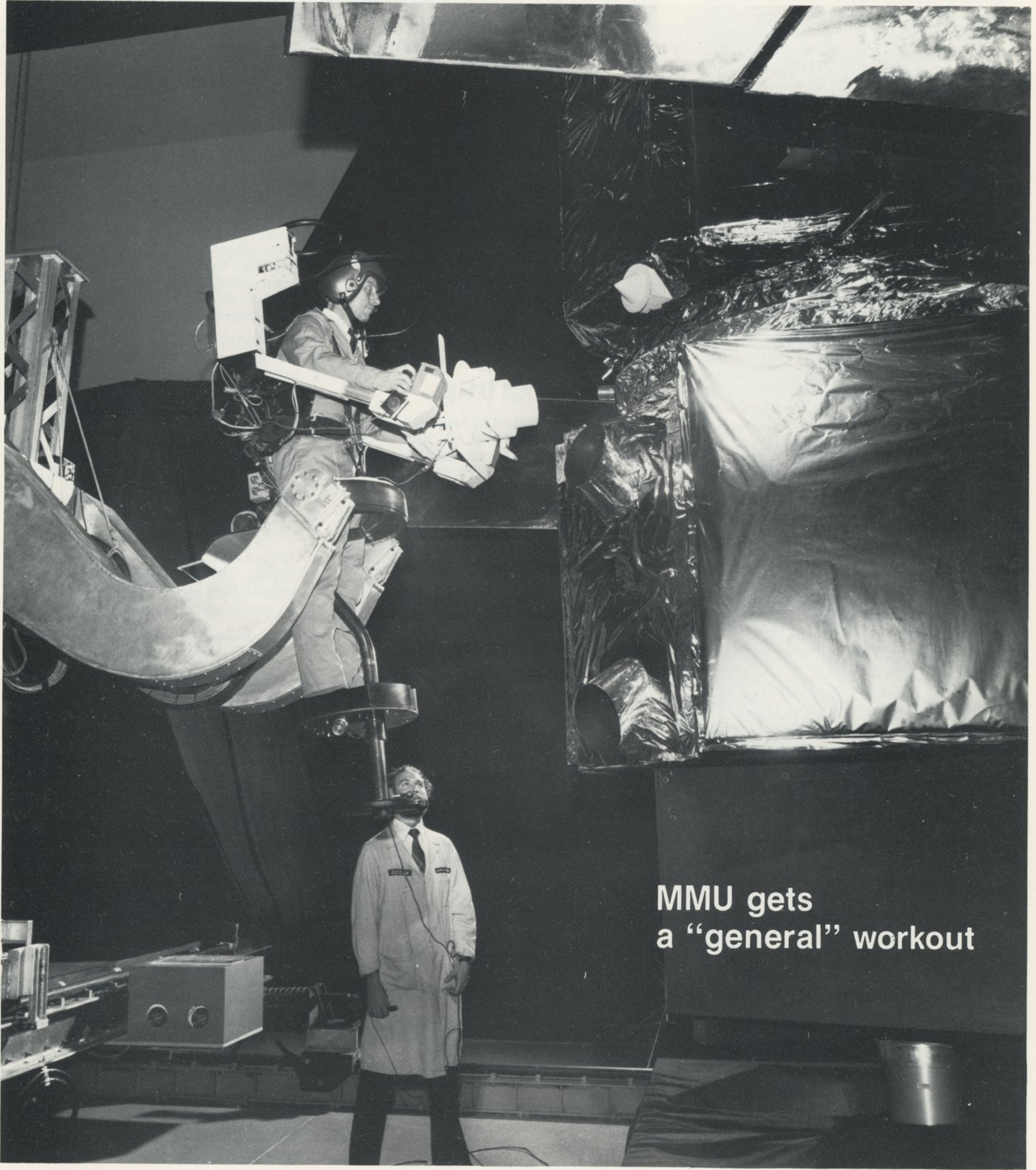


MARTIN MARIETTA

news

DENVER AEROSPACE

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MMU gets a "general" workout

Army tests Martin Marietta's automated message system

The U.S. Army recently tested Martin Marietta's automated message processing system successfully during RE-FORGER '83 field training exercises in West Europe and earned favorable support.

The automated staff message processing central system (ASMPCS), or AN/TYC-16,

played an integral part at V Corps' field sites and at Heidelberg headquarters during the annual exercises.

The tactical system—which is at least six times faster than existing manual procedures—reduces message processing time by 80 percent and cuts training, equipment, and maintenance costs as well. In addition, fewer personnel are required to operate the message center.

Developed for the U.S. Army, the system has been on field maneuvers and under evaluation in Europe since delivery last winter.

Presently, the AN/TYC-16s are being considered by the Army with three other systems. Marketing coordinator Steven Humphrey and project director Arthur E. Homewood, both of Denver Aerospace, expect a decision by the end of this year.

"We hope we can develop other applications for the system in order to generate new business as well," added Homewood.

Denver Aerospace personnel are supporting the Army's test system with soft-

ware and hardware skills. Several changes have been made as the system is being refined to meet customer needs.

"It's an evolutionary process," Humphrey said, "to refine the system and meet the additional requirements of the customer. Software is like an animal and sometimes it's an alligator."

Nicknamed the "tic-16," the system was designed for the field soldier with normal typing skills who could be trained to use the system in as little as two hours to communicate between Army units.

On the cover

Lt. Gen. James A. Abrahamson, associate administrator for the National Aeronautics and Space Administration's (NASA) Office of Space Flight, flew the manned maneuvering unit (MMU) here September 29. The general is assigned to NASA headquarters at Washington, D.C. and has overall responsibility for the Space Shuttle program.

His visit included an address to the large staff at Denver Aerospace where he pointed out how critically dependent the Space Shuttle program is on the approximately 60,000 people who work on the system throughout the aerospace industry. On military issues, he described the industry as "the country's first line of defense."

Also pictured is Robert A. Schein, who acted as safety monitor during the MMU docking simulation with Solar Max in the Space Operations Simulation (SOS) laboratory.



Some of the 250 new Canon bond copiers at Littleton Systems Center (LSC) and the general purpose lab (GPL) await installation throughout Denver Aerospace. All Saxon self-service copiers will have been replaced by October 20. Hourly training sessions on the new machines will be conducted six times a day in turn at various buildings and facilities. Bulletin boards will carry the complete second half of the training schedule.

Employee advises welding group

Frank Clover, chief of advanced manufacturing technology—metals technology, recently served as a consultant on welding procedures at a work session of the Welding Research Council.

The meeting, at the National Bureau of Standards at Boulder, was held to work out details of the Standard Welding Procedure Specifications (WPS) and to determine data-base needs. The group is developing worldwide welding procedure specifications for various materials, thicknesses, and joint designs.

MILSTAR/ICBM Study Contract awarded to Martin Marietta

This nation's strategic and tactical forces will be linked ultimately through a constellation of satellites, known as the MILSTAR communication system.

Martin Marietta Aerospace's role in the eight-month concept definition study will assess that link, focusing on satellite communications for current and future intercontinental ballistic missile (ICBM) sites.

Martin Marietta is teamed with Harris

Corp. and BDM Corp. on the \$1.9 million Air Force contract project.

Following the study phase, in which the Martin Marietta team and two competing teams will participate, the Air Force plans to select one contractor for development of an ICBM ground terminal system.

M. Joe Bretting heads the company's 25-member group with lead technical support from Wayne Kolymago and Larry Tew.

Employees serve as UW loaned executives

Two Denver Aerospace employees are assisting Mile High United Way until December 8 as loaned executives during the annual fundraising effort.

R.F. Heman, Space and Electronics Systems division finance, will help the City and County of Denver in the campaign among its 63 departments and agencies.

B.S. "Bill" Wheeler will work with 217 real-estate companies. He was most recently manager of system effectiveness in the Strategic and Launch Systems division.

Loaned executives speak at meetings, train volunteer workers, and support the campaign organization.

NASA praises external tank

Martin Marietta employees who work directly on the Space Shuttle external tank received praise recently from James Beggs, National Aeronautics and Space Administration administrator.

In a letter to Thomas G. Pownall, chairman and chief executive officer of Martin Marietta Corporation, Beggs wrote the following:

"Since I was skeptical a year ago on your ability to achieve the learning curve projections on the external tank, I should express my appreciation and congratulations on the splendid achievements to date. You not only met the projections, you exceeded them.

"Please express to all of the good Martin Marietta people my congratulations and very best wishes for continued success."

Everything you always wanted to know about computers, but were afraid to ask

"This company spends a lot of money on new technologies," said Ron Remy, chief of financial information systems.

"The Information Center allows us to bring those new technologies into the user environment at Martin Marietta. The company is looking at its people and saying we need to provide them with better tools."

Some of those tools include the 18 microcomputers installed in various departments of cost management. Reactions to the pilot program have been overwhelmingly positive, Remy added, noting the 18 original microcomputers are used an average of 35 to 40 hours per week, and the center expects to have 50 microcomputers operational by the end of this year.

"I wish we had ordered a great many more of the personal computers in the beginning," Robert Kenning reflected. Kenning is chief of cost management for the Peacekeeper program. His department installed its first microcomputer a year ago May and has added several more since.

"There are four or five people in our group who, after a few hours' training at the Information Center... well, it's hard to keep them off the computers now," Kenning said.

(Editor's note: This is the second article in a two-part series on the integration of new technologies into the user environment of Denver Aerospace's data system. The first article described the origin and purpose of the Information Center.)

Kenning's group, like most in the program, uses the computers to simplify budgeting, cost analysis, forecasting, and recordkeeping.

He added, "The computers have resulted in increased productivity in many cases. For instance, it once took a week to calculate manually a particular weekly estimate for the Peacekeeper and two to three days each week to update it. Now, after writing a program to calculate the estimate, it takes only 45 minutes to update it each week."

"The real bottom line is productivity," said Patrick McGuire, manager of cost management, systems, and programming at Data Systems and a member of the Information Center staff.

Robert Manning of Central Estimating anticipates that microcomputers will be installed in his area and appreciates the work being done by Information Center staff to integrate the system so end users have a say in how the system works.

"When the system is deployed, it will improve the productivity of the entire estimating group," he said. "But it would have been hard for an outsider to come in and be able to develop what we needed. This way, we are working together."

One special benefit from the Information Center staff is introduction of the latest software to Denver Aerospace users before it is available on the open market.

A new software package—Lotus 123 and its spreadsheet package tested recently at Denver Aerospace—has proved popular among long-term forecasting and analysis personnel.

"We rely on the Information Center for any new software that might be of benefit," said Kenning. "People on programs and projects don't know what's state of the art."

James Saflund and his group have been training on the new software for use in their work at the Space and Electronics Systems division.

Saflund, who recently joined Denver after an offsite assignment in Massachusetts, said, "I really would have liked to have had microcomputers in the offsite work. I think total systems integration has got to come."

Performance Sharing Plan August unit values set

Unit values for the Performance Sharing Plan as of August 31, 1983, were:

Fund A (Indexed Equity):
2.2617837062

Fund B (Fixed Income): 1.7516028813

Fund C (Martin Marietta Stock Fund): 2.4276037089

Engineering society honors aerospace employee

The Society of Logistics Engineers honored William E. Rogers, director of integrated logistics, during recent ceremonies at U.S. Air Force Space Division in Los Angeles.

Rogers was cited for his dedication to excellence in developing the Life Cycle Cost Analysis Workshop with Air Force Maj. John Parry.

The workshop is conducted three times each year to instruct logistics engineers and financial personnel from industry and government in methods of analysis.

The workshop is recognized throughout the United States and Europe as the most authoritative and up-to-date educational offering in the field, according to John Goodrum, society executive director.

Employee's volunteer work appreciated by schools

"I just think it's part of my job," said Martin Bowland when asked about his volunteer post on a blue-ribbon task force for the Cherry Creek Schools of Englewood, Colorado.

Bowland received a letter of appreciation recently from Patricia Hayes, board of education president.

A 28-year Martin Marietta employee, Bowland is chief of Telecommunications and responsible for all phone systems at

Denver Aerospace locations.

He and five other members of the Colorado Telecommunication Association reviewed the school district's telecommunication needs and followed up with recommendations to the school board.

According to Fred Bennett, manager of capital and facilities support, Bowland's involvement in the volunteer project underscores dedication to his field and willingness to use his expertise and give his personal time to help others.

Taigman to address Denver Management Association

Leonard G. Taigman, director of strategic business planning, will discuss "Major Strategic Thrusts at Denver Aerospace" Tuesday, October 18, before the Denver Management Association in the Denver Hilton Inn South.

The \$13-a-person dinner at 6 p.m. will be preceded by a cash bar. Nonmembers and others may contact Kate Blacklock at ext 7135 for details.

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October 7, 1983

Martin Marietta board elects L. J. Adams president; elevates two to senior vice president

Martin Marietta Corporation has announced election of Laurence J. Adams as president and the designation of David C. Dressler and Caleb B. Hurtt as senior vice presidents. Adams continues as chief operating officer.

Thomas G. Pownall—president since 1977, chief executive since 1982, and chairman of the board since 1983—continues as chairman and chief executive officer.

Adams, 62, a Martin Marietta employee since 1948, has been a senior vice president since 1980 and the chief operating officer since 1982. He also was president of Martin Marietta Aerospace from 1976 until 1982.

Both Hurtt and Dressler also are longtime Martin Marietta employees, 26 and 30 years, respectively.

Dressler, 55, who has been a vice president of the Corporation since 1979 and president of Martin Marietta Aluminium since 1982, continues as president of that company.

Hurtt, 52, who was elected a corporate vice president in 1980, continues as president of Martin Marietta Aerospace, a post to which he was elected in the spring of 1982.

The Corporation also announced appointment of James D. Simpson as vice president for Martin Marietta administration, a new position, and George L.J. Dalferes as vice president of government affairs for



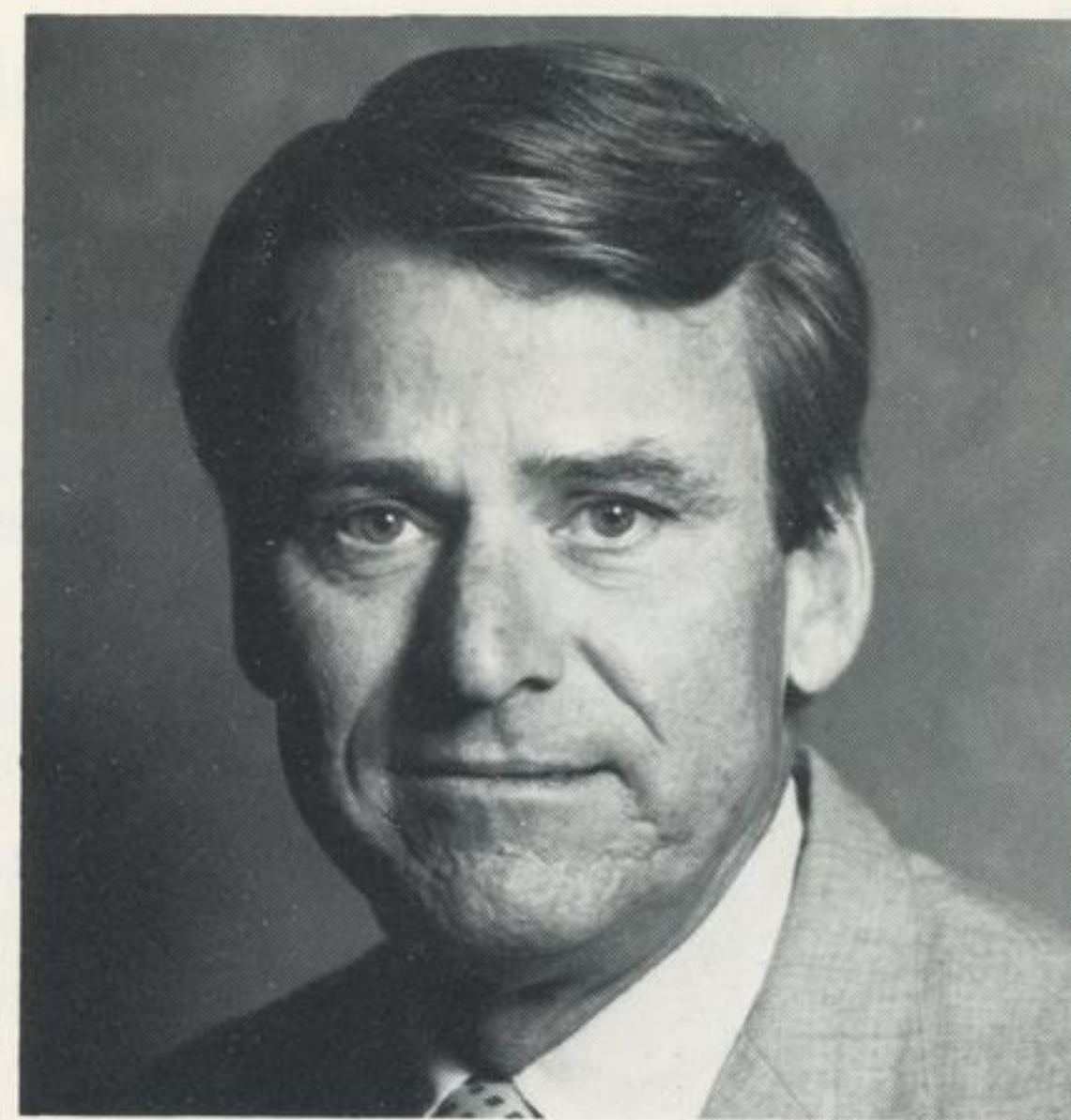
Laurence J. Adams

Martin Marietta Aerospace.

Simpson has been a corporate vice president since 1972 and president of Martin Marietta Chemicals since 1981. Previously, he had been the Corporation's general counsel.

Dalferes has been director of government affairs since 1973.

Before joining the Corporation, Dalferes served in the Office of the Secretary of Defense, his last post as deputy assistant secretary for legislative affairs.



Caleb B. Hurtt



James D. Simpson

Boyd named Aerospace P.R. director



John H. Boyd Jr., has been promoted to Director of Public Relations for Martin Marietta Aerospace and will be located at Aerospace Headquarters, Bethesda.

Boyd had served as director of public relations for Denver Aerospace since 1967 and was previously in charge of the company's public relations activities at Cape Canaveral, FL. Before joining Martin Marietta in 1960 in the flight test division at Cape Canaveral, Boyd was a staff writer for *The Times-Picayune* newspaper at New Orleans.

Koski to head Denver Aerospace P.R.

Arthur E. Koski has been named Director of Public Relations for Denver Aerospace, reporting to Norman R. Augustine, president. He succeeds John H. Boyd Jr.

Koski, a 24-year Martin Marietta employee, was previously a public relations manager with principal responsibilities for special projects and media relations. He came to Denver Aerospace in 1980 from Martin Marietta Laboratories at Baltimore and also served on the public relations staff at Orlando Aerospace.



AIAA Technical Committee nominations announced

Some 24 Denver Aerospace employees have been nominated to serve on the more than 50 American Institute of Aeronautics and Astronautics (AIAA) technical committees for the 1984-85 program year.

Selections will be announced during March 1984. Those named, and the specific committees for which they have been nominated, are:

Lyle E. Bareiss, thermophysics; Frank Bartko, space sciences and astronomy; Albert C. Brandts, atmospheric flight mechanics; Benton C. Clark, life sciences and systems; Stephen L. Copps, computer systems; Darrell Devers, structural dynamics; David A. Dieterich, CAD/CAM; J. Donald Doub, solid rockets; Stephen J. Ducsai, space systems; W.C. Green, support systems; Stanley R. Hurst, communications systems; Jerry D. Leikam, system effectiveness and safety; Joseph P. Martin, sensor systems; James W. McAnally, management; Herbert W. Meyer, support systems; J.A. Navarra, aerospace power systems; Joseph T. Osmanski, atmospheric environment; William E. Pipes III, liquid propulsion; L. Kevin Rudolph, electric propulsion; Sidney L. Russak, sensor systems; Felix J. Scheffler, flight testing; Dana M. Smercheck, aerospace maintenance; William F. Van Dyke II, design engineering; and E. Doyle Vogt, astrodynamics.

A close-up look at Colorado's congressional districts

Creation of Colorado's sixth congressional district following the 1980 census resulted in confusion for many Denver metropolitan area voters. The map outlines the sixth district boundaries in relation to adjacent districts.

A telephone call to the county clerk's office is sufficient to determine a person's congressional district.

U.S. Congressional facts

U.S. Congressional Facts: Congress, currently in its 98th session, convened January 3, 1983, and will meet on a year-round basis for the next two years, holi-

day recesses excluded.

Of the 100 members of the Senate, 46 are Democrats, 54 are Republicans. Senators serve six-year terms and one-third are elected every two years. Each state has two senators, each of whom represent all the state's citizens.

In the House of Representatives, 269 of its 435 members are Democrats and 166 are Republicans. House members serve two-year terms and represent specific districts in their states. The districts are approximately equal in population, and boundaries are reassessed every 10 years following the national census.

Congressional Leadership 1983-84

House of Representatives

Congressional Leadership 1983-84

House of Representatives Speaker of the House Thomas P. (Tip) O'Neill (D-MA)
 Majority Leader James Wright (D-TX)
 Minority Leader Robert H. Michael (R-IL)

Senate

Senate Majority Leader Howard H. Baker (R-TN)
 President Pro Tem Strom Thurmond (R-SC)
 Minority Leader Robert C. Byrd (D-WV)

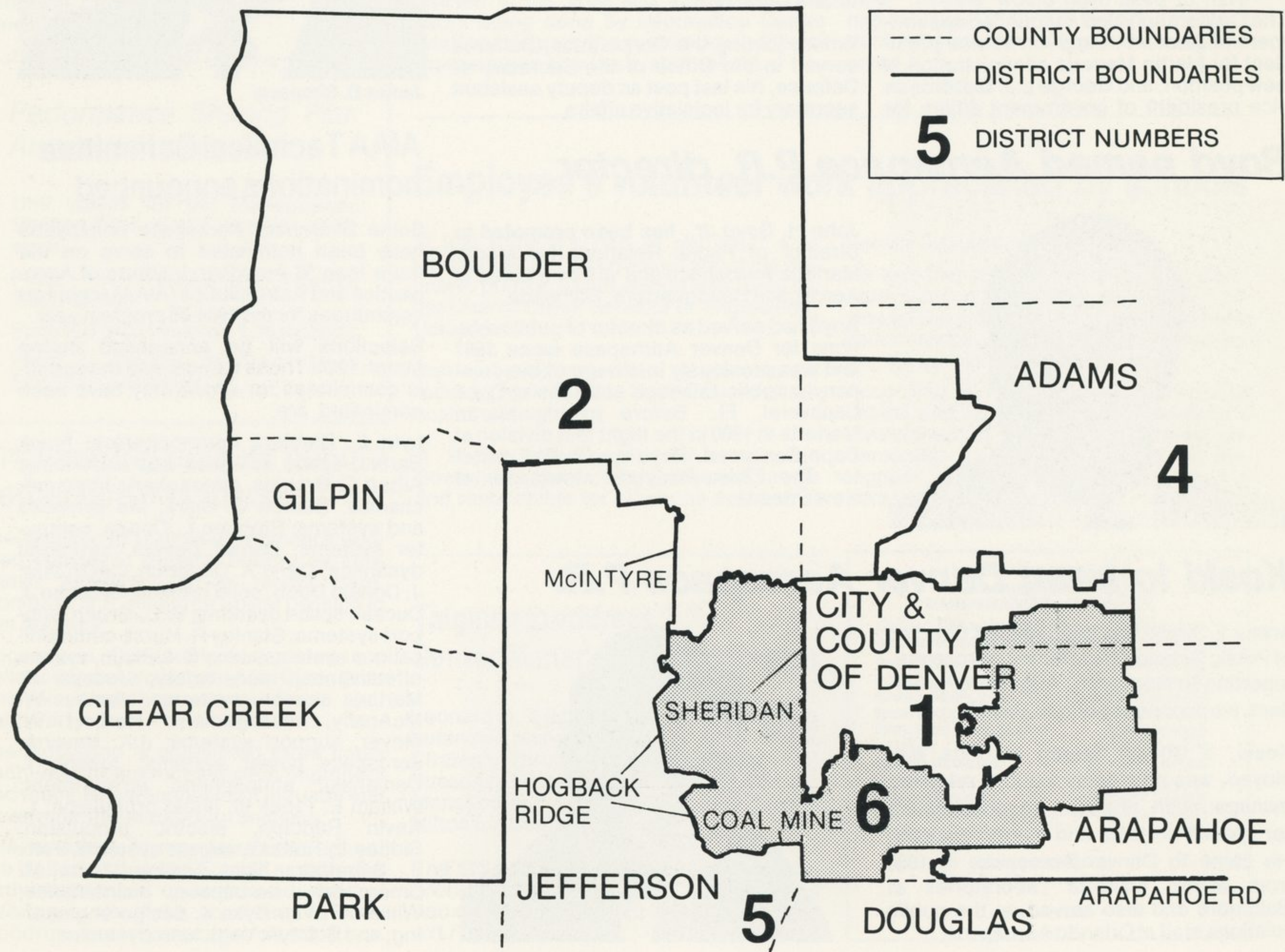
Company cohosts EWI seminar

Denver Aerospace cohosted a two-day regional orientation for more than 50 students in the U.S. Air Force Education With Industry (EWI) program at a recent Dallas seminar. The company is completing its 20th year as an EWI participant.

Kenneth P. Timmons, vice president and general manager of the Michoud division, was the industry keynote speaker. Richard E. Brackeen, vice president for business development, spoke on Martin Marietta.

Capt. Carl R. Schweinfurth, Capt. Ronald T. Bartolomew, and Ms. Anne M. Donahue, assigned to the EWI program at Denver Aerospace, were seminar participants. R.W. "Mike" Walker, education, training, and development, was coordinator of the seminar for the company.

EWI is a graduate-level program administered by the U.S. Air Force Institute of Technology (Air University) at Wright-Patterson Air Force Base, OH. It provides students an opportunity for greater understanding of production, procurement, and management concerns shared by industry and its customers.



Michoud artists' work goes on exhibit

"Artists Three and the Space Shuttle," an exhibition of paintings and drawings by three Michoud division artists, will be displayed at colleges, schools, banks, and other public buildings in the New Orleans and south Louisiana areas this fall.

Featured artists are Charles H. Haymes, the division's chief of publications, and creative illustrators Bobby Lanier and Larry Songy.

The exhibition is part of Martin Marietta's 10th anniversary at the Michoud assembly

facility and will be shown to employees before being sent on tour.

Haymes, Lanier, and Songy covered the sixth Space Shuttle launch at Kennedy Space Center last April to capture—each in his own way—the drama of the event.

Eighteen framed pictures, six by each artist, capture their various impressions. Trying to describe "the indescribable" in mere words, Haymes said: "It didn't look real. The brilliance of the fire, the smoke, the roar, the slow rising of the shuttle are

phenomenal. Unless you've seen a launch, you simply have no idea of the power."



Bobby Lanier's untitled pencil sketch of an Associated Press photographer at the August 30 Space Shuttle launch from Cape Canaveral is part of the Shuttle art exhibit.



This untitled watercolor of the Vertical Assembly Building at Cape Canaveral will be one of Larry Songy's works in the Space Shuttle art exhibition.

Recreation

Ski Club—The Satellite Ski Club program at 7 p.m., Tuesday, October 11, at Gart Bros., 1000 Broadway, will review skiing equipment selection. There also will be a sign-up for the Aspen/Steamboat and Taos trips. Prospective members welcome. See recreation racks or call ext 3477.

Discount Skiamericard—Starting at \$15 and available from the Satellite Ski Club, entitles holders to special discount rates at more than 100 U.S. and Canadian ski resorts. See recreation racks or call ext 3477.

Volleyball—Fall league starting for all Armed Services personnel, Martin Marietta employees and immediate family members at least 18 years old. Team entry deadline is Wednesday, October 12. See recreation racks or call ext 6750.

Computer Club—Kevin Kennelly of

Intel Corporation will discuss state-of-the-art microcomputer system architecture for the '80s at a meeting of the Waterton Computer Club at 5 p.m., Wednesday, October 12 the SSB Presentation Room. Call E. Payson, ext 4585.

Basketball—Organizational meeting for winter leagues now forming will be at 4:45 p.m., Monday, October 17 in SSB Cafeteria. Entry forms due October 31. See recreation racks or call ext 6750.

Tennis—Second Annual "Weekend Hackers" tennis tournament is scheduled for the weekends of October 22/23 and October 29/30. Open to all Denver Aerospace, Data Systems, and Armed Services personnel. Spouses and dependents, 16 or older, are also eligible. Each entry is \$5 and due Friday, October 14. See recreation racks or call ext 6750.



"Two Birds in Flight," an oil painting by Charles H. Haymes for the shuttle art exhibition. "It seemed to me that combining an eagle and the Space Shuttle was a natural—two birds in flight—both highlights of the Kennedy Space Center and both representing the spirit of America," said Haymes.