

NUMBER 15/1981

MARTIN MARIETTA

MORNING

DENVER AEROSPACE



25th anniversary celebration an 'awesome' sight

Many of us were waiting in line before 6:00 pm and when the doors opened, we marched in to the buffet lines and our seats to the music of Rocky Starr and his country and western band.

The beef barbeque, potato salad, pickles, soft drinks, and beer were ample, but it was some trick juggling it all to our seats. Soon the crowd had swelled to at least 15,000. As C. B. Hurtt said a bit later, "This is the first time we have all gotten together at once, in the same place, at the same time—and it's awesome!"

The occasion, of course, was the celebration of Martin Marietta's 25 years in Denver held at McNichols Arena Saturday, September 26.

Hurtt's reminders of Denver Aerospace's past accomplishments gave a sense of a worthy history and aroused excitement and challenge for the future.

Martin Marietta's chairman and chief executive officer, J. Donald Rauth, expanded on that theme, with the words, "These first 25 years. . . have only begun to open our eyes to the great things that are possible, in the next 25 years, and beyond. . . ."

He added, "I know what can be done by an excellent group of people when they have foresight and enthusiasm coupled with dedication and ingenuity. These are the virtues that we associate with this Denver operation. . . ."

Rauth and Hurtt both paid special recognition to the 309 employees who were with Denver

Aerospace at its beginnings in 1956, and each of these employees received a plaque with a picture of the plant in the early days, and as it is today.

The good feelings that the talks left everybody with turned easily to laughter and the antics of

comedians Skiles and Henderson kept that rolling until Donny and Marie and the Osmond Brothers came on with their highly polishe view. It was all over by 10 pm, but we left with sense of a heritage and a common purpose that should stay with us.



Marie Osmond took an added interest in the 25th anniversary celebration by cutting one of the anniversary cakes. Joining in the occasion are, from left to right, C. B. Hurtt, Denver Aerospace president; William McNichols, Denver mayor and special guest at the affair; Donny Osmond; and J. Donald Rauth, Martin Marietta Corporation chairman and chief executive officer, who spoke the gathering.

Martin Marietta's boost to Denver

The following column appeared in **The Denver Post** Wednesday, September 23, 1981. It was written by Bill Hornby, the newspaper's editor.

This weekend, employees of Martin Marietta celebrate 25 years of operation in Denver. From an isolated meadow behind the hogback foothills southwest of town, Martin has developed an aerospace center of 8,000 employees with a capital investment of its own and the government's in the \$200 million range. In that quarter century, the company has paid more than \$2 billion into the Colorado economy.

But more important than this contribution to economic growth was Martin's historic role in helping Denver break through into recognition as a great national city. A number of developments in the mid-1950s laid the base for the future Denver Front Range megalopolis. Among these were the tunneling of water across the mountains, the establishment of the Air Force Academy, the launching of a national ski and mountain recreation industry, and numerous benevolences of the Eisenhower administrations to Maimie's home town.

However, when historians get us sorted out, surely the thrusting of our area into the very heart of the Space Age by Martin's development in Denver of the Titan missile and spacecraft vehicle will be seen as a major turning point.

Denver was picked for the Titan missile home in the face of severe competition from Buffalo, Salt Lake City, Chicago, Birmingham, and Pittsburgh. Martin Marietta literature for this week's celebration quotes one actor of the times as saying of the site selection that "it was the fact that Denver was so remote that finally settled the deal. It was the only city in the West which offered security from naval attack and had numerous other important features—accessibility to rail and air, attractive conditions for working and living, as well as secluded land in the foothills necessary for testing large rockets."

In any event, Hous Waring of the Littleton Independent was able to break the news to a startled Denver in late 1955 that we were to have a big missile facility, and in just 299 days Martin was in operation. Few dreamt that its products would help take us to the moon and to Mars.

A short column is no place for a complex chronology of the exciting 1960s when America probed into space—"our new ocean" as John Kennedy put it. The Titan launch vehicle became the workhorse of the new explorers, and Martin went on to develop the Viking craft which landed on Mars, and vital links of the Skylab, and currently is in the thick of Space Shuttle development. When, as is inevitable, this country shakes off its gloomy obsession with limitations

and inflation and fully recaptures its questing spirit, the space frontier will be explored and settled and many Denverites, thanks to Martin, will be in the history books as space pioneers.

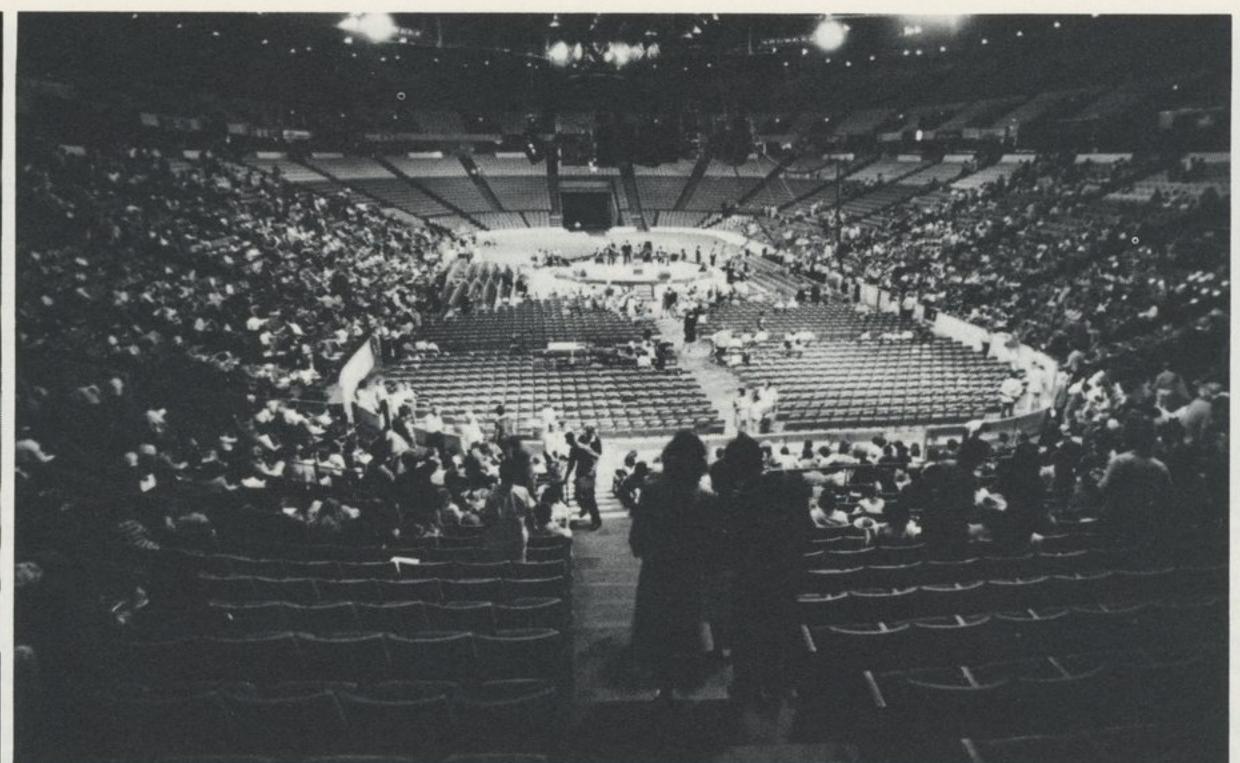
The men who developed the Denver facility have gone on to become backbones of the national space and defense effort. A list of only the men who have headed the Denver facility attests that point—Albert Varrieur, Howard Merrill, Bill Whitson, Donald Rauth (now Martin Marietta's chairman), Bill Purdy, Larry Adams, and Caleb "K" Hurtt.

Each has been a good Denver citizen as well as a technological leader and has encouraged the company to play an active community role.

In many ways, Martin Marietta in the late 1950s broke the ice in terms of national recognition of a "new" Denver. After it, a number of companies took a second look at the cowtown as a possible headquarters, and the same combination of conditions that attracted Martin worked for others.

So, when Martin Marietta celebrates its firs years in Denver this week, it can reflect on a truly significant role in this community's history. And the 300 Martin employees who were here at the beginning and still are can know their lives have been invested in an extraordinary enterprise.



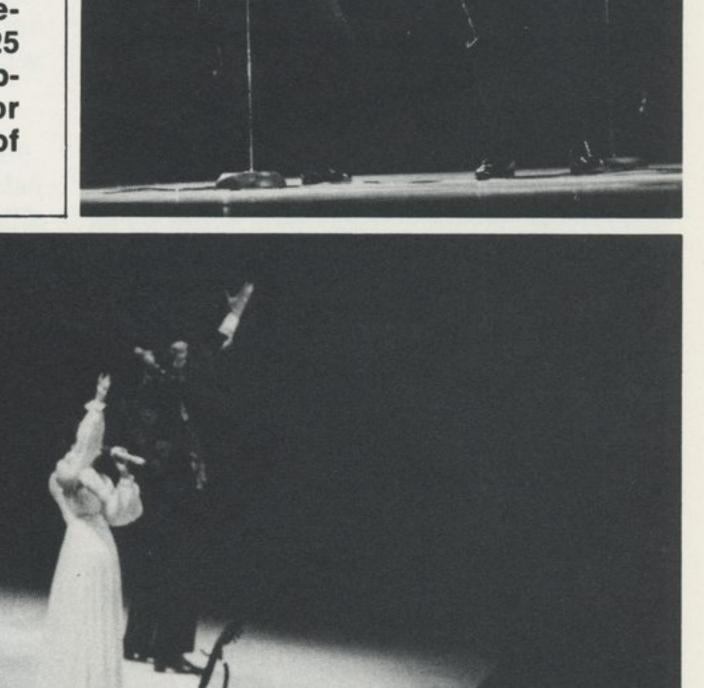




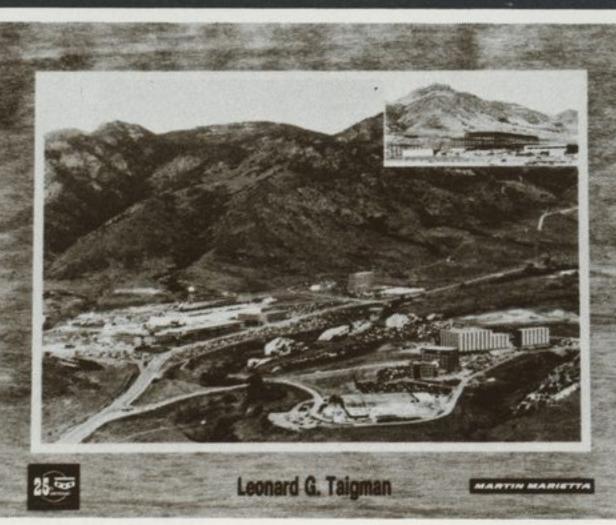


On the cover... ...and on this page

Leonard G. Taigman, right, accepted a plaque from J. Donald Rauth, Martin Marietta chairman and chief executive officer, on behalf of the 309 employees honored at the 25th anniversary celebration for being in Denver for the full 25 years. The photos on this page are representative of the events that made for the most gala evening in the history of Denver Aerospace.









NASA honors Michoud division employees, teams

Six Michoud division employees and three teams have been honored by NASA for contributions to the first Space Shuttle mission.

NASA's highest award, the Distinguished Public Service medal, was presented to Kenneth P. Timmons, vice president and Michoud division general manager; and Ric M. Davis, vice president for the external tank project. They were honored for "meritorious contributions . . . related to the accomplishments of the mission of NASA."

The Exceptional Engineering Achievement medal, recognizing "exceptional individual achievement in the field of engineering and engineering management," was presented to Allan M. Norton, vice president of development; Carroll R. Gray, manager of thermal protection systems; Ben V. Groninger, manager of structural engineering; and Lawrence W. Norquist, manager of propulsion engineering.

Three teams received Public Service Group Achievement awards, given "in recognition of outstanding accomplishment which has contributed significantly to the mission of NASA."

Norton accepted the award for the verification team. Pamela M. Mitchell accepted the award for the on-site Space Shuttle launch support team. Richard D. Moog received the award for the SRB recovery systems development and fabrication team.

Fuel spill delays Space Shuttle launch

The launch of Space Shuttle for its second mission has been delayed because a fuel spill caused about 350 of the orbiter's protective tiles to become unglued.

The launch has been rescheduled for November.

While the orbiter's forward reaction control system tanks were being filled, about two or three gallons of nitrogen tetroxide spilled on the orbiter.

The external tank was not affected by the spill.

MARTIN MARIETTA NEWS Published by Public Relations

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DENVER AEROSPACE
P. O. Box 179—Denver, CO 80201
October 9, 1981





NASA Administrator James M. Beggs pins the Distinguished Public Service medal, NASA's highest award on Kenneth P. Timmons, Michoud division vice president and general manager, in photo at left, and on Ric M. Davis, vice president of the external tank project, in photo at right. The awards were made in a special ceremony at the Marshall Space Flight Center.

New contract adds to Galileo work

Martin Marietta bids on Venus spacecraft

The space and electronic systems division submitted a proposal September 21 to NASA's Jet Propulsion Laboratory to build the Venus orbiting imaging radar (VOIR) spacecraft.

Early in January 1982, NASA is expected to announce a winner in this competition with Hughes Aircraft Company. The contract goahead date will be April 1982.

The proposal was managed by Charles D. Brown under the direction of space systems vice president John D. Goodlette.

Previously, Denver Aerospace has performed feasibility and system design concept studies for NASA on VOIR.

The VOIR mission is the next step in this country's program for exploration of Earth's sister planet, Venus. Using synthetic aperture radar, the VOIR spacecraft will map the surface of Venus with sufficient resolution to provide details on the planet's surface and geology, including tectonics, volcanic activity, surface faulting, and water and wind erosion.

In addition to the surface mapping, the spacecraft will provide data on Venus's atmospheric temperature distribution, chemistry, and dynamics; and temperature, electron distribution, chemistry, and charged particle distribution and concentration at orbital altitudes.

VOIR is expected to be launched in November 1987. After about a five-month journey to Venus, it will go into an elliptical orbit about Venus that will be changed by use of the aero-braking technique to a 250-kilometer polar orbit from which the primary 130-day mission—the global mapping experiment—that will take place.

A recent contract to design and build the net flux radiometer experiment for the Galileo mission to Jupiter means that Denver Aerospace is now responsible for three of the six experiments on the entry probe as well as the attitude control system for the orbiter and software management support.

In addition to the net flux radiometer, the atmosphere structure instrument and nephelometer instrument for the entry probe will be designed, built, and tested here. Of the three remaining experiments, one is being built in the U.S. and two are being built in the Federal Republic of Germany.

The \$1.4 million contract on the net flux radiometer brings the contract value of work being done here to more than \$10 million.

The purpose of the Galileo mission to Jupiter is to determine the chemical composition and physical state of the atmosphere of Jupiter; to study surfaces, chemical composition, and physical state of the Galilean satellites; and to study the magnetic field of Jupiter to determine how the energetic particles behave within it.

The hardware work is being done under James W. McAnnally, director of electronics. Tony C. D. Knight is program manager for the atmosphere structure and nephelometer instruments; Ken H. Schlichtemeier is program manager for the net flux radiometer. The attitude control system work is under W. Keith Dorroh. Software support effort is under the direction of Parker S. Stafford, director of software, with C. Wayne Ratcliff as program manager.

Performance sharing plan unit values set for August

Unit values for the Performance Sharing Plan reported as of August 31, 1981, were:

Fund A (Indexed Equity): 1.510411235 Fund B (Fixed Income): 1.383929078

Canaveral earns top safety award

Two National Safety Council top awards have been earned by Canaveral operations for the fourth consecutive year.

Safety performance in 1980 earned the Award of Honor, the highest award, as well as the First Place Award in the 1980 aerospace industry category.

Canaveral operations began compiling its outstanding record July 20, 1970, the date of the last lost-time, disabling injury. Since then, more than 7.3 million manhours have been worked without a lost-time, disabling injury.

The record has been called "one of the best... known in industry" by the National Safety Council in its national publication, "Accident Facts."

Ronald N. Holcomb, chief of safety attributes the safety program's success to a dedicated safety staff, management involvement, a mature and dedicated workforce, and the continuing effort of the employee safety committee.

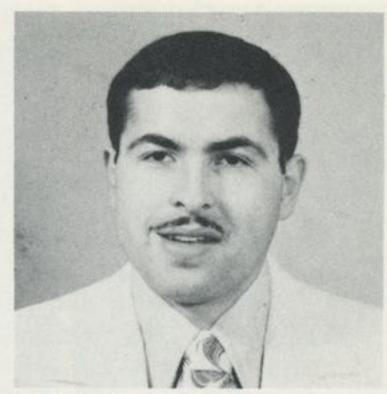
Committee members are William V. Alderman, Willie E. Cannion, Howard J. Earles, Robert J. Gibson, Raymond E. Hall, Robert L. Simpson, James J. Stacharowski, John G. Stiene, Richard J. Tennis, and George E. Walters, all in test operations; Harold R. Burchell, Lois R. Hanshaw, and James W. Weddle of quality; Ann L. Barnett, business operations; Allen M. Cramer, material; and Walter W. Kollosch, engineering.







Lt. Keith P. Wawrzyniak



Lt. Martin J. Aragon

Education with industry students begin study here

Denver products in 'American Spirit' exhibit downtown

Products in which employees here have played a major role will be on exhibit at the downtown May D&F Plaza during the two-week "American Spirit" exhibition sponsored by the store from October 10-25.

The project, scheduled for all nine of the May D&F stores, but centered in the downtown Denver plaza, will focus on the uniqueness of the American people and their products. More than a quarter of a million people are expected to view the downtown exhibit which will be open during daily store hours.

Featured from here will be SCATHA, Viking, manned manuevering unit, Space Shuttle, Titan models, solar energy, and the Martin Marietta exhibit from the 1981 Air Force Association exhibition.

Two U.S. Air Force officers and a civilian employee of the Air Force have begun the 10-month Education with Industry (EWI) program here.

Barbara A. Kaiser, a contract negotiator for the Air Force Systems Command at Hanscom Air Force Base, is the first civilian to be enrolled in the program here. She has been at Hanscom since 1977. She has a BA in history from Mundelein College, and an MA in History from Harvard.

1st Lt. Keith P. Wawrzyniak comes to the program from Wright-Patterson Air Force Base where he was deputy for aeronautical equipment and corporate resource manager for the Aeronautical Systems Division there. He has been in the service 15 years. He has a BS in criminal justice from the University of Nebraska.

1st Lt. Martin J. Aragon has been in the Air Force three years. He was assigned as wing/base acquisition contracting officer, 57th Air Division, 5th Bombardment Wing and 91st Strategic Missile Wing at Minot Air Force Base. He holds a BS degree in political science from the University of Colorado and is working on a master's degree in business administration at the University of North Dakota.

This is the 19th year students in the EWI program have been assigned at Denver Aerospace.



Members of the Canaveral operations safety committee display recently earned National Safety Council awards. Robert J. Gibson, test operations, holds the First Place Award for aerospace industry safety; Richard J. Tennis, test operations; Ann L. Barnett, business operations; and Walter W. Kollosch, engineering, holds the Award of Honor.

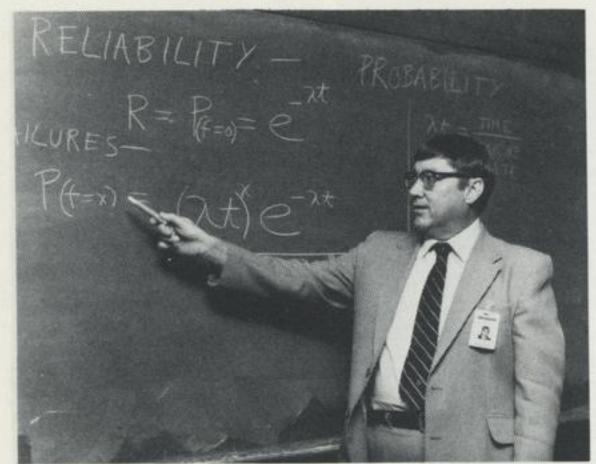
Emergency notices on radio stations

If bad weather this winter causes the facilities to be closed, employees will be notified by emergency announcements on four local radio stations.

Stations that will broadcast the notices are:

KOA 850 AM KOAQ 103 FM KIMN 950 AM KYGO 98 FM

Employees are encouraged to listen to these stations when there is a threat of hazardous weather conditions.



William E. Rogers will conduct a workshop on life cycle cost analysis in Switzerland in late October.

Employee to conduct European workshop

William E. Rogers, manager of logistics for the strategic systems division, will be the coinstructor in a workshop on life cycle cost analysis to be held in Montreux, Switzerland, October 26-30.

U. S. Air Force Major John M. Barry will join Rogers at the sessions. He is chief of the systems effectiveness division at the Space and Missile Systems division in Los Angeles.

Rogers is recognized as an innovator in logistics math modeling techniques for life cycle cost analysis. He has developed several new models and has converted existing models to run on the newest programmable calculators instead of large-scale computers.

Purpose of the workshop is to teach the techniques of performing logistics analysis and modeling on these small calculators.

The workshop, called a "Joint European/U. S. Workshop in Life Cycle Cost Analysis," is sponsored by the Society of Logistics Engineers.

Mace, other sprays prohibited on flights

The security department cautions traveling employees that Federal Aviation Administration regulations bar Mace or other brands of irritating or incapicitating sprays aboard aircraft.

The sprays are classed as both dangerous weapons and as hazardous materials. Passengers carrying them could face fines of up to \$1,000 under the dangerous weapons category or up to \$25,000 under the hazardous materials classification. The prison term could go up to five years.

An employee was recently detained on the west coast, not only because of the FFA regulations, but also because California law prohibits carrying the sprays without a permit. Other states and communities also prohibit the sprays and passengers could face arrest for violating state or local laws.

United Way campaign to begin October 12

The annual campaign for the Mile High United Way will begin for employees October 12 and run through November 12.

Coordinators will meet Monday, October 12 at 9:30 am in the engineering presentation room for a briefing from United Way executives and local management. Supplies, including tab runs and payroll deduction signup cards, will be distributed at the meeting.

"For the past several years, with the exception of last year, we have exceeded 90 percent employee participation in the campaign," said Leroy Hollins, chief campaign coordinator. "Last year we dropped to 86 percent."

Coordinators will be asking employees to sign payroll deductions to fund the 80 agencies supported by the Mile High United Way in the five-county metropolitan area. Contributions may be spread over a full year through payroll deduction and are tax deductible.

Emergency numbers change

An emergency telephone number published in the September 25 issue of **Martin Marietta News** has been changed.

The number for Space Support North is 93+4911, not 8911, as published.



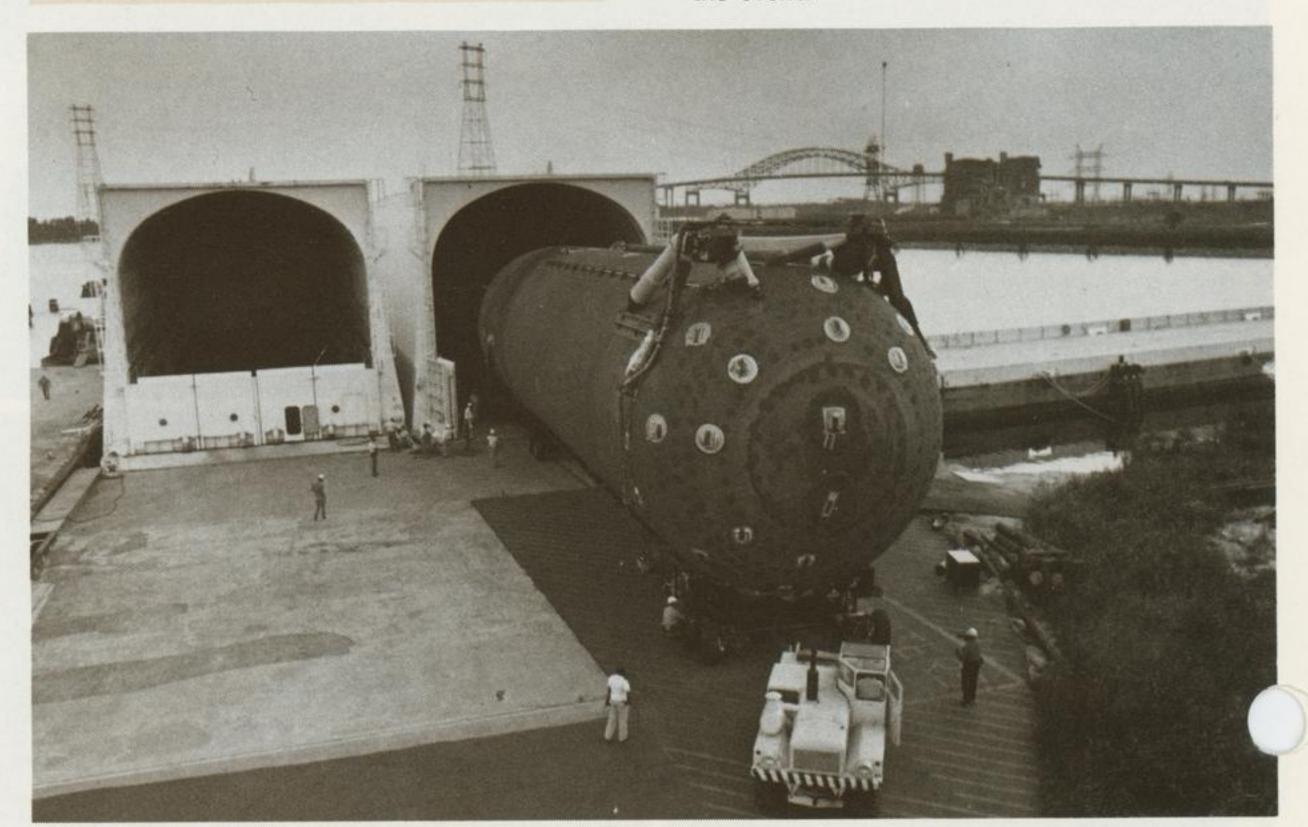
Thomas P. Zum Brunnen, III, left, a senior staff engineer in defense systems, has been awarded the Air Force Commendation Medal. A major in the U. S. Air Force reserve, he was recognized for his "outstanding contributions during research intelligence projects" as a member of the Air Force Intelligence Service. The medal was present by U. S. Navy Captain C. G. Dearie, acting commandant of the Defense Intelligence School in Washington, D. C., where Zum Brunnen's reserve unit is assigned.

Credit Union observes 'Credit Union Day'

A reduced membership fee of \$2.50 for new members will be one of the ways the Red Rocks Federal Credit Union will urge employees to participate in the celebration of National Credit Union Day, October 15.

All members who increase their payroll deduction deposits in the credit union by \$10, and new members opening accounts will be eligible for celebration drawing. Prizes include cash, dinner for two, and a weekend for two at the Residence Inn.

Information booths will be set up in the lobbies at SSB, DSC, and Bldg. 6050 at Greenwood Commons, and outside the first and second floor cafeterias in the engineering building. Offices at Greenwood Commons and DSC will be closed for the event.



The external tank for the third Space Shuttle flight is rolled onto the barge Orion for shipment to Kennedy Space Center. The barge left NASA's Michoud assembly facility September 29 for the five day trip.