

MARTIN MARIETTA

news

DENVER DIVISION

NUMBER 15/1976





A new type of feature never before observed on Mars is seen in this photomosaic of the Viking mission's first high-resolution pictures of the planet's north polar ice cap. The pictures, taken during Viking Orbiter 2's 56th orbit around Mars, show a spectacular array of features caused by the uneven distribution of ice and the exposure of defrosted layered material on slopes. Translucent streaks of varied tones, which overlie both ice and defrosted layered material, are seen here for the first time. The streaks may be formed by redistribution of ice and soil particles by wind. The area shown extends about 360 kilometers (225 miles) from 77° North, 350° West, at the edge of the ice (bottom) to 83° North, 330° West (top).

Canaveral operation earns security award

The Denver division's Canaveral flight operations has been presented the Cogswell Award for "excellence in industrial security operations." The facility was one of two selected in the Defense Contract Administration Services' Atlanta region, which includes more than 300 defense facilities.

This year's award marks the third time the division or one of its facilities has been recognized by the American Society for Industrial Security for maintaining outstanding security operations.

Recreation fund buys tickets; employees to see Nuggets basketball game

Denver division and Denver Data Center employees will be guests of the division's recreation fund at a Nuggets basketball game Nov. 23, Dec. 9, or Dec. 18.

Tickets were distributed Nov. 18 and 19, with each employee receiving two tickets for one of the three games. Distribution was by departments.

The Nuggets play Washington Nov. 23, Cleveland Dec. 9, and Chicago Dec. 18.

"Employees may exchange tickets with each other if they are unable to go to the game for which they are scheduled," R. W. Weber, director of professional

and industrial relations said. "For example, if your tickets are for Nov. 23 and you want to go to the Dec. 9 game, you may swap with another employee. Because of the very special group price we have received, the Nuggets will not exchange tickets for another night."

Additional tickets for the Martin Marietta nights may be purchased as long as seats are available, at a reduced price. Seats will not be in the special section, but will be nearby. Regular \$6.60 seats may be purchased for \$4.40. If you are interested in additional tickets, call the employee relations office, ext; 2234;

CCMS ships first equipment

A partial shipment of the first set of checkout, control, and monitoring subsystem (CCMS) equipment has been made and installation and checkout are proceeding without problems. The balance of the equipment is ready for shipment this week for installation and acceptance Dec. 1.

The shipment marks the end of the development phase of the program to supply electronic checkout equipment for Space Shuttle. The basic design of the hardware and software has been completed successfully. Two major design reviews were held with NASA with only minimum changes in the CCMS project's hardware and software design.

E. C. Wood, who heads the project, said, "The concepts developed during the proposal activity on this program are proving their validity. The commercial-type operation, with cost-effective approaches to design and production, and the team assigned have been highly successful."

"The excellent ratings we have received from NASA have been made possible by the outstanding team attitude and spirit and the top effort and high quality performance of everyone working on the program."

"We have every reason to approach the production challenge with confidence and look forward to future business with the Department of Defense for checkout equipment for the Air Force shuttle to be launched from the Western Test Range and other applications extending into the next five years."

FICA wagebase increases in '77

The combined taxable wage base for Federal Insurance Contributions Act (FICA) and Medicare will increase from \$15,300 to \$16,500 in 1977. The tax rate will remain unchanged at 5.8 percent.

Assuming maximum base earnings, a comparison of the 1977 tax—\$965.25 (5.8% x \$16,500)—with the 1976 tax—\$895.05 (5.8% x \$15,300)—reflects and increase for each employer and employee of \$70.20—about 7.8 percent.

First payrolls affected by the new wage base of \$16,500 will be those first paid in 1977, regardless of whether a part or all the payroll was earned in 1976.

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After 20 years, 5 million eggs Haberl will retire

The division cafeteria will serve its traditional Thanksgiving dinner Tuesday, Nov. 23. It will be the 20th—and last—supervised by F. J. (Bud) Haberl. Haberl is leaving to take optional early retirement from Martin Marietta.

Haberl came to work at the division in 1956, designed the cafeteria, established specifications for equipment, and hired the first employees.

"We don't dwell on statistics in the cafeteria," Haberl said, "but when I decided to retire I got curious about some things. I also thought it might give Phyllis Montgomery, who is taking over, a better feel for her management job."

After 20 years the statistics can be overwhelming. For example: Five million eggs and a million and half pounds of beef have been served.

"Beef! That's equal to 7000 head of cattle," Haberl said.

Mrs. Montgomery put it another way: "When prime rib or sirloin steak are on the menu, we will serve as many orders as any large restaurant in Denver. The difference is that we serve prime rib and sirloin steak at a much lower price."

The new chief of food service is no stranger to the division cafeterias. Mrs. Montgomery has been on the staff for 16 years, doing almost every job on her way to her present position.

She contemplates no changes in policies or procedures.

"We will still do the same things, especially when it comes to food preparation," Mrs. Montgomery said.

Keeping prices down will be her main goal. "Shopping for the cafeteria is little different than shopping at home," she said. "The quantities are much larger, but the aims are the same—lowest price, highest quality."

Busy homemakers may be buying more precooked, convenience foods, but these foods have no place on the cafeteria shopping list.

"We just don't like the quality or the price," Mrs. Montgomery and Haberl said in unison. "If we used these foods, prices would have to go up 20 to 30 percent. We can prepare food on the menu better and cheaper by doing it ourselves the old fashioned way."

The old fashioned way means that some



Mrs. Phyllis Montgomery, left, new chief of the division's food service, checks menu details with F. J. (Bud) Haberl, who is retiring as head of the food service operation.

of the cafeteria people get up at 2:30 or 3 every morning so fresh donuts, freshly baked sweet rolls, and other items on the breakfast menu are ready at 6 am.

"And those people get to work despite snow, icy roads, or whatever," Haberl said. "Our people have amazing attendance records. Most have been with us 12 to 15 years and many have perfect records year after year."

"These people are truly dedicated to serving others," Haberl asserted. "Employees coming through the line are more than customers—they are friends who have stopped by to eat with us."

There is strong evidence employees have the same feeling. Would you ask anyone but a friend for a recipe for a favorite dish?

The cafeteria people are happy to share recipes. Most requested are lasagna, spaghetti sauce, roast turkey and dressing, Italian bean soup Livorno, steak or chicken in hunter's sauce, and farmer's potato soup.

Mrs. Montgomery is responsible for some of those recipes, including hunter's sauce.

So far no one has asked for a recipe for anything purchased from a vending machine, but the vending machines are important to the cafeteria. The machines are owned by the division and serviced by cafeteria people. Profits from the machines help keep cafeteria prices low.

The cafeteria is an excellent employee benefit.

Occasionally, an employee will attempt to increase his own benefits from the

cafeteria by bypassing the cashier—not paying for his total lunch, or not paying for a piece of pie, for example.

"When we see this happen or when another employee tells us about it, we take immediate action," Haberl said. The loss by this dishonesty is really suffered by other employees, who, in the long run, pay for these instances through increased prices.

"Fortunately, this kind of dishonesty is rare," Haberl said. What few instances we have had generally have been reported by other employees who resent this type of theft."

This is another policy that will not change under Mrs. Montgomery.

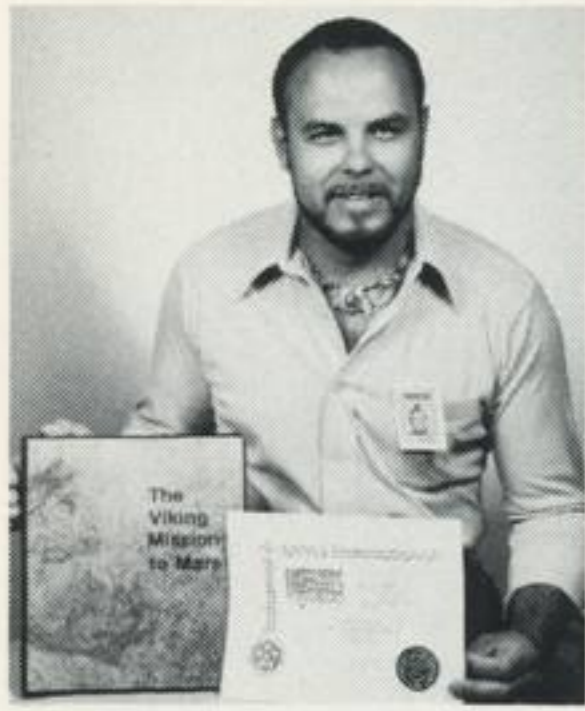
A good cook and a good manager is the way Haberl described his successor.

To assure that she continues to be a good manager, Mrs. Montgomery is completing work at Denver Community College for an associate degree in food and beverage management.

"Bud is leaving some big shoes to fill," Mrs. Montgomery said. "I'm a little shaky—nervous—but with his help and the help of those I have worked with all these years, I am sure I will make it."

Haberl said, "She will."

Haberl, who is leaving after Thanksgiving, will devote most of his time to managing the apartment rentals he and wife Dorothy have developed over the years and to developing personnel management systems for two Colorado ski areas—Copper Mountain and Winter Park. He is on the board of both areas.



The division's Viking Mission to Mars press book was judged the best designed two-color technical brochure at the recent Industrial Graphics International conference. Conceived and produced by the division's public relations department under the direction of John H. Boyd Jr., the book was designed by John Tieleman, an illustrator in graphic services. Tieleman has been with Martin Marietta three years.

NASA seeks astronaut candidates

The National Aeronautics and Space Administration recently announced two selection programs in which a limited number of persons will be selected as astronaut candidates.

The candidates will be part of a two-year training and evaluation program with the possibility of selection as Space Shuttle pilots or mission specialists.

Basically, requirements for candidates for mission specialist positions are a bachelor's degree from an accredited institution in engineering, physical or biological science, or mathematics (advanced degree or equivalent experience desirable); ability to pass NASA flight physical; and a height between 60 and 76 inches.

Candidates for pilot positions should have a bachelor's degree in engineering, physical science, or mathematics from an accredited institution (advanced degree or equivalent experience desirable); 1,000 hours first pilot time, with 2,000 hours desirable and high performance jet aircraft and flight test experience preferred; ability to pass NASA flight physical; and height between 64 and 76 inches.

Further information on requirements may be obtained from professional and industrial relations, A-15, in Denver. In Michoud, contact Ray Lacombe, personnel and industrial relations, column EC40 on the first floor of building 161.

Applications are due June 30, 1977, selections will be made by Dec. 31, 1977, and successful candidates will report for duty July 1, 1978.

Swine flu vaccine available December 6

A program of voluntary Swine flu inoculation for employees will be held at the Denver division Dec. 6. The shots will be given by Colorado health department technicians under the direction of the Jefferson county health department.

Schedule for the inoculations, to be

given in the second floor cafeteria, will be posted for those who signed up for the program.

If you have not registered and wish to do so, contact the division medical department, ext. 2676.

The Economic Facts

Employee benefits no longer 'fringes'

Employee benefits may still be called "fringe benefits" but the word fringe is no longer appropriate in describing them. Particularly when a company's expense for such extras as pensions, insurance, vacations, and holidays is one-third of payroll costs.

According to *Nation's Business*, American employers will spend about \$300 billion this year for employee benefit programs.

"Employee benefit costs are growing almost twice as fast as wages," the magazine reports in its October 1976 issue. "Benefit costs grew 165 percent between 1965 and 1975, while wages and salaries increased 85 percent.

"Employers spent an average of \$76.62 per week for employee benefits last year, compared to \$28.88 per week in 1965."

Information reported by *Nation's Business* is from a survey conducted by the Chamber of Commerce of the United States. This is the 15th survey by the organization, which has traced the growth of employee benefits since 1947.

Two principal types of benefits were covered in the survey:

1. Wages paid for time not worked, including vacations, holidays, sick leave, and rest periods. These benefits total an overall average of \$29.71 per employee per week.

2. Nonwage payments for pensions, insurance premiums, Social Security taxes, unemployment compensation, and similar benefits, totaling \$46.91 per employee per week.

The survey covered more than 25 employee benefits.

"Employer Social Security taxes for old-age, survivors, disability, and health insurance are, overall, the single most expensive employee benefit, averaging \$12.23 per employee per week," the magazine reports. "This does not include an equal amount withheld from the employee's wages."

Social Security taxes have skyrocketed. "In the past ten years," the report says,

"Social Security taxes rose 291 percent, the highest percentage increase for any major employee benefit."

The maximum employer Social Security tax was \$174 per employee in 1965 and \$824.85 in 1975. Now 895.05, it will be almost \$1000 in 1977. (See article "FICA wage base increases in '77" in this issue of *Martin Marietta News*.)

Private pensions are the next most expensive benefit, averaging \$11.92 per employee per week.

Next comes employer payments for private life, accident, and hospitalization insurance, averaging \$11.19 per week per employee. These costs, according to *Nation's Business*, have increased 216 percent in the past ten years.

Paid vacations average \$11.15 per week per employee. Employee vacations average 13 days a year for all industries.

Paid rest periods, washup time, and other on-the-job time paid for but not worked cost employers an average of \$7.85 per week. This time off averages 17 minutes a day, up from 12 minutes a day ten years earlier.

Paid holidays average eight days a year and cost employers \$7.23 per week per employee.

When we talk about the average cost per week, we mean employers spend that much each week, 52 weeks a year, to provide the benefit to employees.

Taking the average for paid holidays, for example, of \$7.23 per week, you find a company pays more than \$375 per year for each employee just for holidays.

Or, if you take the \$76.62 per week average for all benefits, the cost per year, on the average, is nearly \$4000 per employee.

Add that to your annual pay. "Fringe benefits" are no longer "fringes"—they are a sizeable part of your total compensation (pay plus benefits) for doing your job.

On the cover

Probably the most photogenic feature on Mars is the enormous canyon—Valles Marineris—which cuts deeply into the surface and stretches nearly a third of the way around the planet. This photomosaic was made from pictures taken August 23 by Viking Orbiter 1 from an average range of 4200 kilometers (2600 miles). The principal canyon crosses the bottom half of the picture. North is to the top. The far wall of the main canyon shows several large landslides which probably formed in episodes and perhaps were triggered by Mars quakes. Along the near wall, another widening process appears to have occurred; a series of branch channels cuts into the plateau at the bottom. These may have formed either by slow erosion as a result of the release of ground water or by mass wasting processes in which rock debris moves slowly downhill as ground ice freezes and thaws. Other branches of the canyon are visible at top.

Former officers, federal employees must file reports

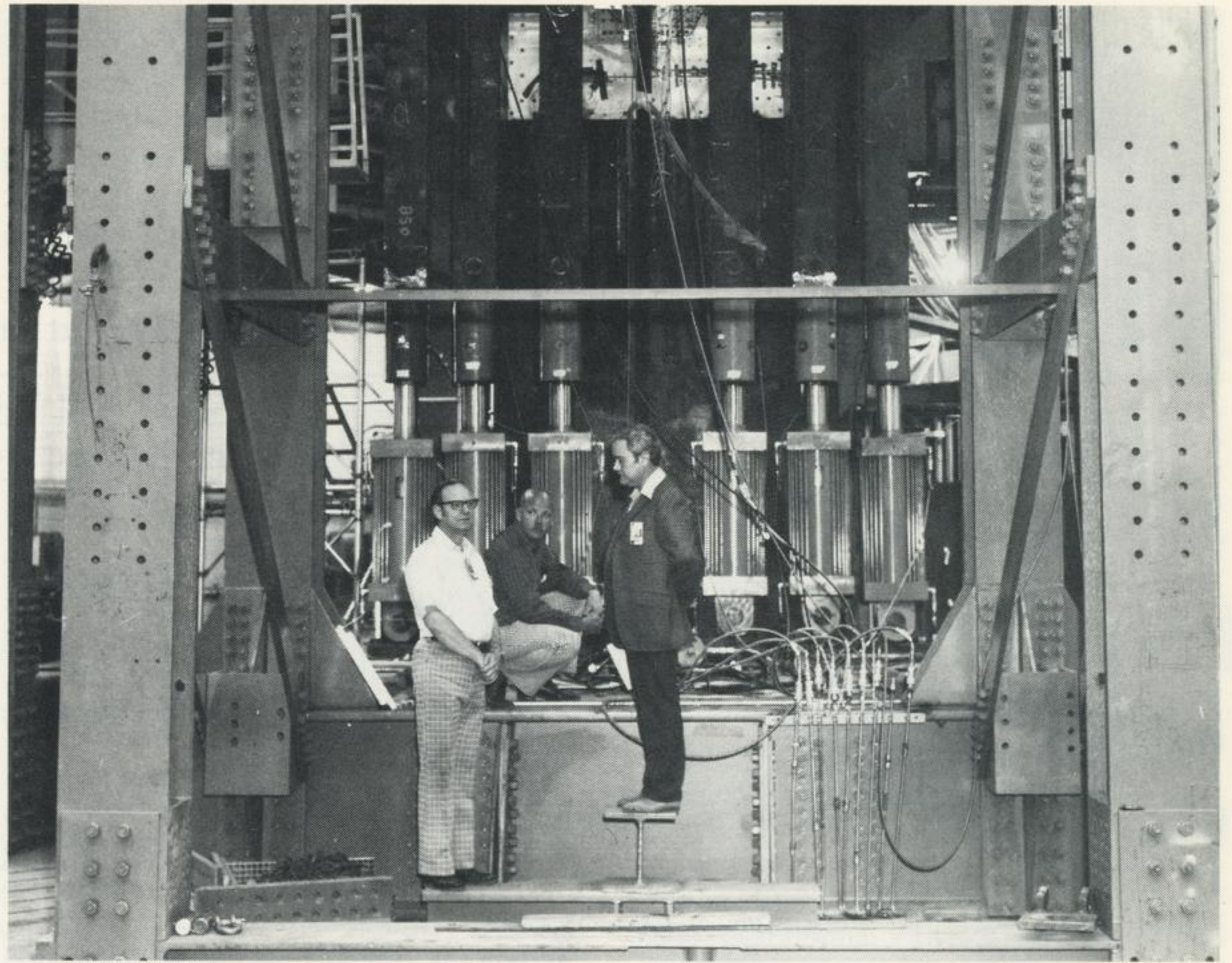
Until recently certain former and retired military officers, former civilian government officers, employees of the DOD, and former NASA employees were required to report their employment with Martin Marietta by Nov. 15 each year.

Both DOD and NASA procedures for reports are being revised to adapt to changes in the federal fiscal year. The fiscal year is now Oct. 1 to the following Sept. 30. As a result, the deadline for filing the current defense related employment report has been changed from Nov. 15, 1976 to Feb. 15, 1977.

This means employees required to file such reports need not file a report in 1976, but should file instead a report covering the one-time 15-month fiscal year by Feb. 15, 1976.

Forms are being obtained for employees and will be available in Denver at the employee relations office, module 110 in the engineering building. If you have questions, call R. E. Burnett, ext.2234.

In Michoud, information and forms may be obtained from Ray Lacombe, personnel and industrial relations, column EC40 on the first floor of building 101.



Marvin Bryant, senior engineer, L. C. Heatherly, group engineer, and R. B. Murphy, foreman, production operations, left to right, discuss final procedures for the pressure test of Solid Rocket Booster attach fitting successfully performed at Michoud recently.

New Orleans Jazz offer discounts

The New Orleans Jazz NBA basketball team is offering Michoud operations employee groups a discount for tickets to the team's remaining home games in the Superdome.

Groups of 20 or more may purchase \$6 tickets for \$4.50 and \$4 tickets for \$3—a 25 percent discount.

Yet to play on the Jazz home schedule are the World Champion Boston Celtics with John Havlicek; Los Angeles Lakers with Kareem Abdul Jabbar; Golden State Warriors with Rick Barry; Denver Nuggets with David Thompson, Bobby Jones, and Dan Issel; and the Philadelphia '76ers with basketball's six-million-dollar man Julius (Dr. J) Irving. They'll be gunning for the New Orleans Jazz all-pro forward Pistol Pete Maravich.

Tickets may be arranged by calling the Jazz at (504) 587-4263 or by writing to Jazz Tickets, PO Box 43213, New Orleans LA 70153.

Be sure to ask for Martin Marietta recognition on the scoreboard.

OIC presents Pathfinder Award to Michoud employee

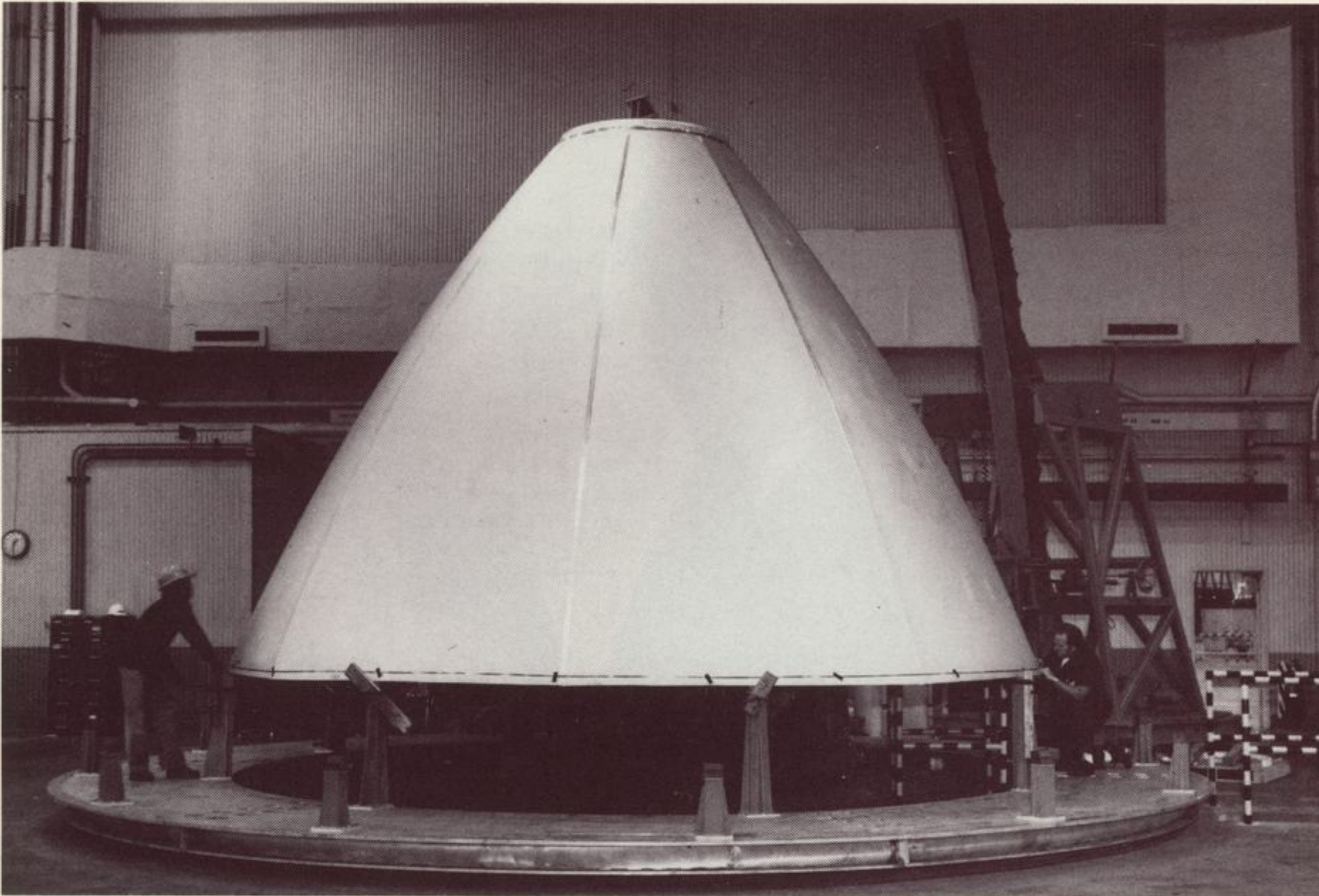
The "contribution and dedication" of William V. Willis to the program of the Opportunities Industrialization Center (OIC) has earned the Pathfinder Award for Willis and Michoud operations.

Willis is EEO administrator for Michoud operations. He joined Martin Marietta in 1974 after serving in the same EEO capacity for Litton Industries.

OIC is a major national manpower program training the underemployed, the unemployed, and the disadvantaged to meet the needs of the nation's employers.



Alex Wilcox, manager of employee and labor relations, left, congratulates William V. Willis for receiving the coveted OIC Pathfinder Award.



Main propulsion test article (MPTA) forward ogive's light, 15-foot-long welds are prepared

for x-ray by Tom Bromfield, left, production helper, and Charles O. Neal, "B" welder.

MPTA work moves toward '77 delivery

Work on the external tank main propulsion test article (MPTA) is progressing steadily toward Summer 1977 delivery.

Fifteen of the 16 major structural components that make up the external tank have been assembled in preparation for major weld. The 16th component, an intertank, has been assembled and will be delivered early next year for static testing at Marshall Space Flight Center. Another intertank will be assembled in time to meet MPTA delivery.

External tank major components consist of a forward and aft ogive, five various size barrels, three domes (one for the liquid oxygen tank and two for the liquid hydrogen tank), an intertank, a slosh baffle, and four major structural support rings connecting barrels.

Major welding has begun to complete the MPTA liquid hydrogen tank and major welding to fabricate the liquid oxygen tank is scheduled to begin soon.

SRB attach fitting load test successful

Michoud operations external tank program passed a milestone recently when the attach fitting that secures the forward end of the solid rocket booster (SRB) to the external tank successfully passed the proof load test.

The test was seven months in preparation, according to Robert Murphy, foreman, production operations. A structure weighing a quarter million pounds was assembled to hold an SRB attach fitting that was fully instrumented with strain gauges and deflection transducers to provide 405 channels of data for evaluation.

Each SRB attach fitting must absorb up to 1.6 million pounds of thrust during liftoff. Murphy and his team showed that the Michoud operations designed attach fitting will successfully absorb thrust loads of 2.7 million pounds—41 percent over specifications.

Others making contributions to the successful test were George Lomax, James Wollen, and David Willick of structures test; and Charles Diem, Marvin Bryant, Emmet Cocran, Richard Durham, William Herron, Gerald Hill, Lester Johnson, Herb Sykes, Norman Yost, Raymond Young, and Homer Vinson of subsystems test and checkout.



Steve Tucker, Michoud operations manager of project safety, left, accepts Award of Merit on behalf of Michoud operations from Frank Anthony, right, representing the Metropolitan Safety Council of New Orleans. The award recognizes the low injury frequency rate of 1.79 injuries per million man hours worked from July 1975 to July 1976. In the center is Frank Rhodes, lead safety engineer for factory operations.

In Michoud

Call C. H. Fleischer at 3710 with suggestions or information for articles for the Martin Marietta News.