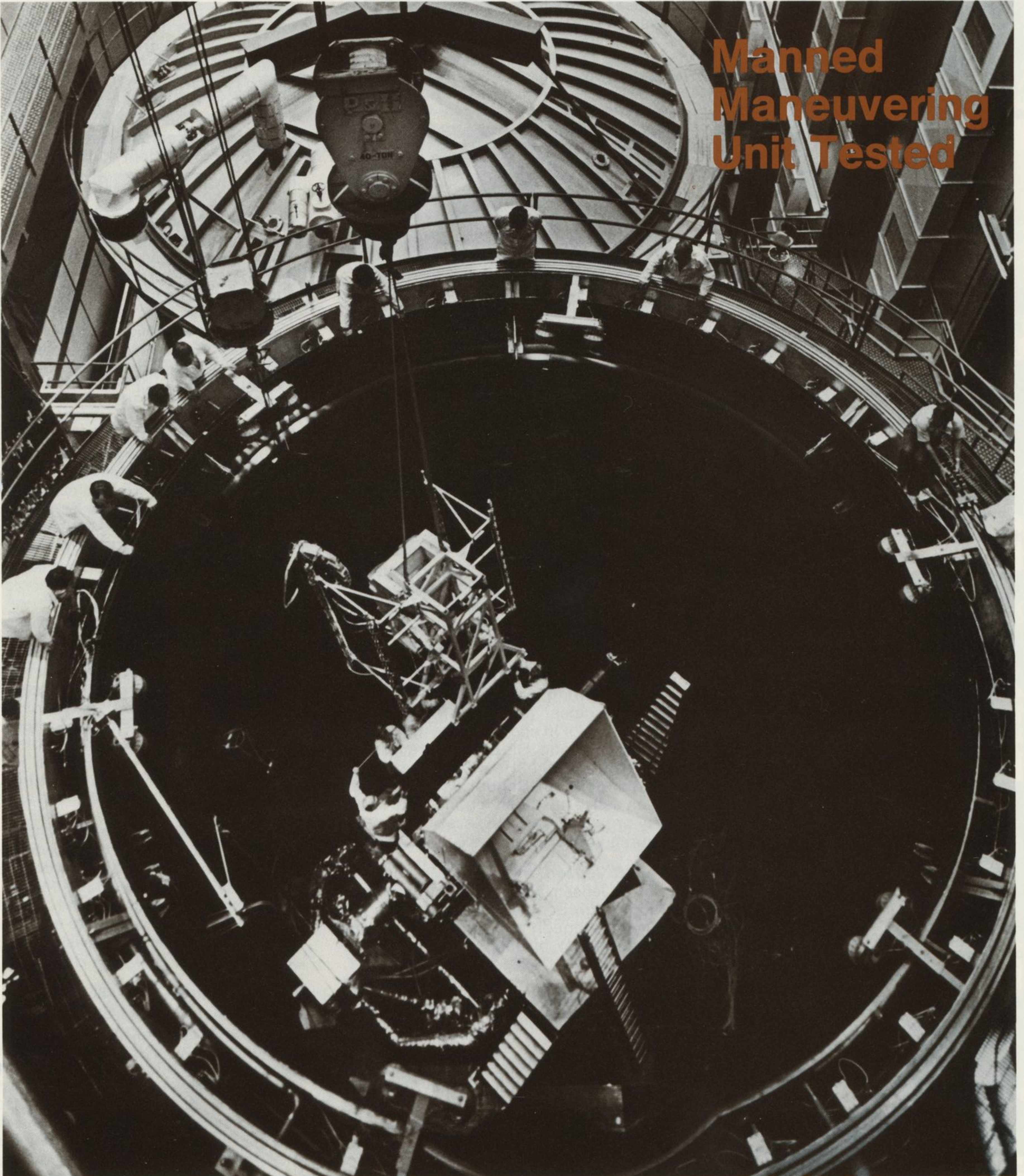


25th MARTIN MARIETTA
ANNIVERSARY
DENVER AEROSPACE

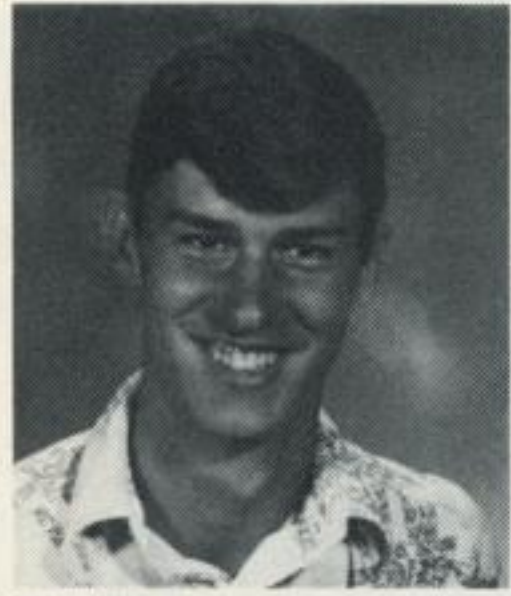
NUMBER 4/1981

MARTIN MARIETTA
news
DENVER AEROSPACE

**Manned
Maneuvering
Unit Tested**



11 earn Martin Marietta scholarships



Dallas



Fraser



Griffith



Jensen



McCracken



Murphy



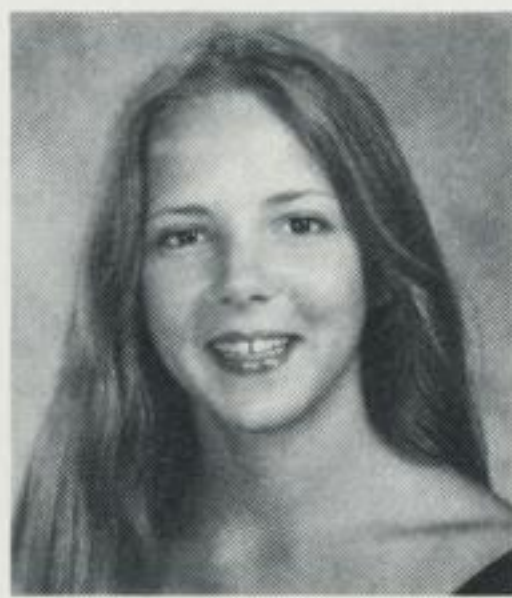
Scott



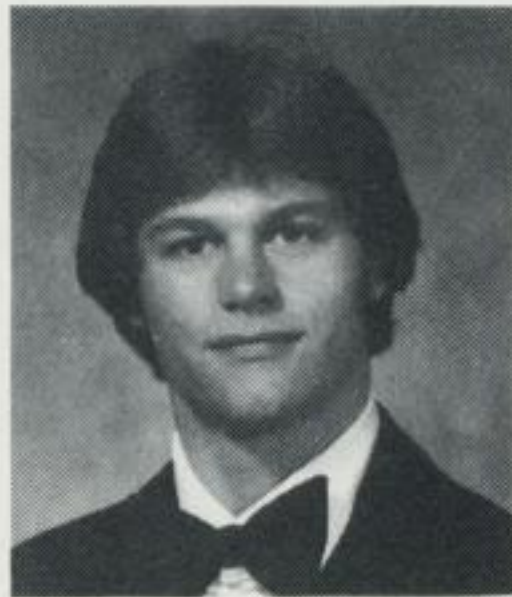
Silver



Yablonski



Beal



DeGeorge

Eleven children of Denver Aerospace employees have been selected to receive Martin Marietta Foundation scholarships for the 1981-82 academic year. Nine are from the Denver area and two are from the Michoud division.

Those from Denver are Charles A. Dallas, William H. Fraser, Kent A. Griffith, Paul S. Jensen, Kristal L. McCracken, Kenneth P. Murphy, Gail F. Scott, David A. Silver, and Scott M. Yablonski.

Selected from Michoud division were Jennifer G. Beal and Bradley T. DeGeorge.

The scholarships, initially for one year and renewable for three more years based on academic achievement, are for \$3000 each year.

Charles A. Dallas is the son of Mr. and Mrs. George M. Dallas. He will graduate from John F. Kennedy High School and wants to attend Case Western Reserve University in Cleveland. He plans to major in either chemical, biomedical, or computer engineering. He has participated in a special math program sponsored by the National Science Foundation at Colorado State University. His father is a staff engineer.

William H. Fraser will graduate in May from Palmer High School in Colorado Springs. He is the son of Mr. and Mrs. William A. Fraser. Rice University in Houston is his first choice for work in economics or mathematics. He has been active in Scouting and enjoys creative writing. His father is a senior group engineer.

Kent A. Griffith, whose father is a senior group engineer, plans to use his scholarship to major in economics at the University of Colorado. His parents are Mr. and Mrs. Gary Griffith. He will graduate from Arapahoe High School where he has been active in student council and musical organizations. He is also active in church youth groups.

Paul S. Jensen, the son of Mr. and Mrs. Roy P. Jensen, will graduate from Wheat Ridge High School. His father is an engineer. Although he is undecided on his college major, his first choice for college is Middlebury College in Middlebury, VT. He is a member of the National Ski Patrol at Winter Park, was on the high school football team, and is a swimming instructor.

Kristal L. McCracken plans to major in computer science at Colorado State University after graduation from Highland High School in Thornton. She is the daughter of Mr. and Mrs. Burl L. McCracken. Her father is a senior specialist in materiel. She has been a member

of the All State Honor Band and the Western State College Honor Band as well as her high school marching band and pep band.

Kenneth L. Murphy will graduate from Columbine Senior High School in Littleton in June. He plans to pursue a double major in chemistry and chemical engineering at the Colorado School of Mines. His parents are Mr. and Mrs. John M. Murphy. His father is a program manager. He has been active in musical and theater groups and the People-to-People High School Student Ambassador program.

Gail F. Scott has been accepted at Colorado State University where she plans to major in business administration and management. She is the daughter of Mr. and Mrs. Gerald F. Scott. Her father is a staff engineer. She has been active in sports at Littleton High School, including two years on the varsity soccer team. She has also played recreational soccer and recreational softball.

David A. Silver, the son of Mr. and Mrs. Aaron N. Silver, will graduate in late June from Yeshiva Toras Chaim in Denver. He plans to become a pre-medical student at Yeshiva University in New York City. His father is a senior staff engineer. He is a musician, playing the piano and the clarinet, and builds "fully functional" airplane and boat models.

Scott M. Yablonski, whose father is a technician-I&E, will graduate from Abraham Lincoln High School. He is the son of Mr. and Mrs. James R. Yablonski. The University of Denver is his first choice and he plans to major in psychology or sociology. He has exhibited his bird carvings and has participated in the Clown Ministry Troupe at his church.

Jennifer G. Beal plans to major in biological sciences at the University of Florida following graduation from Miami Sunset Senior High School in Miami, FL. She is the daughter of Mr. and Mrs. James B. Beal. Her father is a group engineer in quality for the Michoud division.

Bradley T. DeGeorge will graduate from St. Stanislaus at Bay St. Louis, MS, in early May. He plans to major in aerospace engineering at Notre Dame University. His parents are Mr. and Mrs. Melvin DeGeorge. His father is a specialist in materiel at Michoud. He is interested in weightlifting, water skiing, and football. He participates in a program helping mentally and physically handicapped children.

Electronic mail evaluation to begin

An evaluation of a proposed electronic mail system will begin April 6.

George B. Macaulay, who is coordinating the evaluation, said two systems will be used in the initial test. However, the evaluation is not a competition.

"The systems are different. One, the Mailway program using Wang equipment, provides electronic mail and text editing. The other, based on the Prime computer, has additional capabilities, such as calendars, schedules, and appointments. It may be that we can effectively use both systems, but our primary interest now is in document distribution."

Why consider electronic mail?

Macaulay says that recent surveys have shown that the top time wasters in any business are the telephone, mail, and meetings.

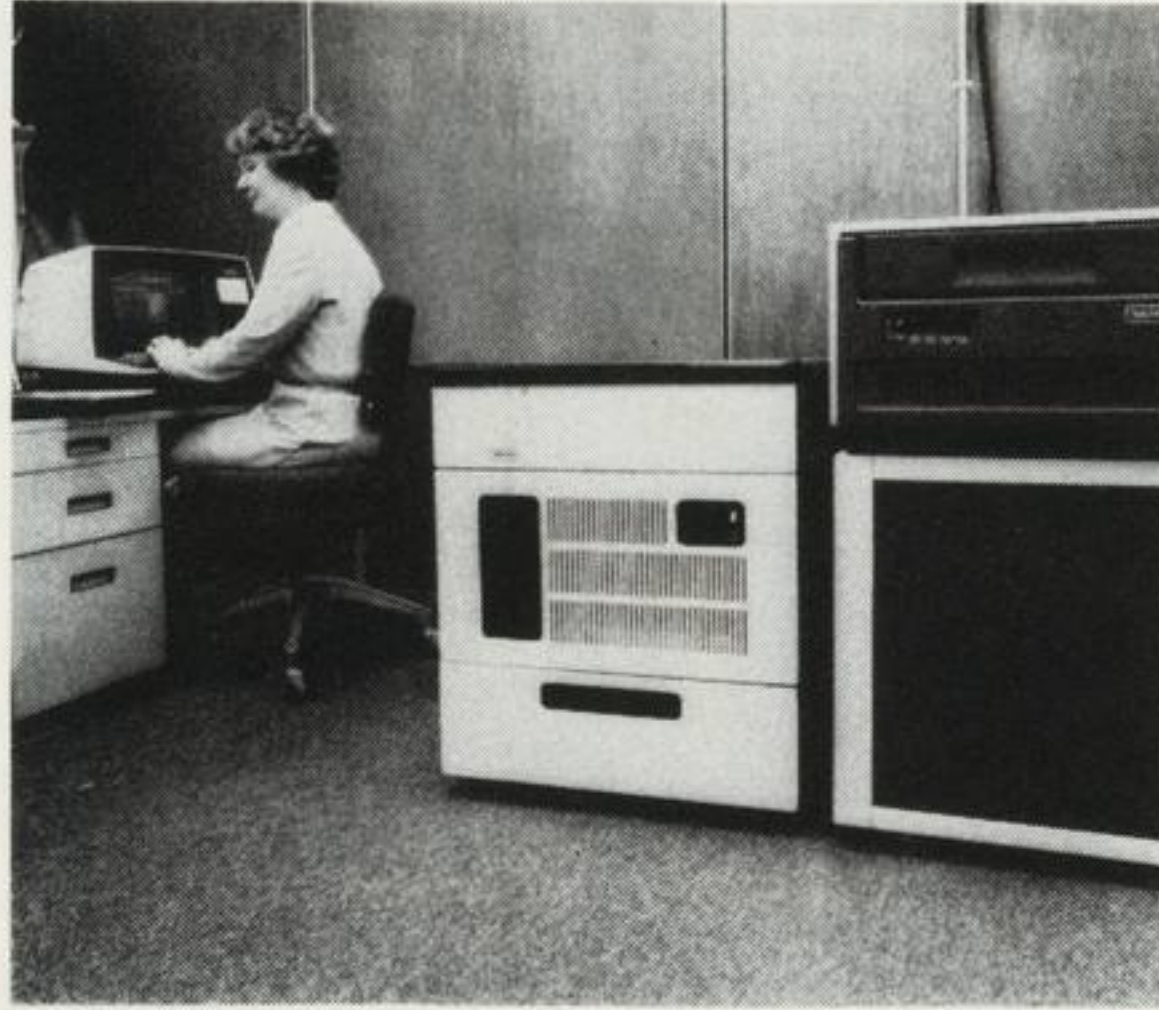
Electronic mail, he points out, can eliminate some wasted time in each area.

"Telephone tag is one good term for one of these time wasters," Macaulay said. "You make a call, the other party is out so you leave a message. Your call is returned, but you are out. And that sequence can go on and on. With electronic mail, your full message is received even if the other party is out. He reads it when he returns, responds, and you get the information even though you are out when it arrives."

In the evaluation beginning April 6, functions that are familiar with Wang equipment will be connected. They include the word processing centers in the engineering building and in the new addition at DCS, editorial services, and Data Systems both at Inverness and in the inventory building.

The first evaluation will continue through June. In July, other stations will be added, including offsite locations on the west coast. That test will continue through 1981.

"We are looking for speed in transmitting documents and also at automating some office functions to allow more time for productive work—not playing telephone tag, or waiting impatiently for an important piece of written information," Macaulay said.



The Wang office information system in the engineering building word processing center will be used as the central unit in the upcoming electronic mail evaluation. Polly Speranza is shown putting a document in the system for transmission electronically to another station.



Two electronic mail terminals can be operated by Paula Curra at this station in the evaluation that begins in April. Messages travel from station to station over normal telephone lines.

Wall Street Week top PBS program

Wall Street Week is the most watched of all public television programs.

Recent audience rating figures show the program—for which national underwriting is provided by Martin Marietta—is viewed in more than four million homes each Friday night. From that number is extrapolated a weekly adult audience of more than eight million viewers.

The new rating figures place Wall Street Week atop the PBS rating for the first time, although the program consistently has been in the top two or three.

Martin Marietta's underwriting association with the program is in the third year.

In Denver, the program may be seen on KRMA, Channel 6, at 8:30 pm each Friday.

RTD adds bus for route 67

The Regional Transportation District (RTD) has added a second bus for service on route 67 from the main Denver Aerospace facility. The bus leaves at 4:33 pm. The first bus serving the route still leaves at 4:02 pm.

The added service will continue as long as there are enough riders to support the service.

Corporation president directs message to employees

Thomas G. Pownall, president of the Martin Marietta Corporation, has written the following message to employees at all the corporation's locations.

As a Corporation, we have been asked several times recently to comment for various of the news media on the economic recovery plan proposed by the new administration in Washington. We have declined those offers for mass media comment for reasons that seemed to us to be entirely appropriate in the context. On the other hand, it also seems entirely appropriate to address by internal means the 34,000 Martin Marietta employees in the furtherance of effective and good citizenship—both corporate and personal.

All employees have been by now exposed to the program which has been laid before the Congress for action.

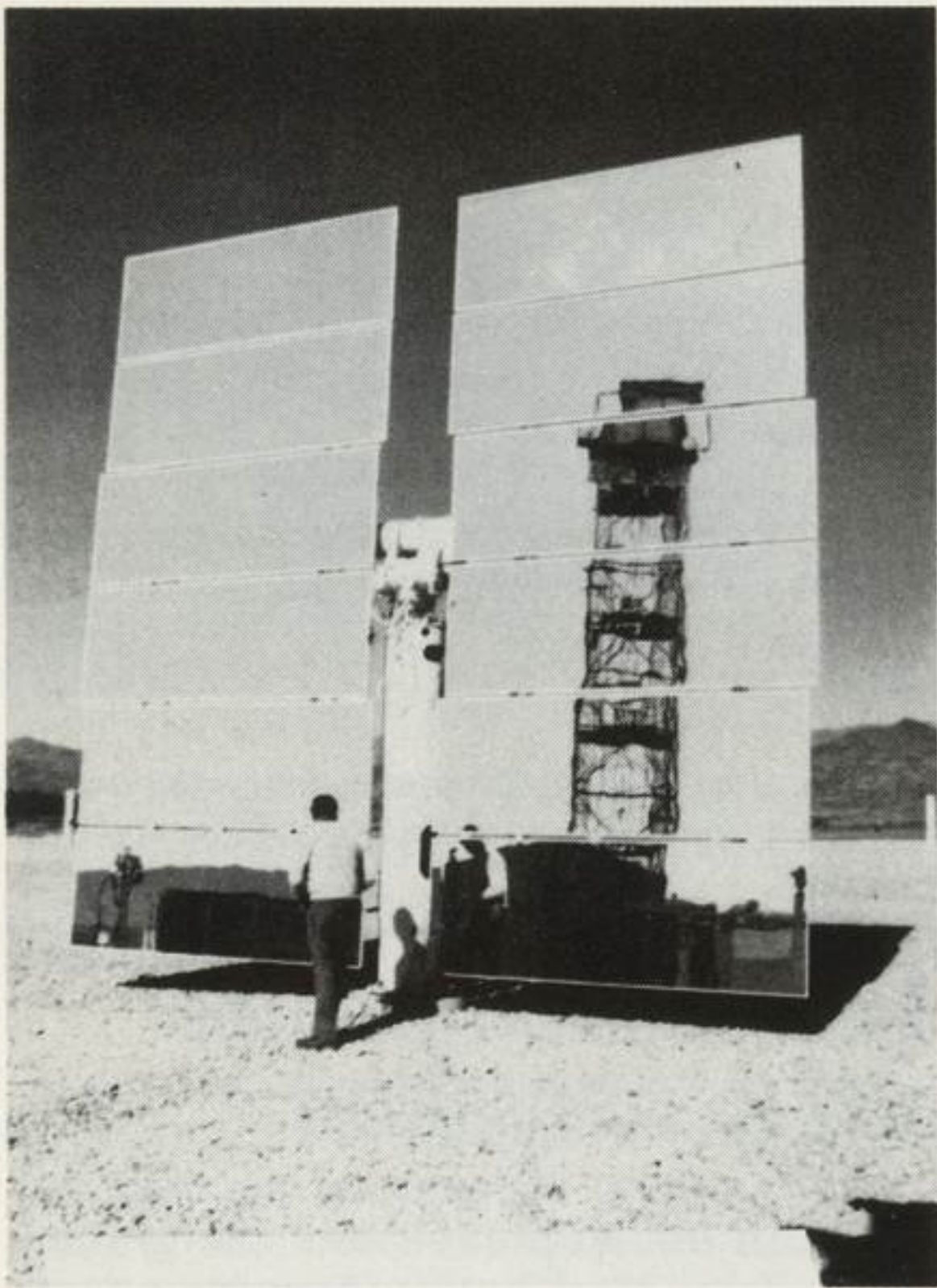
None of us, as citizens, has escaped from the harm inflicted by continuous inflation. Few of us, probably none in fact, have not been somehow affected by the long and cumulative impact of federal regulation piled upon federal regulation. I'm certain each of us has, at the very least, wondered when the tax burden will stop growing heavier, and common sense surely tells us all that the nation can no more continue to live beyond its means than can our families. In our individual lives, we come daily face to face with the fact that there is no free lunch.

Virtually all the commentators of whatever political shading now can agree that we are witness in Washington to an effort at the most dramatic turnabout attempted in the federal government in nearly 50 years.

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Call Ext. 5364 with suggestions
or information for articles

Denver Aerospace
P.O. Box 179 • Denver, CO 80201
March 1981



Solar energy equipment is being installed by Denver Aerospace in Spain and Saudi Arabia. In the photo at left is a heliostat in Almeria, Spain that will be used with a solar thermal central receiver. The second photo shows construction on the world's largest photovoltaic power plant near the capital city of Riyadh in Saudi Arabia.

Pownall—*from preceding page*

Martin Marietta Corporation has no vote—ever. You as individuals do have a vote—and, while it sometimes is forgotten and is often neglected, it can be a powerful force. Every election is a powerful reminder. Mail from their constituents does, in fact, get the attention of Congressmen and Senators.

This is not a partisan political matter. If you, as individual citizens, no matter where you work or what your job, feel that the nation needs to ease the tax burden, needs to have the federal budget reduced, needs to re-energize the industrial base which is the source of national security and individual freedom, then you may find great satisfaction in letting it be known in the truly influential places, in the Congress. The most persuasive force in the land is the voice of the voting citizenry. If it suits your individual desires and feelings, please take the time and effort to let your Congressmen and your Senators hear from you, about what you, as a citizen, feel and what you expect of them.

One closing thought: I do believe it is entirely proper for us to take a direct corporate position in favor of the Administration's tax and depreciation proposals, and for other proposals designed to encourage investors. We intend to convey Martin Marietta Corporation's thoughts on these legislative matters to Congress via the strongest appropriate means.

Over the past several years, as you know, Martin Marietta has been making heavy capital expenditures—at record-high levels. These are important sources of our present corporate prosperity; they help, also, to explain the current high

levels of our employment and the fact that job opportunities in the Corporation continue to grow. There are, lying ahead of us, abundant opportunities for further expansion, further growth, the creation of yet more jobs. The Administrations package of proposals to Congress in this regard surely would be of substantial encouragement and benefit to Martin Marietta as a business entity and, as individuals, to those of us who work for it.

Your views, of course, must be presented as your own. They will be most effective that way—and when delivered on your own stationery or letterhead. (In any case, our policy prohibits use of corporate stationery for personal correspondence.)

Again, not as a Democrat or as a Republican but simply as a concerned citizen, please consider whether it will not be in your individual interest to write letters to your Congressmen and your Senators.

Respectfully,

Thomas G. Pownall

Bids asked for expanded SSB upper parking lot

Local area contractors have been asked to bid on a contract to expand the upper parking lot at SSB.

Plans call for the lot to be doubled in size. A completion date has not been announced, pending contract negotiations.

Carpool promotion set at Greenwood

Applications for carpools have been distributed in the Greenwood area in cooperation with the Denver Regional Council of Government's (DRCOG) share-the-ride program at the complex.

DRCOG is mounting a special campaign for carpools. The greater the participation the greater the potential for carpool matches through DRCOG's computer program.

Denver Aerospace employees should return their applications to the share-the-ride office, mail no. 1321, by March 31.

Employees at other locations may file applications at anytime.

"The process is simple," said Lori Sharp, share-the-ride coordinator. "By filling out an application, the employee is matched by work location, hours, home address, and other factors with others interested in forming a carpool."

Questions on carpools may be directed to Ms Sharp at ext. 6606.

SpaceWatch 81 is available to schools

SpaceWatch 81, a special Space Shuttle fold-out developed by the educational magazine INSTRUCTOR primarily for use in grade schools, is available in quantities from the public relations department.

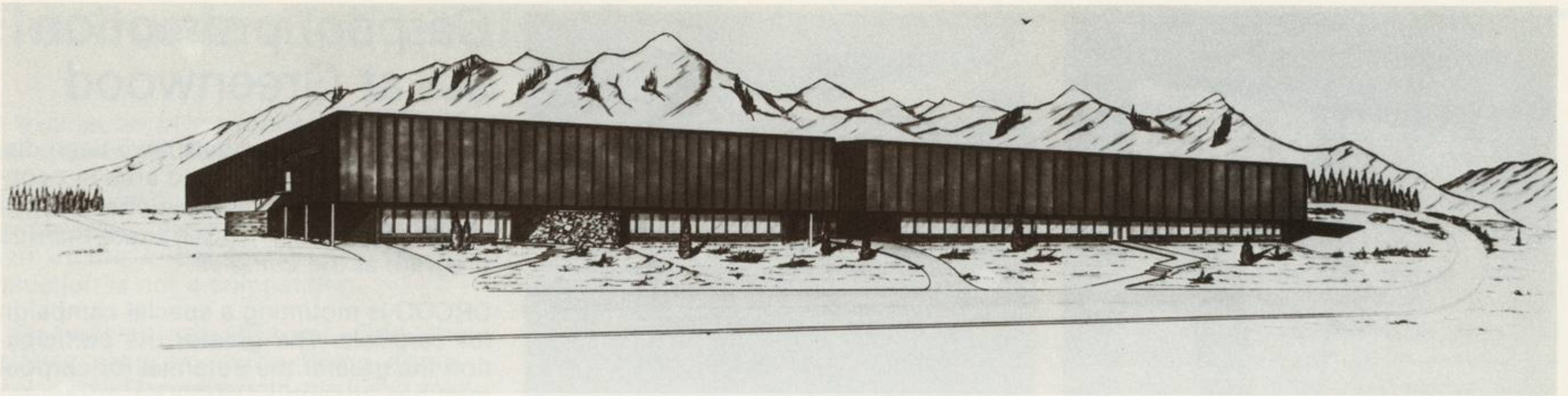
A sample of the fold-out was enclosed in Martin Marietta's TODAY magazine recently received by employees.

Additional quantities may be obtained by teachers by sending a request on the school letterhead to SpaceWatch 81, P.O. Box 179, Denver, CO 80201. Employee children who wish copies for their classrooms may also write to the same address.

Roane named to corporate post

Arnold F. Roane has been named director of capital planning and strategic planning for the Martin Marietta Corporation. He joined Martin Marietta at Denver Aerospace in 1980 as director of the future systems organization. He had been with the General Electric Company 19 years, where, at various times, he managed design, quality control, and strategic planning operations.

Roane received a bachelor of science degree in mechanical engineering from Penn State University and a master of science degree from the Sloan School of Management, Massachusetts Institute of Technology.



The electronic manufacturing facility will be doubled in size when the addition, at right in this artist's concept, is completed. The 65,000 square-foot addition will house office and laboratory areas on the upper floor and manufacturing facilities on the ground floor. The metrology lab and the failure analysis lab, and the receiving and inspection function will be located in the facility. Completion is set for late 1981. A new parking lot is being built.

Aerospace headquarters intern program applications due

Applications for candidates for the Aerospace headquarters operations intern program are due April 17 for review here.

One candidate will be selected for consideration by Aerospace headquarters along with candidates from Baltimore and Orlando for the one 1981-82 intern position.

Applications and information may be obtained from R. W. Walker, ext. 3395.

Candidates should have a minimum of three year's employment with Martin Marietta Aerospace and have a technical background. During the one year assignment, the intern will report to the Aerospace vice president for operations and have a wide range of assignments at headquarters in Bethesda.

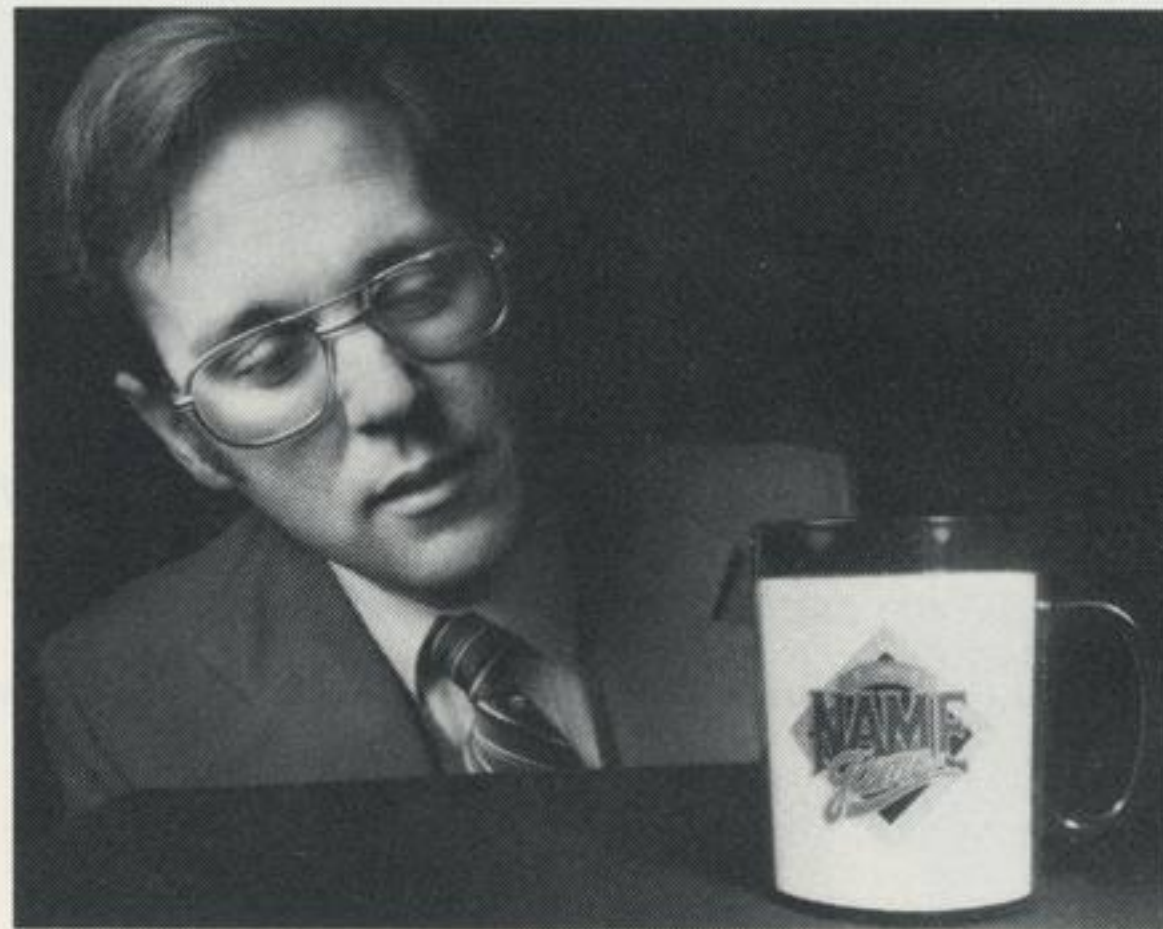
Employee elected society chairman

Albert J. Sulzer, chief of plant protection, has been elected chairman of the Mile Hi Chapter of the American Society for Industrial Security.

The society's local chapter has about 275 members. Nationwide, membership is about 15,000.

On the cover

The quality test manned maneuvering unit has successfully completed a six-and-one-half day, 24-hours-a-day test in the thermal vacuum chamber. The test was designed to stress the equipment to maximum temperature extremes. All systems operated properly. The unit is identical to those scheduled to fly on Space Shuttle.



John Burbage is shown with The Name Game mug he will receive as the first to qualify for the award in the revised employee referral program. Employees who qualify for the mug and a chance at the trips being offered will be notified by letter. The letter is to be exchanged for the mug.

Two JA companies are in operation

Two Junior Achievement companies sponsored by Denver Aerospace are operating in JA's spring semester program.

Hot Stuff Unlimited plans to manufacture fireplace bellows. Employees serving as advisers for the company are Patricia A. Plumbo, Leonard Franzblau, Kevin D. James, and Clinton Kitchell.

Roll Data Company has selected a combination note pad/key holder as its product. Advisers are Kurt B. Dietl, Joseph B. Cook Jr., and John Shipley.

Recreation

Activity cards—Employees who have not obtained activity cards entitling them to select two of the three remaining family events scheduled as part of the 25th anniversary observance may pick them up at the recreation office. Remaining events are the Shrine Circus, June 13; Denver Bears games July 25 and 26; and the Family Day at Lakeside Amusement Park, August 22.

Softball—An organizational meeting for men's, women's, and co-ed softball leagues will be held at 4 pm Thursday, April 2 in the sixth floor SSB presentation room. Information is available at the recreation office or from Commissioner Paul Shattuck at Cinderella City, 977-0810.

Photo contest—Employees and their families are eligible to enter the photo contest sponsored by the National Industrial Recreation Association and Guardian Photo. Two photos may be entered in each of the three divisions—color slides, color prints, or black and white prints. Entry fee is \$1 for each divi-

sion, with a maximum fee of \$3. Entries must be hand delivered to the recreation office, Eng. 125B, between 4:30 pm and 6 pm Thursday, April 9, or Friday, April 10. Entry forms and rules are available at the recreation office.

Basketball champions—The Running Runts took first place in the Denver Metropolitan Industrial Recreation Council tourney after winning the Martin Marietta competitive basketball league playoffs. Team members are Dennis Long, William Campbell, Leonard Hawkins, Michael Osborne, Geoff Obermeyer, John Adamson, B. Doug Meyer, Mark Willey, Dale Stone, Michael Liggett, Glyn Ottefy, and Trent Newton. Eleven teams played in the March 14-15 tourney.

Golf leagues—To be sanctioned by the recreation office, all golf leagues must register teams with the office by reporting the chairman's name, telephone extension, and mail number. Registration forms are available. Individuals interested in playing a league should register with the recreation office.

First Space Shuttle launch scheduled for early April

Launch of the first Space Shuttle is currently scheduled for approximately 6:50 am one day during the week of April 5.

The solid rocket booster will break away from the external tank two minutes after liftoff, and the external tank will be jettisoned from the orbiter six and one-half minutes later.

Following disposal of the external tank, the maneuvering system aboard the orbiter will place it in a 150-nautical-mile circular orbit.

The first mission is 54½ hours long. The primary purpose of the flight is to check out all systems aboard the orbiter. The astronauts will open the payload doors about two hours into the flight and close them 24 hours later. The doors must be opened during the flight to expose radiators on the doors' interior surface. The radiators dissipate heat built up inside the orbiter's cockpit. The doors will again be opened six hours later for approximately 21 hours.

All computers and flight control systems will be checked out continuously during flight. TV status reports will be broadcast to Earth throughout the mission to keep the public informed. The astronauts will eat five meals and two snacks during the mission and they will take time for two sleep periods.

Six landing sites are available for the orbiter. These include the prime landing site at Edwards Air Force Base, California, and five backup sites at Northrup Strip, New Mexico; Kennedy Space Center, Florida; Hickam Field, Hawaii; Kadena, Okinawa; and Rota, Spain.

If there were a single main engine failure prior to main engine cutoff or a time critical failure within four and one-half minutes after liftoff, the orbiter would return to the landing strip at KSC. If there were a main engine or time critical failure after that time, the astronauts would have two options. If the main engines and the maneuvering system can provide enough thrust to fly at least one revolution, the astronauts would come out of orbit and land at Northrup Strip. If the engine can provide enough thrust to achieve a 105-nautical-mile circular orbit, but not enough to achieve the desired 150-mile orbit, the astronauts would then orbit the earth once before landing.

If all goes well, after closing the cargo doors for the final time, the astronauts will turn the orbiter around tail first and fire the orbital maneuvering thrusters to slow the vehicle down. The astronauts John Young and Robert Crippen will guide the orbiter to a powerless landing at Edwards Air Force Base.



Songwriter Jerry Rucker is shown at work on his daily job at the Michoud division's Kennedy Space Center operations. His country and western tribute to the Space Shuttle has been recorded and is being distributed nationwide.

Space Shuttle inspires employee songwriter

Denver Aerospace plays a big role in the Space Shuttle program. But no one ever thought this role would extend to the country and western music sector. And Jerry Rucker never thought that something he works on every day would enable a dream to become a reality.

Rucker, a technician for Michoud division's Kennedy Space Center (KSC) operations, has been writing country and western songs as a hobby for ten years, but has never had one published.

At the suggestion of his father, he sat down and wrote "Blast Off Columbia," a tribute to the first Space Shuttle flight.

When a local disc jockey heard Rucker's demonstration tape, he put him in touch with Hamman Publishing, Inc. (BMI). They bought the rights to the song and had it recorded by Roy McCall, an up-and-coming country and western singer.

Hamman distributed 8000 copies of the song nationwide to radio stations and is working on retail distribution.

Rucker has been with the KSC operations for two years. He is a member of a special team working on repairs to debonded insulation on the first flight external tank.

He has signed a two-year contract with Hamman Publishing and has another song under consideration. But "Blast Off Columbia" is special to him.

"Besides being my first song published," he says, "it's something I really think is going to happen."

Gold medallions are awarded at Canaveral

Canaveral operations held its annual gold medallion awards dinner recently to "honor those who have made very special and significant contributions to the Titan space flight program at Cape Canaveral Air Force Station." Nineteen employees received medallions and certificates from the space launch systems division for contributions in three award categories.

James W. Weddle, quality mechanical inspector, received the flight success award for detecting an improperly mounted thrust control valve. He was given a \$750 U.S. savings bond.

John A. Cunningham, test operations guidance technician, was recipient of the readiness award for his efforts in correcting a malfunction in the gyro temperature controller. He received a \$500 U. S. savings bond.

The innovation/performance award for achievement beyond general assigned functions went to Victor S. Butkis, Claude M. Cornett, Dale L. Custer, Robert M. Day, Gale H. Faison, Otto E. Fenske, Ralph E. Foley (posthumously), Douglas N. Gilman, William R. Graham, Donald E. Hass, Joel Hagan, Herbert H. Hearne, Joseph C. Lohman, James H. Mathena, Jerry L. Neff, Kenneth W. Villyard, and Dean W. Wiloughby.



George Tefft, a program engineer in the space and electronics systems division, has been elected to a second two-year term as a member of the board of directors of the Denver Area Council of Camp Fire, Inc. He was elected to his first term in 1978 by the council's southwest region members to serve as regional representative.