

MARTIN MARIETTA

news

ASTRONAUTICS GROUP

May 5, 1989 Number 10



Magellan

Teets encourages Denver residents to vote yes on May 16

By the year 2000, the number of passengers using Stapleton International Airport will double.

And without a new airport, Denver will lead the nation in delays by as early as 1996.

These figures, according to the Federal Aviation Administration (FAA), are just two of the many reasons Denver voters must take a serious look at the airport issue prior to voting on May 16.

"In my opinion, all the issues concerning the airport and its location already have been hashed out," Peter B. Teets, president of the Astronautics Group, said. "I feel it's time to vote yes, and get on with turning Denver into a significant national and international transportation hub for people and goods."

"I am convinced that the new airport will bring with it significant economic growth for the Denver metropolitan area and for this region."

—Peter B. Teets

Major concerns surrounding the current airport include safety and closed runways during bad weather. Both of these items have a solution—the new airport.

"I believe this is a very important issue for our region," Teets said. "However, regardless of an individual's position on this issue, I want to encourage people to voice their opinion and vote."

"I personally am in favor of the new airport," Teets said.

Notably, he actively supports a new airport for four simple reasons.

First, the runways at Stapleton are inadequate and unsafe because they are too close together.

Although Denver actually has more days of good flying weather than many U.S. cities, it's been notorious for delays because of runway problems.

"... the planned airport development has our full support."

—T. Allan McArtor

During bad weather, FAA rules require that parallel runways must be 4,300 feet apart to keep airplanes far enough away from each other. Stapleton's two east-west runways are 900 feet apart. Its north-south runways are 1,600 feet apart. Thus, during inclement weather two, and sometimes three, runways are closed.

Secondly, Teets does not feel expanding onto Rocky Mountain Arsenal is an option.

He is quick to point out that the Arsenal is polluted, and even if it were possible to expand onto it, the cleanup effort would take many years and would be prohibitively expensive.

"Expanding Stapleton onto the Arsenal also would undoubtedly lead to law suits by Adams County residents concerned about noise," Teets said.

Thirdly, some opponents feel a new airport is not needed because passenger traffic through

Stapleton has decreased slightly over the past two years.

Teets, however, does not feel this is a valid argument. The FAA predicts steady growth for the Denver airport. "I believe the FAA estimates for the future are accurate," Teets said. "They project significantly increased traffic over the next several years, traffic Stapleton is incapable of handling."

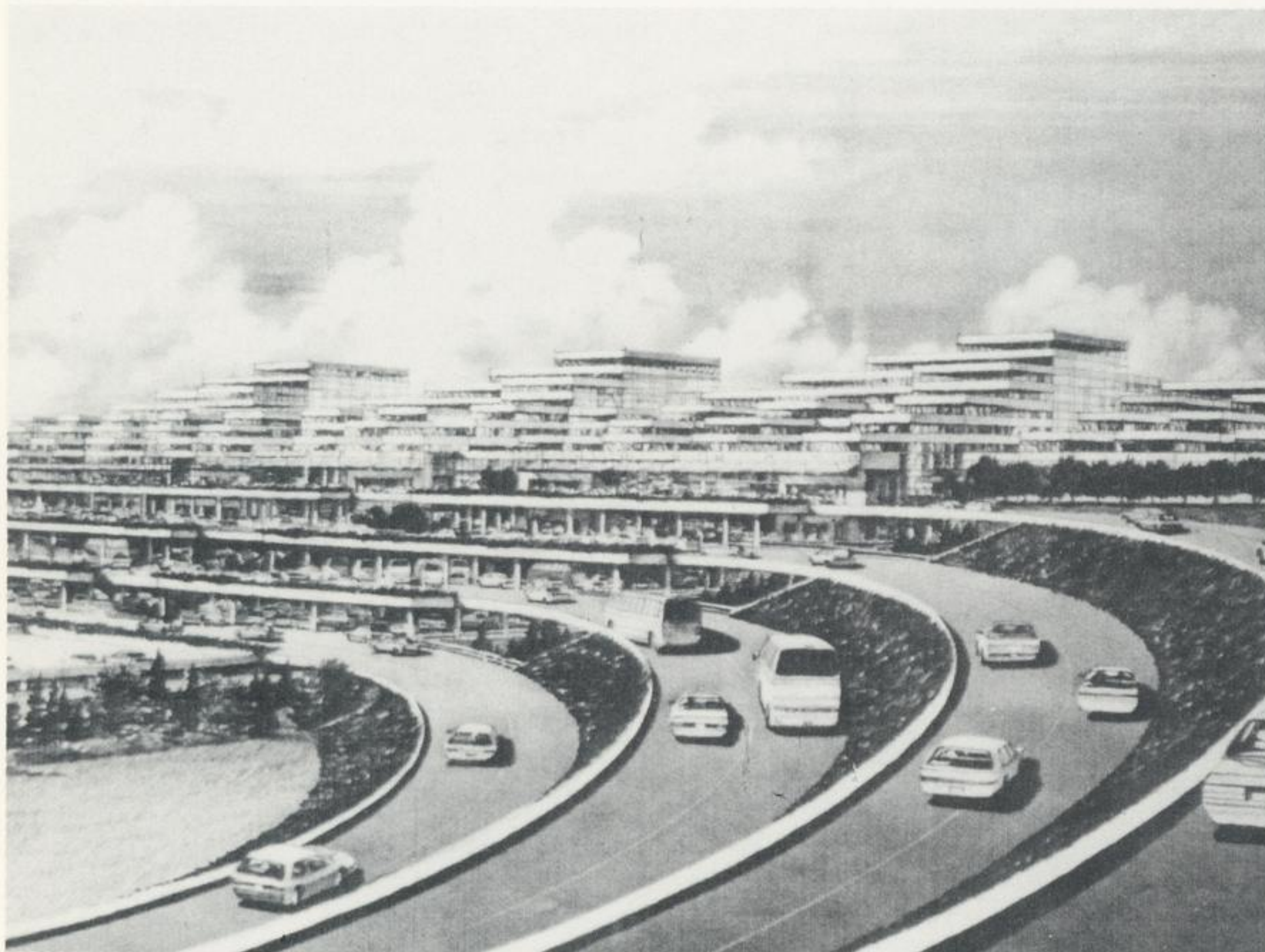
Lastly, Teets favors the new airport for economic reasons. "I am convinced that the new airport will bring with it significant economic growth for the Denver metropolitan area and for this region."

A local task force recently completed a study documenting that the new airport would create a need for nearly 90,000 new permanent jobs.

Additionally, the study found that the new airport will create an average of 2,500 construction jobs per year during the four years of construction. (The task force consisted of representatives of leading Denver banks, local government, the Denver Chamber of Commerce, numerous businesses, the airlines, and the business schools of the University of Colorado and the University of Denver.)

In addition to Teets' support, many other local business and government officials have voiced their support for the new airport. And perhaps most importantly, the FAA has lent its support for the new airport.

"...the planned airport development has our full support." T. Allan McArtor, FAA administrator said. "We in the FAA will continue to work closely with you to assure timely completion of the project." ■



Easy access

This artist's concept shows the multi-layer design for the new airport that will provide convenient parking, shorter walks, and more curb space on both sides of the terminal. Roadway signs direct passengers to the correct side for their airline.

Absentee ballots available for May 16 airport election

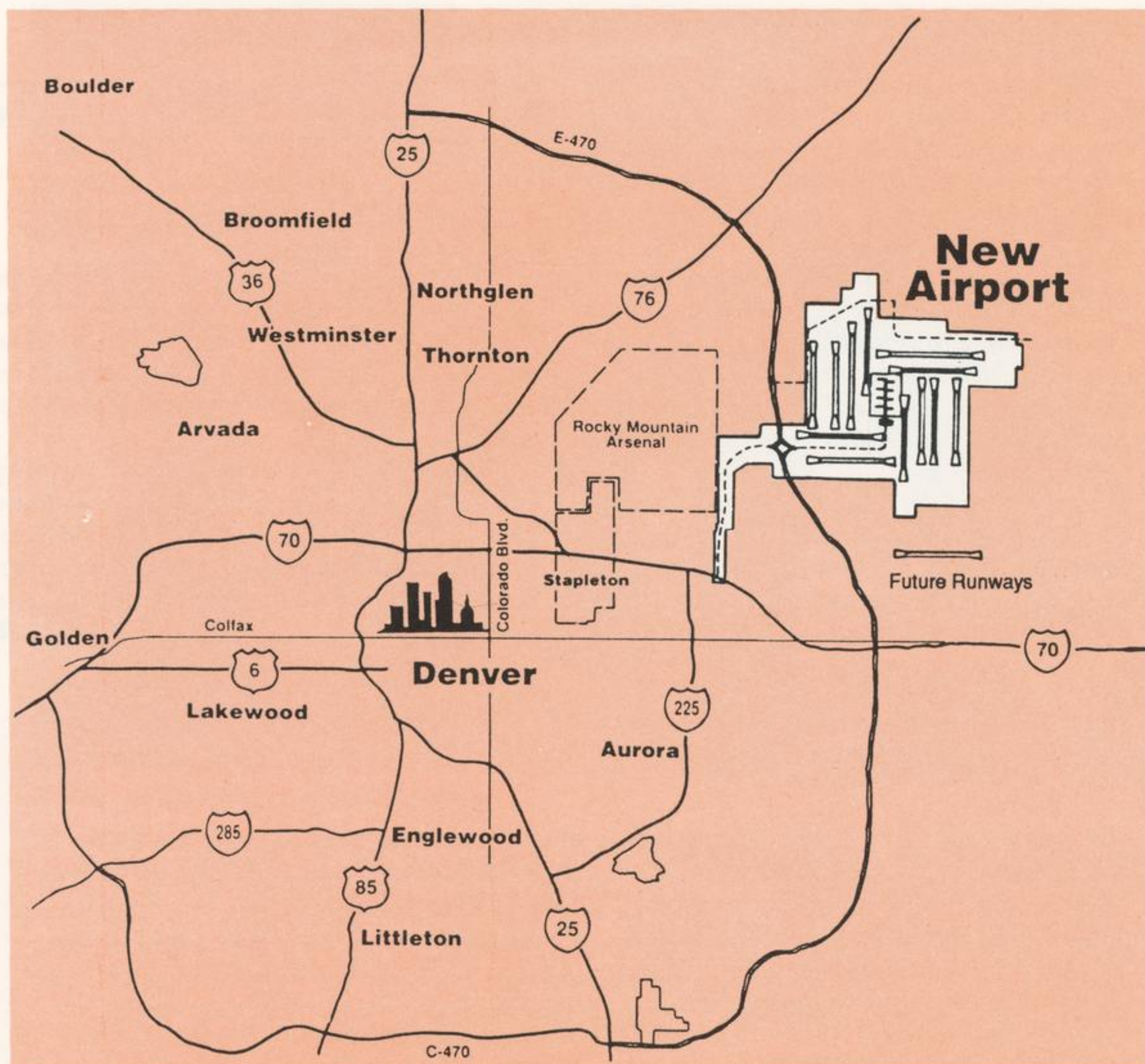
Denver residents who are unable to vote on May 16, but still want to vote on the airport issue, have two alternatives for voicing their opinion.

First, they may request an absentee ballot by writing the Denver Election Commission at: 414 14th St., Denver, Colorado 80202. The letter should include a reason for the request, complete name and address, telephone number, birthdate, social security number, and also should be signed.

Another option is to place a walk-in vote at the Denver Election Commission located at 14th and Tremont streets.

Walk-in votes must be completed by May 12, and requests for absentee ballots should be received by the commission by May 12. The completed absentee ballot should then be post-marked by May 16.

For more information call the commission at 575-2351. ■



Proposed location

The proposed site for the new airport is about 25 miles northeast of downtown Denver. Officials hope to begin construction on the 53 square miles of land sometime this summer, with the first phase scheduled to be opened in mid-1993. Five fully operational runways will be open at that time, and final development plans call for up to 12 runways.

Open enrollment scheduled for Special Accident Insurance

Now is the time for employees to either enroll in the Special Accident Insurance plan or adjust existing coverage. These changes will be effective June 1.

The Special Accident Insurance plan offers supplemental life insurance coverage that provides benefits in case of death, dismemberment, or total disability following an accident on or off the job, Clare Ryland, of the Benefits Office, said.

Any active, full-time employee (hired to work on a normal, continuous basis for at least 20 hours each week) can take coverage ranging from \$20,000 to \$250,000, Ryland said. "Or, if an employee desires coverage up to \$500,000, he or she must bear in mind that it can be no more than 10 times his or her annual earnings."

Employees choosing the family coverage portion of the plan may insure the lives of their spouses and dependent children. Coverage for an employee and dependents costs 14 cents per week for each \$10,000, Ryland said.

Standard employee insurance under this plan costs 9 cents per week for each \$10,000 of coverage.

For more information, refer to the Special Accident Insurance booklet or contact the Benefits Office at Ext. 7-4928 or 7-3232. ■

Proposed airport site offers many benefits

While proponents and opponents of the new airport battle over many crucial issues surrounding the airport, developers, planners, and architects continue to plan and prepare for building on the proposed site northeast of Stapleton.

Room for growth, safety, environmental factors, and more efficient facilities are just a few of the primary elements supporting the proposed location.

The new airport provides three north-south runways and two east-west runways, spaced far enough apart so that even in the worst weather conditions enough runways can operate to prevent delays. The 53 square miles of the new site, compared to 7.5 at Stapleton, leave room for up to 12 runways.

Its location in relation to the mountains provides for safe flying to the west, and, according to the Let's Vote Yes campaign, "It's the closest site to Denver that provides a 'clean slate' to build an ideal airport in terms of runway layout, terminal, and support facilities."

All of these factors weigh heavily into ensuring a safe and efficient airport.

The new airport site has also passed several important environmental tests.

The U.S. Environmental Protection Agency (EPA) found that "the construction and opera-

tion of a new airport will not cause a delay in attainment of air quality standards in the Denver metro area."

In addition, the city of Denver will own all land two miles off the end of all runways to protect against noise pollution, and it plans to buy the residential development rights in any area that could be affected by the airport noise in order to prevent construction forever in those areas.

More curb space, more parking, less walking, and the already-mentioned runways make the new airport a better facility than Stapleton.

Additional curb space will make dropping off and picking up passengers easier. And, because of the tucked-under, twin-terminal design, the new airport will have 8,000 parking spaces within 900 feet of the terminal. Only 3,000 of Stapleton's spaces are this close.

Shuttle trains will transport travelers from the terminal complex to their concourse destination in about 60 seconds.

The final design for the airfield was agreed upon by the city, airport planners, the airlines, and the FAA. It will be laid out so that aircraft taxiing in and out need not cross runways. This is a major safety consideration supported by pilots and the FAA.

Concourse designs are shaped to permit easy movement and parking of airliners, cutting down on delays, fuel waste, and air pollution.

When the airport opens its Phase One design in mid-1993, 94 gates will be operating, including the international terminal. While Stapleton has 110 gates, they are too small for modern aircraft and many are poorly located.

The Denver Post recently stated, "The result is the infamous 'penalty box' at Stapleton, where airliners that have already landed must wait—sometimes as much as an hour—until a gate big enough to service them opens up.

"As a better comparison of gate capacity, the new airport will open with 14,200 linear feet of gates... Thus, even on its first day, the new airport will have enough gate capacity to abolish the time-wasting 'penalty box.'"

Designs for the new airport's terminal complex and concourses allow for expansion of up to 200 gates.

These factors, combined with the fact that no general taxes such as property taxes or sales taxes of the city will be used for the construction or operation of the new airport, are the major reasons proponents of the new airport have used for their campaign effort. ■



United Way campaign underway

John Jaco, president of the Mile High United Way, left, meets with James A. Sterhardt, president of Strategic Systems Company and Astronautics Group campaign chairman, to discuss the upcoming campaign. The Astronautics Group has established itself as a "Pacesetter" for this year's campaign and recently got things underway by making a corporate donation of \$140,000.

Corporate news

Electronic Systems awarded electro-optical contracts

Electronic Systems in Orlando has received two contracts to develop advanced technology electro-optical systems for a version of the U.S. Army's Light Helicopter Experimental (LHX).

The systems will provide the LHX flight crew with long-range vision capabilities to fly at low altitudes and attack targets in darkness and poor weather.

Data Systems to open facilities in Maryland, Virginia

Data Systems announced it will open new data processing and office facilities in Maryland and Virginia as part of its long-range growth plan.

Frederick H. Hudoff, president of the company, announced the creation of a major new Washington Data Center, to be located in Lanham, Md. At the same time, Hudoff said, the Data Systems headquarters staff will be relocated to another Martin Marietta location at

Electronic Systems is a member of the Boeing Sikorsky team, one of two industry teams competing for the LHX full-scale development contract expected to be awarded by the Army in December 1990. The Army has indicated it plans to purchase 2,096 LHX aircraft to replace its aging fleet of light attack and scout helicopters.

Chantilly, Va.

The new Maryland data center, to be dedicated later this spring at Lanham, will be housed in a 60,000-square-foot facility. Staffed initially with approximately 50 data systems specialists, the center is expected to more than triple in personnel as Martin Marietta's major data center for the northeastern United States. It would be second in size only to the company's data center at Orlando, Fla.

Martin Marietta reports first quarter earnings

Martin Marietta Corp. reported 1989 first quarter earnings increased to \$59,212,000, or \$1.12 per share, from \$50,948,000, or 96 cents per share, in the same period last year. Sales in the quarter increased to \$1,316,352,000 from

\$1,295,803,000 in the first three months of 1988.

Backlog at the end of the quarter was \$11.2 billion, compared with \$11.1 billion at the same time a year ago. ■

Is good enough really good enough?

Anyone who's ever been in the military may have heard, "You get what you inspect for."

This is another way of saying that people generally rise to the level expected of them, or that performance won't exceed the established standards.

In other words, if the standard is to do things right 9 out of 10 times, that's what you generally get.

And what if the standard is to do things right 99 times out of 100? After all, in school a 99 percent grade was pretty good. It got you an A, didn't it?

From a brochure by the American Society for Quality Control, here are some examples of what you'd get if 99 percent is the standard that's expected in these critical service areas:

"At least 200,000 wrong drug prescriptions each year.

"Unsafe drinking water almost four days each year.

"No electricity, water, or heat for about 15 minutes each day.

"No telephone service or television transmission for nearly 15 minutes each day.

"Newspapers not delivered four times each year.

"Nine misspelled words on every page of a magazine."

So how does this idea apply to Martin Marietta?

Every work group, whether it produces a service or a product, must strive to produce defect-free products 100 percent of the time.

In a workplace that has adopted Total Quality Management (TQM) as its guiding philosophy, just "good" is never good enough.

The TQM approach is one of continuous improvement. Improvement that looks at the processes involved and takes place over time will help make just "good" never good enough. ■

How dollars for education can grow in U.S. Savings Bonds

Bond value at age 18 with monthly savings of \$50*.

Child's age

now

1	\$17,356.08
6	10,328.96
10	6,025.72
12	4,226.88

*Assumes annual interest rate of six percent (current minimum rate) and 10-year interest extension. Rates could be higher. Call 1-800 US BONDS for current rate information.



General Monahan visits Denver

Lt. Gen. George P. Monahan, director of the Strategic Defense Initiative Organization (SDIO), second from left, and some of his staff recently visited the Astronautics Group. He was briefed on the Astronautics Group and its SDI programs, including Zenith Star, the Space Operations Simulator Laboratory, and the Rapid Retargeting/Precision Pointing (R2P2) Laboratory. Hosting Gen. Monahan for his visit was Peter B. Teets, Astronautics Group president, left, and Robert Molloy, director of the Zenith Star program, center.

Publication can improve IR&D scores

Having a paper or article published in a recognized publication can help boost Independent Research and Development (IR&D) scores, according to Ron Bena, Astronautics Group IR&D program manager.

"No set number of points is awarded (for publication)," he said, "but it counts in the evaluation of past year progress."

Publishing a paper also qualifies the author(s) to compete for an Astronautics Group publication award.

These awards are made annually to recognize authors and encourage employees to make important, creative contributions in their professional fields, according to Jim Hoagland, chairman of the Publications Awards Committee.

"Publication awards are for articles published in recognized professional, technical and trade publications," Hoagland said. "The Awards Committee encourages authors to submit papers that have been published.

"Because the awards recognize the excellence of published articles, they don't include presentations (lectures) accompanied by viewgraphs, company reports and that sort of thing," Hoagland continued.

Published papers are eligible for cash awards of up to \$1,000. The top Astronautics Group paper each year is also entered in the corporate publication awards competition.

"The earlier people get their papers in, the better," said Hoagland. "Any paper or article actually published before Dec. 31, 1989, is eligible, as is any paper submitted within one year of its publication date."

Hoagland said the governing policy and full requirements are contained in Policy P-19 dated Nov. 1, 1984, "Awards for Publication of Articles." Forms for entering a published article in the competition are available from Barbara Espinoza, Ext. 1-9534, or from Hoagland, Ext. 1-9291. ■

Astronautics Group calls for TQM abstracts

The Astronautics Group is seeking contributed papers for the First National TQM Symposium, which the company is hosting here Nov. 1-3.

The papers should deal with TQM as it applies to:

- o Business operations,
- o Engineering and technical operations,
- o Production (including procurement),
- o Lifetime product support, and
- o The total enterprise.

The deadline for abstracts is June 15. Prospective authors should send their one-page

(200-word) abstract to Ted Sundin at Astronautics Group, M.S. DC 4800.

Papers will be selected for presentation on the basis of the originality, comprehensibility and technical relevance, and content of the abstract.

Authors will be notified of acceptance by July 10. Final, camera-ready manuscripts will be due Sept. 15.

Questions on the program, format and policies, and suggestions for special presentations, should be directed to Sundin at Ext. 7-5213. ■

Astronautics Group gets highest IR&D score ever

The Astronautics Group's 1988 Independent Research and Development (IR&D) program recently received a score of 8.60 from the government's evaluators. This is the highest score ever achieved in Denver.

"This score puts us in the 98th percentile of the 138 industries participating in the Air Force managed IR&D program," Ron Bena, IR&D program manager, said. In 1987 the Astronautics Group got an 8.28.

The IR&D Technical Plan (brochure), containing documentation on 105 projects, was distributed to more than 70 government organizations that expressed interest in the projects.

Scores assigned to the projects by the evaluators are an important factor in the government negotiations that set the reimbursable dollar ceiling for the IR&D program.

The 8.6 score was sufficiently high that a "re-opener" of the negotiations is authorized. This re-opener may result in an additional ceiling for the 1989 program, Bena said.

"I want to congratulate all those who were instrumental in this outstanding achievement for the Astronautics Group," Peter B. Teets, Astronautics Group president, said. "This score is extremely important, and an indication of the high quality of our research and development program. It is a reflection of the technical image of the Astronautics Group as seen by our government customers."

"The Space Systems company, under Jim McAnally, scored an impressive 8.88 and was a key factor in the overall Astronautics score," Bena said. "However, this was a total team effort, and all who contributed are to be congratulated."

Specifically, there were 28 IR&D principal investigators who led the team effort. Of those 28, 17 scored a perfect 10. They are: Bill Collins, John Coyner, Scott Dahl, Jules Damski, John Flemming, John Gruetzmacher, Bob Ingoldby, John Oss, Damon Ostrander, Boris Popovitch, Paul Rader, Michael Shultz, Frank Sosler, Jim Walker, Ken Whiteacre, Dick Willett, and Bill Woodis. ■

On the cover

The Magellan spacecraft, built for NASA by Martin Marietta, is shown in this artist's concept beginning its 700-million mile journey to the planet Venus after being released by the Space Shuttle Atlantis. Using thrust provided by the booster rocket shown, Magellan will travel to Venus by circling the sun one and a half times, arriving at the planet 15 months later. Magellan will map the planet in great detail. The concept was created by Astronautics Group artist John Tieleman.

Due to the timing of the Space Shuttle launch, and the subsequent deployment of Magellan, the *Martin Marietta News* will provide complete coverage in the next issue.

Martin Marietta hardware and software expo

Martin Marietta is sponsoring a Vendor Exposition May 24-25 at the Deer Creek Facility. Vendors will be exhibiting and demonstrating various products featured on the Micro Standard Product List. Additional information will be published in the next *Martin Marietta News* regarding specific location, vendors, and products.

Astronautics runners place first in international event

Running the route explorers Lewis and Clark took through the state of Washington in 1802, four Astronautics Group runners were members of a six-runner team that recently took two first-place awards in an 8-day, 500-mile international relay road race.

The team calls itself the Colorado Mountain Maniacs. Dick Croteau of Product Assurance Special Programs is team captain. Team members Eric Lindblad and Keith Golding are also from Product Assurance Special Programs. And Jim Randolph works in Software Assurance Engineering.

The Washington State Centennial Celebration Lewis and Clark Trail Run began April 2 at Clarkston, Wash. Following the Lewis and Clark Expedition's approximate route along the Snake River to the Columbia and then to the Pa-

cific, it ended eight days later at Cape Disappointment. ■

Blood bank solicits donors

Waterton employees may donate blood to the Belle Bonfils Blood Bank May 17 or 18 at the Space Support Building (SSB) in the sixth floor presentation room. Donations are needed to increase the community blood supply before Memorial Day weekend.

Employees can schedule an appointment by calling the Employee Services branch office, Ext. 7-9424, between noon and 4 p.m. on Monday, Wednesday or Friday. Or they can register in person during those hours at the office in room 200 of ORB. ■

Employee services/recreation

Career Women's Association—Elizabeth Sharp will present "Empowering Yourself and Others," 5:45 p.m., Wednesday, May 17, 1989, at the Radisson Hotel Denver South, Event Centre 3, 7007 S. Clinton St. (south of Trail Dust Steak House). Doors will open at 5:00. Cost is \$5.50 for members and \$7.50 for nonmembers, which includes the dessert bar. Reservations must be made to boosters by 3:00 p.m., Monday, May 15.

Colorado Corporate Games—Several employees are helping to coordinate Martin Marietta's team for the ninth annual Colorado Corporate Games June 9-10 at various locations in Lakewood. The games are a fund-raising event for the Colorado Special Olympics. The volunteers lending support to this effort are Terry Heggy—swimming; Bob Brown—co-ed volleyball; Randy Sprague—golf; Chuck Roberts—bowling; Ralph Galbraith and Mark Helton—racquetball; Raymond Ray—trapshooting; Stratty Cunningham and Pat Hossle—track; Keith Golding—5K- and 1,500-meter runs; Ken Rillings—bicycle (Marti Carter is coordinating the bicycle event at the Corporate Games); Jenny LeJeune, Conrad Gaboriau and Tracy Fiedler—tennis; and Mardi Emerson—racewalk.

Golf Tournament—The Martin Marietta partner (two-man scramble) golf tournament is Saturday, May 20, at Raccoon Creek golf course. Shotgun start times are still available for 1:30 p.m. The tournament is open only to employees and retirees of the Astronautics Group, I&CS, and Data Systems. Registration forms and \$45 entry fees are due at the Deer Creek Recreation and Employee Services office by May 5. Early registration is advised because the tournament usually reaches capacity before deadline. Entry forms are in the recreation racks.

Racquetball Tournament—Employees and employee spouses may participate in a racquetball tournament May 19-21 at Highline Athletic Club. The registration fee is \$10, which must be submitted with the entry form to the Deer Creek Employee Services

office by Friday, May 5. Men and women will compete in A, B, C and D divisions. The top male and female employees from the A division will represent Martin Marietta at the Colorado Corporate Games. Entry forms may be obtained in the recreation racks.

Hunting and Fishing Club—The group will meet at 5 p.m., Monday, May 8, in the clubhouse at the recreation area. For more information, contact Mel Smith, Ext. 1-8655.

Win the Food Fight—Join the Weight Watchers at Work Program beginning Thursday, May 18, for Waterton employees. The eight-week session will be from 11:45 a.m.-12:45 p.m. in Room 402 at the Technical Support Building (TSB). The \$15 registration fee has been waived, and the cost is \$64 if you pay by May 11. If 21 or more people pay by May 11, one participant's name will be drawn to receive free tuition. Registration forms are in the information racks at Waterton.

Running Club—The top male runners in the recent four- and two-mile Shepherder races were David Nickel, Vaughn Larsen, Brad Eckhoff, Russ Scott and Bill Johnson. The top female finishers were Melanie Baker, Sharon Brooks, Sally Cuffin and Diane Eckhoff. The Shepherders race series in Waterton Canyon continues May 11 and 25. All races start between 4:45 and 5 p.m. For information, contact Brad Eckhoff, Ext. 7-7102/1496.

Smoking Cessation Classes—Enjoy a breath of fresh air. The American Cancer Society's "Fresh Start" program is available free to all Martin Marietta and Air Force personnel, their spouses, and dependents. Classes consist of four meetings from 5-6:30 p.m., May 11, 15, 18 and 22 at Goddard Middle School. (The start date of May 8, printed on the flyer, has been changed to May 11.) To register, call Employee Services at Ext. 7-6750.

Commodore Users Group—The club will meet at 5 p.m., Tuesday, May 16, in the

clubhouse at the recreation area. Amiga users are welcome. Contact Dan Whitemore, Ext. 7-6324, or Chuck Barton, Ext. 7-9950.

Parapsychology Club—Will meet from 5-7 p.m. on Thursday, May 18, in the Littleton Systems Center cafeteria. Florence Michael, field investigator for Aerial Phenomena Research Organization, will present a "UFO Update," specifically aimed toward recent cases in Colorado. Non-employees are welcome to attend, but must be at least 16 years old. Employees must provide escorts for their guests and give names of guests to Helen Hussander, Ext. 1-7344, prior to the meeting.

Summer Tennis League—Entry forms are in the information racks for the summer tennis league. Participants must be employees (or spouse/dependent of employees) of Astronautics Group, Data Systems, I&CS, or armed services personnel assigned to Martin Marietta. Round robin competition is the format for singles, doubles and mixed doubles. Registration forms are due in the Employee Services office at Deer Creek by Friday, May 19.

Satellite Ski Club—The group's annual spring picnic is at 4:30 p.m. May 19 at the recreation area pavilion. Guests and prospective members are welcome. Food and beverages will be provided, and the newly elected club officers will be announced. Non-members must pay a \$5 fee. For more information, call Steve Packard at Ext. 7-3830.

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