MARTIN MARIETTA

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DENVER AEROSPACE

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CU president Gee, far left, Teets, center, Denver Aerospace president, and Governor Lamm discuss Onizuka scholarship fund during press conference February 13.

Company grant gives start to Onizuka scholarship fund

Martin Marietta Corporation gave \$10,000 recently to a scholarship fund established at the University of Colorado in memory of Ellison S. Onizuka. Onizuka, a CU graduate, died in the space shuttle explosion January 28.

Peter B. Teets, Denver Aerospace president, who presented the check to CU president E. Gordon Gee, urged other businesses to contribute.

"The loss of the Challenger crew is a tragedy felt by all of us, and we are grieved by their passing," Teets said. "Nevertheless, we are buoyed up by the spirit of the families of the Challenger crew, who have urged Americans 'to keep the dream alive' by continuing the manned exploration of space."

Onizuka earned bachelor's and master's degrees in aerospace engineering at CU. Aboard the shuttle with him was the CU-designed Spartan-Halley satellite that was to analyze the gaseous makeup of Halley's comet.

Gee said there may be enough money to support more than one student a year, starting as early as next year.

"It's my understanding that Ellison was especially interested in student involvement with the space shuttle," Teets said. "This fund can help further that goal."

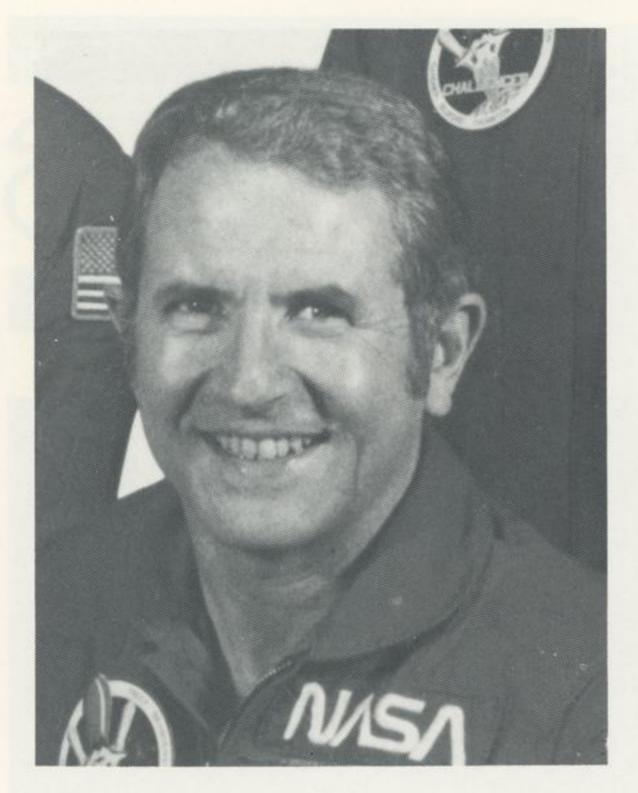
"I trust that today will be a further tribute to Ellison Onizuka and to the entire Challenger crew, and that this scholarship fund will grow



Ellison S. Onizuka

in recognition of the vital projects this nation is undertaking in space," Teets said.

Governor Richard Lamm, and presidents Teets and Gee are signing a letter to send to individuals around the state urging support to the fund.



Richard H. Truly

Jesse W. Moore

Truly named to NASA post

Former astronaut Richard H. Truly was named February 20 to succeed Jesse W. Moore as the NASA associate administrator for space flight at NASA Headquarters, Washington, D.C.

Truly, a 48-year-old Navy rear admiral, has made two shuttle flights, the first in November 1981 aboard Columbia and the second in the summer of 1983 as commander of Challenger.

Jesse Moore was appointed director of the Lyndon B. Johnson Space Center, Houston, on January 23, 1986. He will assume this position May 1986.

Moore became associate administrator for space flight in August 1984. He came to NASA Headquarters in 1978 from NASA's Jet Propulsion Laboratory, Pasadena, Calif., where he began in 1966.



United Way applauds employee contributions

Robert Blanz, seated, right, president of Mountain Bell and general chairman of the Mile High United Way last year, presents Peter B. Teets, seated, Denver Aerospace president, with plaque in appreciation of employee donations to the United Way in 1985. Standing, left to right, are Richard E. Weber, vice president, personnel and facilities, and chairman of the United Way effort for Denver Aerospace last year; Karen J. Cutler, senior vice president of the resource division of the Mile High United Way; and Michael J. Kelly, chief, employee/labor relations, and coordinator of the United Way effort for Denver Aerospace.

Two programs rated excellent

The inertial upper stage (IUS) independent verification and validation (IIVV) program has earned an "excellent" rating, and an award fee evaluation of 94.5 percent from the Air Force Space Division.

The Space Launch Systems Division was notified of the IIVV contract performance for the period ending September 30, 1985 on January 31, 1986.

On the same day, negotiations for an 18-month extension to the Department of Defense mission integration support contract (MISC) were successfully concluded with the Air Force Space Division. Both the IIVV and MISC efforts are part of the Space Transportation System integration and operations product line in Space Launch Systems.

Jim Nelson, director of integration and operations, said that these announcements "are another indicator of our customer's confidence in our ability to perform, and recognition by them of the significant contribution both programs make to the successful integration of DOD payloads to the shuttle."

Martin Marietta has been performing the IIVV effort since 1977. This is the fourth consecutive excellent rating over the past 22 months, with an overall score of 94.3 percent for the four periods. IIVV Program Manager, Ken Graham, attributes the excellent ratings "...to outstanding technical achievements combined with effective interface working relationships with other contractor personnel." In addition, Graham cites significant cost reductions through innovations in both technical and management approaches.

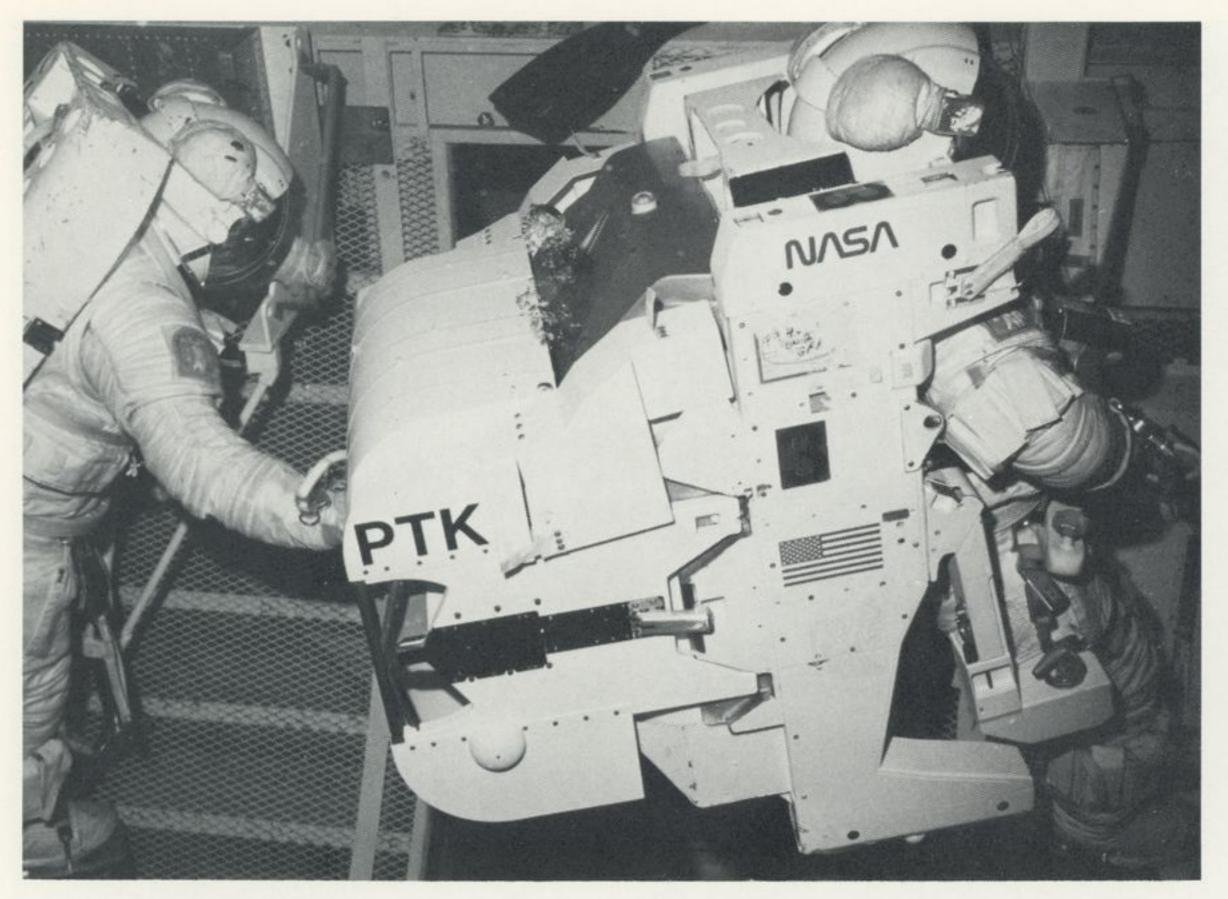
Robert Lewis, MISC program manager, congratulated the MISC personnel for their excellent past performance and "...their superb dedication exhibited during the proposal effort."

The teamwork of MISC personnel was cited as a significant factor in the Air Force decision to award Martin Marietta a sole source extension as opposed to undertaking a competitive procurement. MISC efforts include such activities as payload specialist training, flight operations, engineering, and safety analyses for a number of DOD payloads. The work is performed in Denver, Colo.; El Segundo, Sunnyvale, and Vandenberg Air Force Base, Calif.; Houston, Texas; and Kennedy Space Center, Fla.

I&CS announces change in planning organization

Ronald K. Powell has been appointed director of planning for Denver Information & Communications Systems (I&CS). The planning organization will report to I&CS operations under Reid H. Clausen, vice president.

Powell joined the company in 1957 and has served most of his 29 years in successive planning assignments. He was manager of planning for Space Systems, Denver Aerospace.



Astronaut Mark Lee engages the hand-operated latch of the PTK, which attaches it to the MMU, as astronaut Bruce McCandless tests the new device during underwater activities.

Propellant tank kit adds to capabilities of MMU

A propellant tank kit (PTK) designed by Denver Aerospace will extend the range and flight time of the manned maneuvering unit (MMU).

Following nine successful MMU missions on three shuttle flights, NASA astronauts recommended increasing the gaseous nitrogen fuel capacity of the MMU. The PTK is being designed to house two 2,570 cubic inch tanks to supplement the two 1,600 cubic inch tanks of the MMU.

Underwater evaluations of a PTK mockup (built at Denver Aerospace's model shop) were recently conducted in the weightless environment training facility (WETF) at NASA's Johnson Space Center in Houston, Texas.

During the tests, astronauts Bruce McCandless and Mark Lee simulated operations of the PTK in the orbiter payload bay. The astronauts verified operational concepts and crew interfaces with PTK mechanisms. Earlier evaluations of the PTK configuration in the space operations simulator (SOS) lab indicated that controllability of the MMU/ PTK system is adequate for flight operations. The PTK latches to the back of the MMU and connects to the MMU propulsion system via flex hoses and quick disconnects, explained Leslie J. A. Rogers, systems engineering lead. The PTK then increases the MMU delta velocity capability by nearly 100 percent, which essentially will double the time and distance available to the crew member. The PTK will weigh less than 200 pounds, 41 pounds of which is nitrogen, Rogers said.

The PTK will be launched and stored in a flight support module (FSM) aft of either the port or starboard MMU in the orbiter's payload bay. Both flight MMUs will be modified to accept the single PTK protoflight unit.

"Based on the successful completion of the WETF evaluations, design of the PTK/FSM is proceeding," Rogers said. The hardware should be available for onorbit flight testing and use in 1987.

MARTIN MARIETTA NEWS

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News briefs

Project Referral winner sets record for program



George L. Coggan

During the last year, George L. Coggan referred nine friends to Denver Aerospace, all of whom were hired.

Coggan, a senior staff engineer for systems operations in support of an Air Force contract at the Satellite Test Center in Sunnyvale, Calif., earned \$2,000 for each employee hired.

In addition, during the Project Referral drawing in January, Coggan's name was selected to receive a trip to attend a space shuttle launch.

VAFB manager selected for executive program



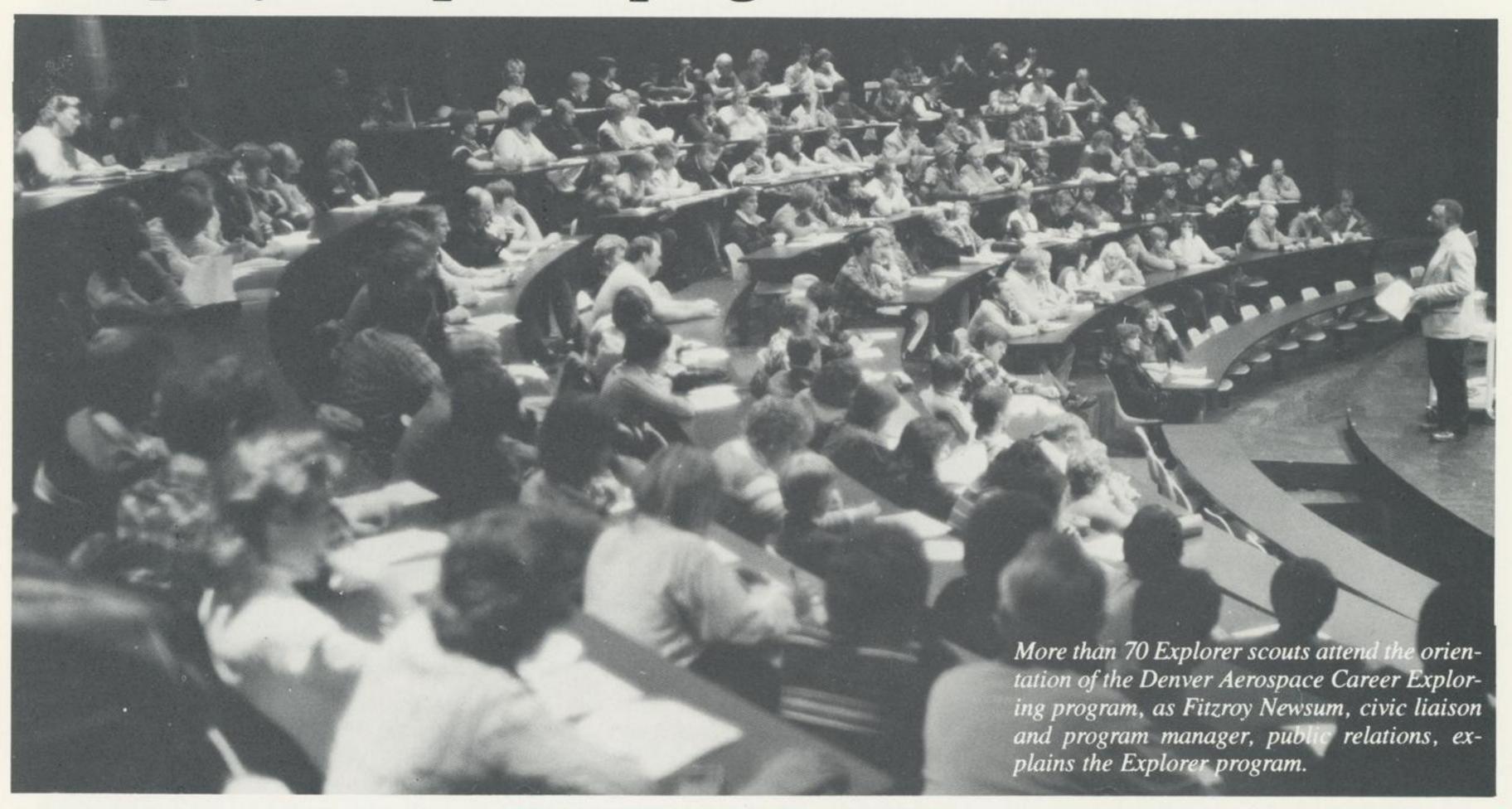
Paul A. Diller

Paul A. Diller of Santa Maria, CA, has been selected to attend the distinguished Massachusetts Institute of Technology Program for Senior Executives. Diller, 47, manager of Finance for Martin Marietta's Vandenberg Operations, will be attending the nine-week course at MIT's Sloan School of Management.

This specialized program was designed to enhance management skills of executives.

Diller has 25 years of experience in aerospace finance, and earned a Bachelor of Science degree in accounting from San Diego State University in 1961.

Company's Explorer program attracts 70 students



"Exploring" is the young-adult division of the Boy Scouts of America. The Explorer student program at Denver Aerospace this year involves more than 70 young men and women aged 14 through 20 and matches their interests with adult expertise and program resources of Martin Marietta.

"The purpose of this program is to give the best information available on careers in aerospace and computer operations through tours, guest speakers, discussions, and projects," said Fitzroy Newsum, civic liaison and program manager for public relations. "The group meets twice a month throughout the school year with successful, highly qualified men and women in the computer field at Denver Aerospace and Data Systems."

Following their introductory session, Explorers have toured the Waterton facility; attended personal computer training at the Inverness Park Facility (IPF); and participated in a demonstration of a data conferencing session of artificial intelligence at IPF.

In addition, the students have viewed demonstrations of computer aided design (CAD) and computer aided manufacturing (CAM) at the Denver Systems Center, and have seen the simulation of the manned maneuvering unit at the Space Operations Simulator at Waterton.

Future activities will include tours of central software laboratories, robotics and artificial intelligence, information on conceptual designs for the space station, and opportunities to try state-of-the-art application programs in the computer training room at West Point.

"We feel we offer the students a dynamic and flexible program that can influence and enrich the lives of our next generation of citizens," Newsum said.

Corporate news

Shuttle children's matching fund deadline set

Martin Marietta Corporation will match until March 31 all employee donations to The Space Shuttle Children's Fund to aid the 11 children of astronauts who died in the Challenger accident last month. The fund, with first lady Nancy Reagan as honorary chairman, has been set up by the American Security Bank in Washington, D.C., which is administering the trust.

To contribute, make checks payable to the Space Shuttle Children's Fund. Send checks to Employee Services, mail stop 1344. The Corporation will match the gifts and forward the money to the bank.

Researchers develop new heart evaluator at Oak Ridge

Nuclear medical researchers at Oak Ridge National Laboratory in Tennessee have developed an improved bedside radionuclide generator for evaluating heart functions in both children and adults. The device produces a short-lived radioisotope, iridium-191m, for use as an imaging agent to detect blood volume and flow. The new generator, compared to existing generators, offers improved efficiency and much longer shelf life while limiting patient radiation exposure.

National safety award goes to Michoud Aerospace

Michoud Aerospace will receive the National Safety Council Award of Honor for the fifth consecutive year after completing 1985 without a lost workday caused by a job-related injury. The safety performance record at the Michoud Assembly Facility in New Orleans, La., continues into 1986 after 16 consecutive months and 14,302,353 man hours without a lost-workday injury.

Marketing vice presidents named by Corporation

Peter A. Abate and John Stap, Jr. have been named vice presidents responsible for the Corporation's marketing offices in the western and southern regions, respectively. They will report directly to Joseph N. Kremonas, vice president of marketing for the Corporation.

Abate, who has been director of the western region, based in El Segundo, Calif., since 1970, joined Martin Marietta in 1957. He held various engineering positions in Denver, Colo., and Cape Canaveral, Fla.

Stap, director of the southern region based in Huntsville, Ala., since 1973, joined Martin Marietta in 1960 in advanced technology sales in Denver. In 1964 he was promoted to director, Air Force requirements in Washington, D.C., and became director of the Houston regional office in 1969. In 1973 he began his current assignment as director of the Southern Region based in Huntsville, Ala.

Company grants license for tool index system

In 1984, Denver Aerospace granted Stanley-Vidmar, a division of The Stanley Works, an exclusive worldwide license to market the Tool Index System.

Stanley-Vidmar presented the completed and expanded tool index to Denver Aerospace February 4, 1986.

Developed by Denver Aerospace, the system is a unique computerized listing of more than 95 percent of all commercially available production tools by type. Hal L. Gariety and Clarence E. Bunnell are credited with formulating the idea as a spinoff of a wire numbering system to give better order to tool cribs.

The index also provides information about each tool to enable a production engineer to select the appropriate tools for a job and provides users with an inventory control of their tooling.

The data are generic and enable those who order tools to specify the ones needed, rather than ordering tools from thousands of different cataloges, explained William J. Devaney, president and general manager of Stanley-Vidmar. "This is a major breakthrough in tool identification, and Martin Marietta is lightyears ahead in the field," Devaney said.

"It began at Martin Marietta as a great idea, and the technology was transferred to us," Devaney said.



Tool index inventors Hal L. Gariety, seated, far left, and Clarence E. Bunnell, standing, far right, examine computer listing with, left to right, Phillip L. DeArment, business manager, business development international; James A. Strycula, Stanley-Vidmar; Stanley F. Albrecht, vice president, production operations; and William J. Devaney, president and general manager, Stanley-Vidmar.



Company recognizes long-term service anniversaries

Martin Marietta honored seven employees in February who celebrated 45-year anniversaries with the company. Those recognized include, left to right, beginning at the top of the stairs, Lester J. Lippy, James J. Healey, Jr., Thomas J. Sisk, Harry C. Bull, Daniel S. Jones, and Stanley W. Kirchner. Those on the left side of the stairs are Richard E. Weber, vice president, personnel and facilities, who officiated at the recognition dinner, and Howard C. Delcher.

There when needed, now they need you

PROJECT HELP AMERICA is the Denver metro area's way of assisting the American Red Cross Emergency Disaster Relief Campaign, and, according to Governor Richard D. Lamm, the American Red Cross has never been more financially troubled than it is now.

"An unprecedented series of major disasters in the United States has required the American Red Cross to commit more than \$49 million in aid and relief to disaster victims during the past four months," Lamm wrote in a recent letter to Peter B. Teets, Denver Aerospace president.

The amount committed to provide this food, clothing, shelter, and medical care to more than five million Americans will cost the Red Cross some \$15 million more than what was budgeted for the 12-month period ending June 30, 1986.

More than \$240,000 is needed from the Denver metropolitan area to help replenish these exhausted funds. The Governor asks that employees pledge support as soon as possible to the Mile High Chapter of the United Way by calling 399-0550; ask for the PROJECT HELP AMERICA special appeals coordinator.

The American Red Cross is a nonprofit organization, supported by voluntary contributions from the public.

Employee services/recreation



Last year's swim team in the Denver Corporate Games displays first-place medals. The Corporate Games will be Friday, June 6, and Saturday, June 7, to benefit the Colorado Special Olympics. Those interested in participating should watch for flyers in the recreation racks during the next few weeks.

Riding—The next meeting of the Ridge Riders Saddle Club will be held at 7:30 p.m., March 4, in the club room at the recreation area.

Radio—The Waterton Amateur Radio Society will meet at 5 p.m., March 4, in the hamshack (west side of the recreation area).

Chess—The Chess Club will meet from 6:30-9:30 p.m. on March 5 at the DSC snack area.

Archery—The Red Rock Bowmen will meet at 4:45 p.m., March 11, in the recreation club room.

Skiers—The Rocky Mountain Alpine Club plans the following activities:

-2/28-Avalanche seminar, all levels. Contact Dan Hawkins, ext 7-0727.

-3/1-Avalanche field class, Webster Pass, beginning skiers. Contact Dan Hawkins, ext 7-0727.

-3/9-Michigan Creek, beginning cross country. Contact Dan Hawkins, ext 7-0727.

-3/15-Deer Creek, beginners/ intermediate cross country. Contact Bill Dalton, 790-3404.

Hunting—Hunter education classes will be held at DSC I (Wadsworth Bldg) from 7-9:30 p.m. on March 18, 19, 20, 21, and 24, and from 8 a.m.-12:30 p.m. at SH & FC Range on March 22. Students must attend all six classes. The cost is \$7. No preregistration is necessary, but there must be a minimum of 10 students. NOTE: The course is required now for all trappers. For further information, contact Dick Benson, ext 7-5241, or 985-3728, or the recreation office, ext 7-6605 or 7-6750.

Hunting and fishing—The next meeting of the Skyline Hunting and Fishing Club will be at 5 p.m. on March 30 in the recreation club room.

Runners—The Waterton Sheepherders Running Club begins its 1986 spring race series promptly at 4:45 p.m., Thursday, March 6. Entry is free to Sheepherder members and their families, 50¢ to non-members. Schedules are available in recreation racks. For further information, contact John Huleatt, ext 7-7705, or Stan Barrett, ext 1-6422.

Golf—Arrowhead Golf and Country Club will become private April 1 and is making a special offer to Martin Marietta golfers:

-Regular membership-\$4,000; (maximum number of \$4,000 memberships is 100)

-Cut-off date for \$4,000 memberships-April 1. For further information, contact Ed Campbell, 759-3366.

Smoking cessation—Attend a free, company-sponsored introductory seminar from 5-6:30 p.m. on March 3 and 4, at Goddard Jr. High, 3800 W. Berry Avenue. Learn how to stop smoking in five days.

Bicyclers—The Mile High Rollers Velo Club will meet to discuss racing at 5 p.m. on Thursday, March 6, at the Meadows Clubhouse (see maps available in the recreation racks). For more information, call Tom Parmentier, ext 7-3717.

Auto emission testing schedule—All test times will be from 8 a.m.-3 p.m. unless noted. Schedules and key deposit envelopes are available in all recreation racks.

Location: Annex C parking lot (SW corner Admin)

Monday, March 3 Day: I Bldg., Admin. For:

Drop off & pick up key:

Plant Protection HQ (W of Admin)

Heliport (NE of RDL) Location: Tuesday, March 4 Day:

GPL, Factory, RDL, Eng. For:

and Hill

Drop off & pick up key:

Rec. Office, Eng. Room 124

EMF W parking lot Location:

Day:

For:

Wednesday, March 5 SSB, SSN, SSN-A, EMF,

AVL & SSL

Drop off & pick up key: EMF-I lobby

Greenwood Bldg. 8100 (S Location:

parking lot

Thursday, March 6 Day: Greenwood Commons For:

Drop off & and pick up key:

Bldg. 8100 Guard Station

LSC E parking lot Location: Thursday, March 6 Day:

LSC and GEPS For: Drop off & pick up key:

Main lobby, LSC

DSC S parking lot (S of Location:

DSC I)

Friday, March 7 Day:

For: West Point, Tishman, Linpro, DSC & ASC I & II

Drop off & pick up key: Main lobby, DSC

Drive-through schedule for LSC, DSC, second and third shifts:

LSC: Thursday, March 6—GEPS

will have drive-through time of 7-8 a.m. at LSC, E park-

ing lot.

DSC: Friday, March 7—ASC I &

II will have drive-through time of 7-8 a.m. at DSC I, S

parking lot.

3rd Shift: Tue., March 4, third shift

employees will have drivethrough time from 7-8 a.m.

at the Heliport.

DMA talk to focus on office technology

The Denver Management Association (DMA) will feature Dr. Ken Hoffman, vice president and general manager of Data Systems accounts division as guest speaker at its March 3 meeting.

Hoffman will discuss the activities and direction the accounts division plans in such areas as expert systems, modeling and simulation, and office automation as well as new approaches and technologies to develop application systems.

The meeting will begin at 5 p.m. at Chateau Pyrenees, 6538 South Yosemite Circle. Employees and guests are invited. For information and reservations, contact a DMA booster or call ext 7-6687 by February 28.