESRA) photo contest. Her photograph also earned a second place in the color prints division. A total of 250 photographers, representing 45 organizations, submitted 541 entries for the contest. Winning photos were exhibited at the annual NESRA conference which was held at Breckenridge, CO this year.



Human interest, black and white print, third place honors went to Michele Elm, Data Systems computer operator, for "Longevity".

You can't get blood from turnips

Donors are being sought for the August 23 visit of the Belle Bonfils mobile blood unit to Littleton Systems Center (LSC) in conference room 104-E.

Appointments should be made by August 20 to donate blood during the 9 a.m. to noon and 1-2:30 p.m. periods. Employees at LSC should contact Mary Greenwood or Bev Cupp at exts 6605 and 6750 to set up their appointments. Lucy Winkam ext 2818 is the contact for those at the South Lincoln facility (GEPS).

Denver Aerospace shares 'space tug' pact; aim is 1990

NASA has taken a major step toward development of an unmanned "space tug" that would start flying in 1990 to ferry satellites to and from space shuttles in orbit above Earth.

Last week the space agency awarded preliminary design contracts for the orbital maneuvering vehicle (OMV) to Denver Aerospace, LTV Aerospace of Dallas, TX, and TRW, Inc. of Redondo Beach, CA. Each company will have 12 months to conduct its design work. Then NASA will select one of the companies to build the spacecraft.



Bergonz

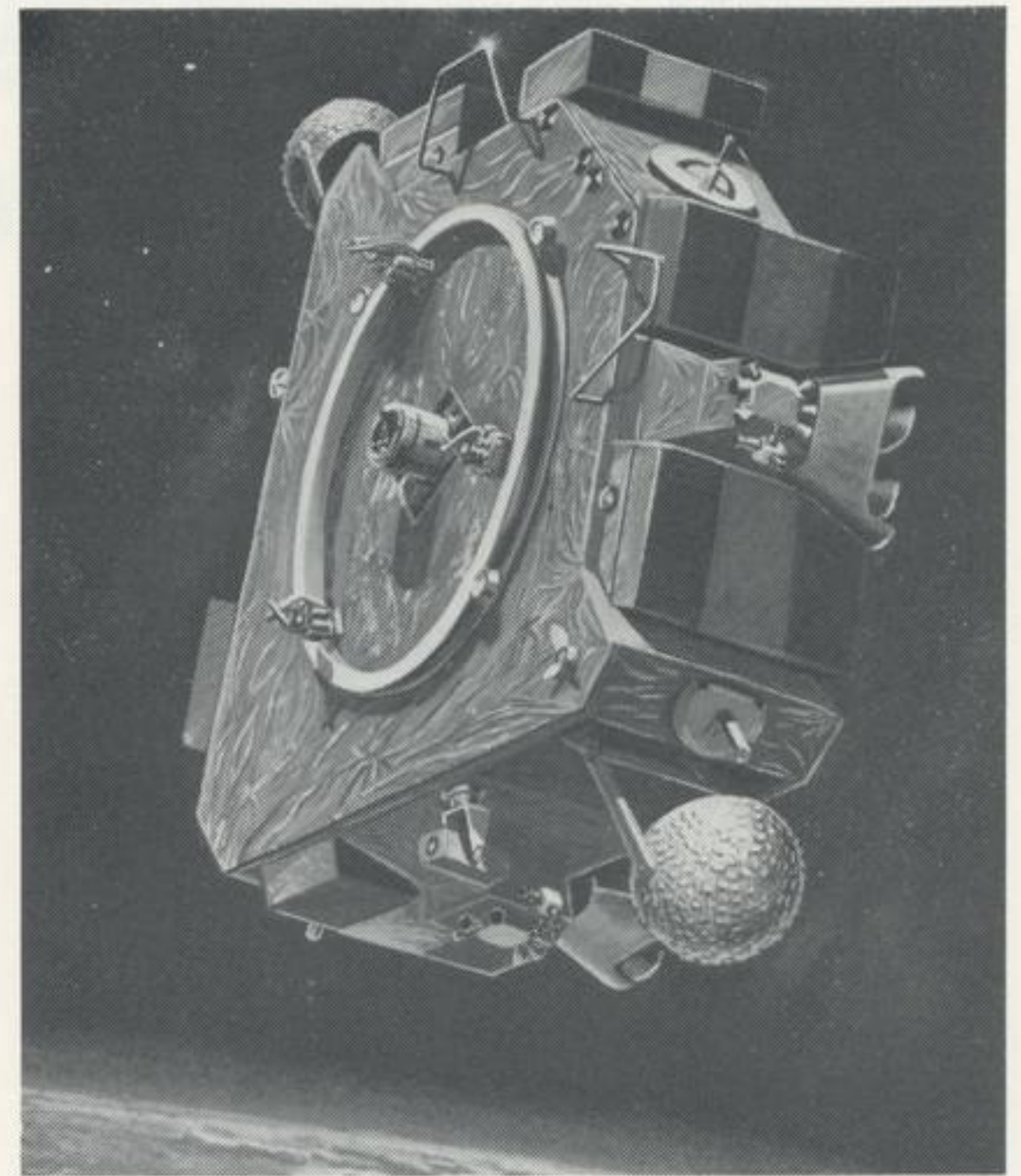
The three 12-month, fixed-price contracts have a combined value of about \$5 million. Francis H. Bergonz is project manager for Denver's OMV design effort.

Norman R. Augustine, Denver Aerospace president, in a note to the OMV team, extended congratulations "on your superb win...we are very proud of your accomplishments and look forward to giving the next phase of this undertaking our absolute best shot."

The OMV would supplement the present Space Transportation System (STS), the heart of which is the space shuttle, and would extend the reach of the shuttle to about 1000 miles above Earth. The vehicle has the ability to retrieve satellites from high orbits, bring them back to the shuttle for maintenance and repairs, and return the refurbished satellites to their operational orbits. The OMV would also reboost satellites as their orbits gradually decay, avoiding costly shuttle missions.

As envisioned, the OMV would be a remotely-piloted unmanned spacecraft approximately 15 feet in diameter and three feet in length. Life of the vehicle would be about 10 years with refurbishment. On-orbit maintenance would be included in the design.

First, the OMV would be deployed from the shuttle for short duration missions.



OMV concept by Denver Aerospace Graphics section artist Charles O. Bennett.

Later it would remain in orbit for extended periods for use in shuttle-based and space station-based missions. Its role as support for a future space station program is viewed as one of OMV's essential attributes. The vehicle is expected to be available for assembly and buildup of a space station, proposed by NASA in the early 1990s. The OMV would become an essential element of space station operations.

In addition to the three contract winners, four other companies had submitted OMV proposals to NASA: Boeing Aerospace Company, Seattle, WA; General Dynamics Corporation; Convair Division, San Diego, CA; Lockheed Missiles and Space Company, Sunnyvale, CA; and Rockwell International, Downey, CA.

Library gets new acquisitions

The research library, located in second floor module 226 of the Engineering Bldg, has added a variety of new books to its reference and circulating collections.

Among those volumes added to the reference shelves are: *Handbook of Batteries and Fuel Cells*, *Perry's Chemical Engineers' Handbook*, and the 1984 edition of the *Damage Tolerant Design Handbook*. New titles in the circulating collection include: *Programming in Ada*, *The Handbook of Artificial Intelligence*, *Successful Project Management*, and *An Introduction to Robot Technology*.

The library also recently purchased the latest American Institute of Aeronautics and Astronautics (AIAA) conference proceedings, including the 10th Communications Satellite Systems Conference, the 8th Aerodynamics Deceleration and Balloon Conference, and the 19th Thermophysics Conference. Individual papers from those conferences are available on microfiche and may be reproduced in hard copy.

On the cover

J. Douglas Ratcliffe (on ladder) and Robert Murray, Denver Aerospace Graphics section artists, put the finishing touches to the new mural in the stairwell between the first and second floors of Engineering Bldg just in time for the company's family open house, August 25. Philip H. Hayward, another Graphics section artist, designed the overall layout for the mural. Its centerpiece is a blown up cutout of a photograph of Bruce McCandless, the first astronaut to fly untethered in space last February 7 with the manned maneuvering unit that Martin Marietta designed and built for NASA. The space scene behind the photo is the work of artist Charles O. Bennett. From top to bottom on the opposite wall are company artists' conceptions of the orbital maneuvering unit (OMV) and the transfer orbit stage (TOS) both by Murray and the Venus radar mapper (VRM) by Joseph S. Lannerd. Not shown in this picture, but also top to bottom on the third wall of the mural are Graphics artists' concepts of a tethered satellite by Bennett, a space station by John G. Tieleman, and an orbital transfer vehicle (OTV) by Murray.



Recreation

(Editor's note—Martin Marietta Denver Aerospace's Recreation Department, exts 6750 and 6605, is located in Engineering Bldg, module 124. Flyers on sports and other extracurricular activities, discounted tickets, special sales, and trips are available from that office and from the information racks throughout the company.)

ALPINE—The Rocky Mountain Alpine Club (RMAC) has scheduled a "full moon" weekend backpack into the Mount of the Holy Cross Wilderness Area for August 10-12 (Brian Gallagher, ext 6469 or 791-2143). Also planned August 18 is a session on intermediate rock climbing and an introduction to advanced rope techniques at Kenny's Peak (Marc Brideau, ext 8346)

CHESS—DSC snack-a-teria is the site, August 16, of the 6:30 p.m. Martin Marietta Chess Club meeting and competition night (Dick Pickerell, ext 5891 or Jerry Farmer, ext 8114)

HUNTING/FISHING—Skyline Hunting & Fishing Club will hold a "bull-roast" for members, family and guests, August 12 (Ed Mielkus, ext 9563). The club will be conducting a hunter education class from 7-9:30 p.m., August 7, 9, 14, 16, 21 and 23 at DSC and from 8 a.m. to noon August 18 at the club's range in the company's recreation area. Cost is \$5 a person (Dick Benson, ext 6209 or 985-3728).

PHOTOGRAPHY—The Platte Canyon Photo Club will meet at 7:30 a.m. for nature photography and a picnic in Estes Park August 19 (Tim Sobotka, ext 4432).

RADIO—The Radio Club's August 7 meeting will feature a presentation by Hal Beaver on "The Courage Handi-Hams" at the radio shack atop the hill in the company's recreation area. Guests are welcome (Tom Fulton, ext 2930).

RIDING—Cowboy polo will follow the 8:30 a.m. O-Mok-See conducted August 11 by the Ridge Riders Saddle Club at the company's recreation area. (O-Mok-See is an Indian word for a variety of horse racing competitions that include barrel and flagpole events.) An open O-Mok-See is also scheduled for noon August 19. A family night square dance will begin at 6 p.m., August 15 at the recreation picnic area (Frank Roe, ext 9592).

WEIGHTLIFTING—The newly refurbished weight room in the upper level of the company's recreation area is open from 7 a.m. to 10 p.m. Monday through Friday and from 7 a.m. to 6 p.m. Saturday and Sunday. It is equipped with Universal weight equipment (Mary Greenwood, ext 6750 or 6605).



"Project Referral" trip winner Janice Strand and her husband, Doug, with rental 1984 Mustang convertible at Cape Canaveral.

Trip winners in 'Project Referral' tout shuttle experiences

For the first "Project Referral" drawing winner, software engineer Janice E. Strand, the free VIP junket to Florida's Cape Canaveral to view a space shuttle launch "was a very memorable trip; we really had a good time."

Frank Davis, senior engineer in test operations, another trip-for-two drawing winner thought, "the most spectacular part was seeing that baby (the shuttle) take off...; it really makes you feel insignificant. As for the tour, it was great! Everything was first class."

Even the disappointing shutdown of the first flight of the space shuttle orbiter "Discovery" wasn't a total disappointment to Joseph F. Kutsner, a group engineer in the test area. "The countdown itself was very thrilling even so. And, of course, I thoroughly enjoyed the tour, and the slides and talk by a 25-year veteran of the space program was excellent."

"Project Referral" is a program Denver Aerospace initiated late last year to "encourage each of our employees to help find capable, qualified, high integrity people to join our team," said Norman R. Augustine, president. At that time he noted the program "is an extremely effective way to recruit because we get candidates known to somebody we trust—our own employees."

Employees can earn \$2000 bonuses for each of their professional referrals who are hired as labor grade 43 or above (except new college graduates). In addition to the bonuses, employees also qualify automatically for mid-month drawings to award a trip for two to a space shuttle launch from the Cape. "Project Referral" drawing winners receive airfare to Cocoa Beach, meals, lodging, and a rental car for four days and three nights. They and their guests also get to witness the launch from the VIP viewing area and attend other selected functions. Any employee who submits a qualified referral—a person actually called in for a job interview—whether it results in a hire or not, also re-

ceives a special "Project Referral" notebook.

To date, \$570,000 and nine trips to the Cape have been awarded to Denver Aerospace employees under the referral program that has resulted in 285 new Martin Marietta employees.

"Once more our employee referral program is proving to be one of our most successful means for finding qualified professionals," Augustine said. "I'd like to thank everyone who has contributed to the program so far and, because a number of critical skill positions are still open, I urge your continued support."

Most recent among the regular monthly drawing winners were Tom F. Noble, a senior buyer in materiel, and Steven E. Deatherage, a senior engineer in test.

Recently, a special bonus program was initiated in the referral program which increased employees' chances of winning the trip drawing. Winner of that May-bonus month drawing was Richard O. Trummer, engineering manager on a special project. Other bonus months are planned for coming months.

Detailed information is available from personnel staffing, ext 2731. Employees with referral possibilities should get "Project Referral" applications from department or personnel administrators and submit completed applications to personnel staffing, mail stop L1311, Littleton Systems Center.

