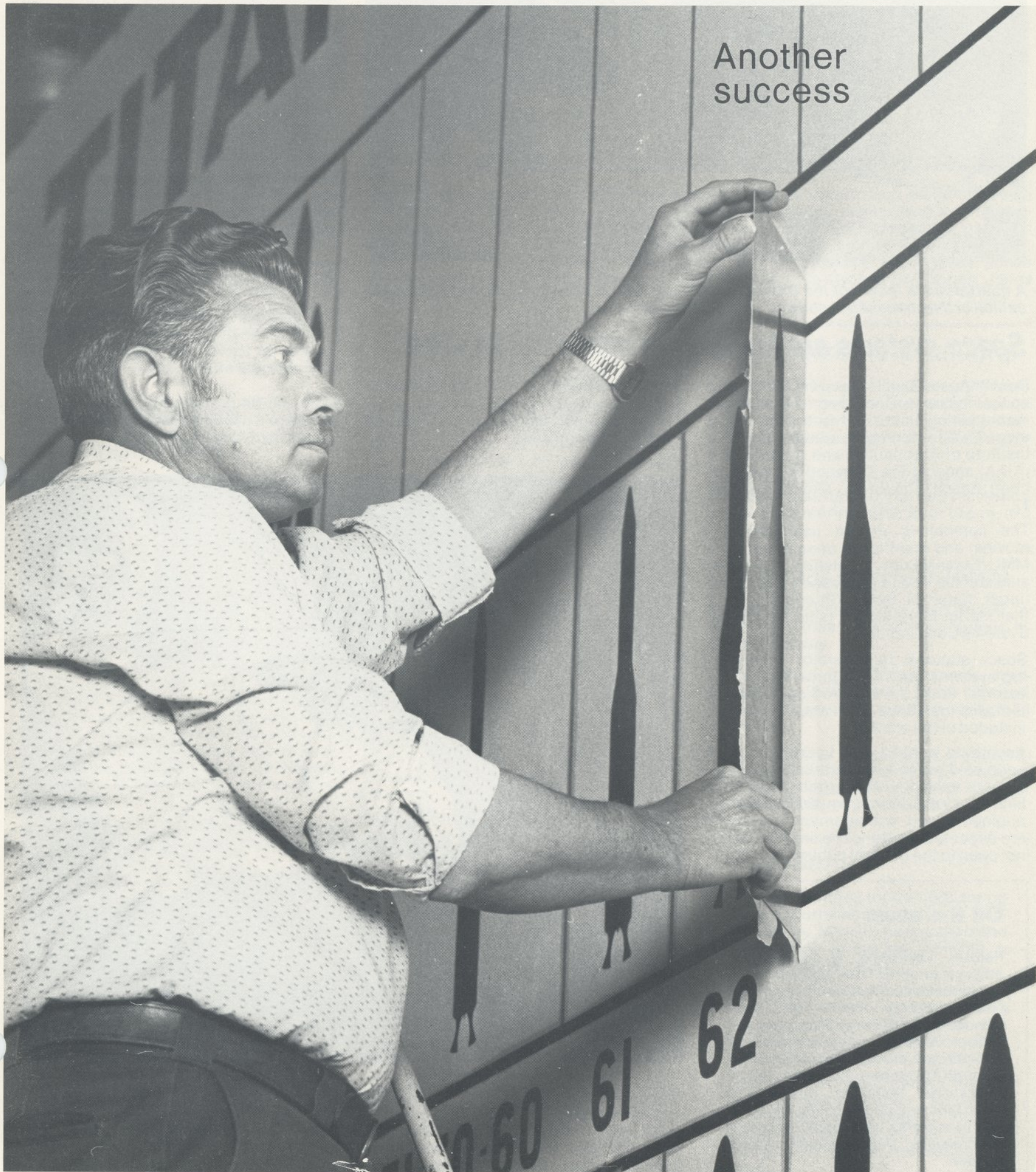


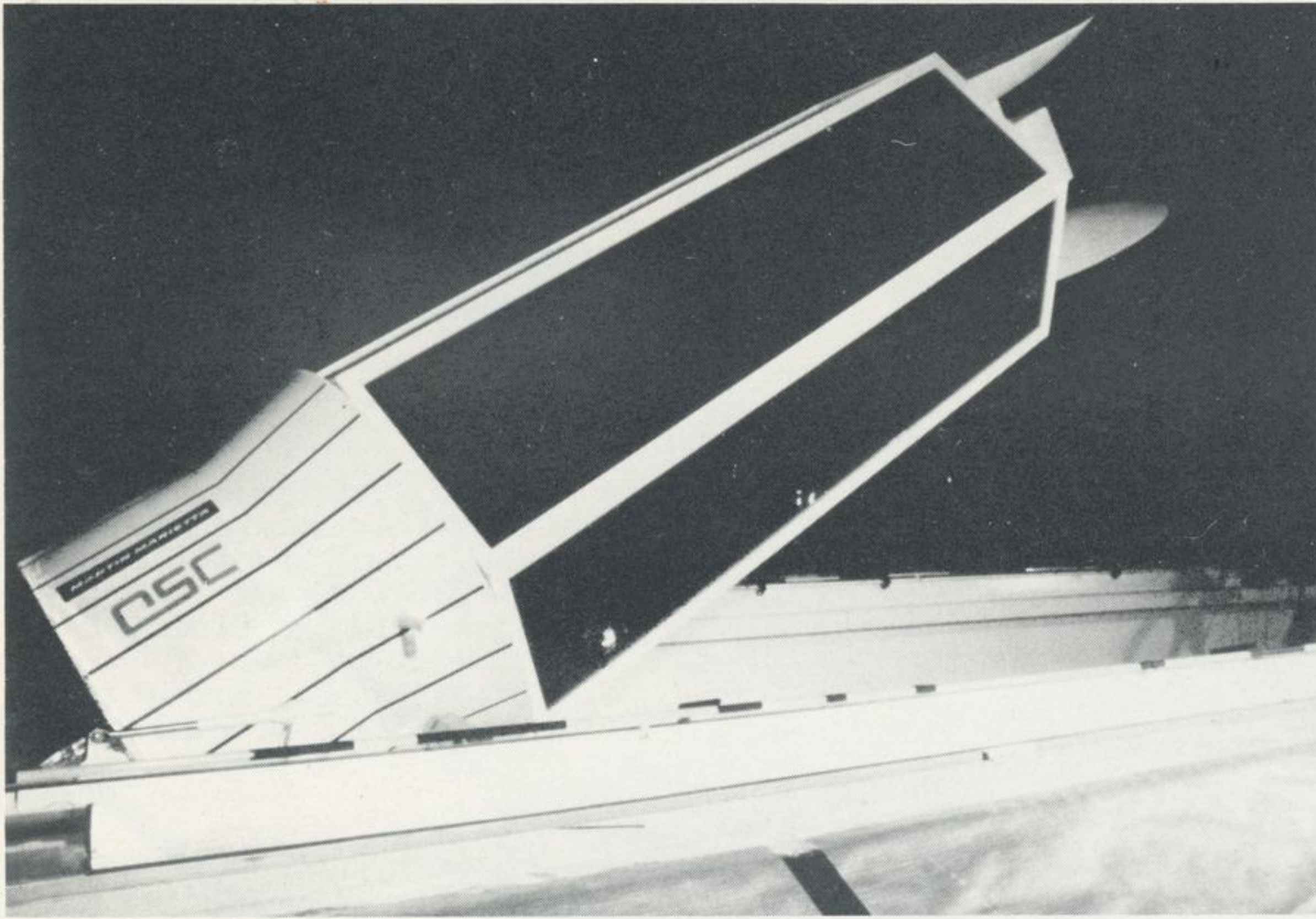
MARTIN MARIETTA

news

DENVER AEROSPACE

NUMBER 9/1983





A quarter-scale model of the transfer orbit stage will be part of the Denver Aerospace exhibit at the annual AIAA show in Long Beach, California.

Space systems are featured at annual AIAA show

Denver Aerospace is featuring many of its space systems—including the manned maneuvering unit and the transfer orbit stage (TOS)—during the annual American Institute of Aeronautics and Astronautics (AIAA) show at the Convention Center in Long Beach, California, May 10 through 12.

The company's exhibit uses models, movies, and graphics to demonstrate the MMU/Solar Maximum satellite repair mission and the TOS, a proposed commercial upper stage for Space Shuttle payloads that Martin Marietta will build for Orbital Systems Corporation.

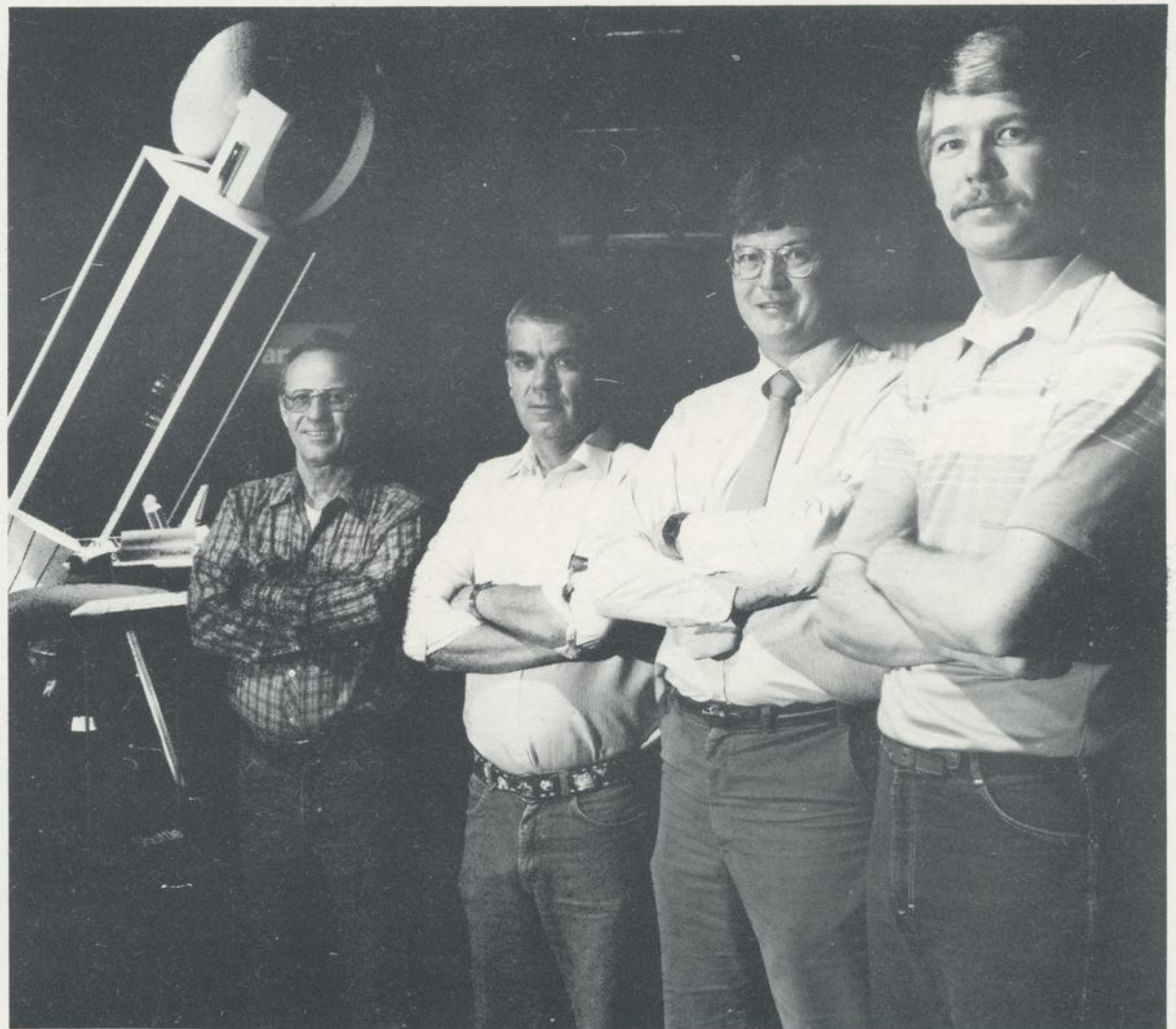
Space stations, teleoperator maneuvering systems, an aft cargo carrier for the external tank, the tethered satellite system, and the Venus radar mapper also are included in the exhibit.

According to AIAA, this year's show has been sold out to a recordbreaking 129 exhibitors, making it the largest show of its kind ever held. More than 4000 aerospace engineers and management personnel are expected to attend the show, which is not open to the general public.

On the cover

Painter Lawrence W. Kietzmann adds yet another Titan success to the scoreboard in Manufacturing. The latest launch, April 15, from Vandenberg Air Force Base gives the Denver Aerospace launch team a 100-percent mission success record through 16 consecutive years. The 80 successive launches include 58 Titan IIIBs and 22 Titan IIIDs. Another five in a series have been launched successfully from Kennedy Space Center.

Denver Aerospace President Norman R. Augustine will be installed as AIAA president in ceremonies during the week. He will serve for one year.



Significant contributions to the shuttle program and a history of outstanding performance on all jobs earned a trip to the April 4 Space Shuttle launch for, from left to right, John C. Bujaci and Leroy Small, structural and mechanical manufacturing; Rich A. Lundy, electronics manufacturing; and James F. Paradise, product assurance and systems safety. Hazen D. Brinkerhoff, product assurance and systems safety, not present for the photograph, also earned a visit to Kennedy Space Center.

Contract is sought on spacecraft charging sensor system

A proposal will be submitted to the Air Force at the end of May to develop and build a system that will sense automatically and then discharge static electricity as it builds up on an orbiting spacecraft.

The Flight Model Discharge System is an outgrowth of work done here on SCATHA—the spacecraft charging at high altitude vehicle—and data gathered during the successful operation of that spacecraft.

William A. Fraser, proposal manager, says the work will combine SCATHA-like systems into a single system with a sensor to determine when a spacecraft has been charged, a control system to determine if a dangerous charge exists, and activation of a plasma source to produce the positive ions and electrons that will discharge the spacecraft.

The automatic discharge system is expected to be the forerunner of a standard system for use on any spacecraft in geosynchronous orbit.

Work will be done in the electronics department's payloads and sensors section headed by Sidney L. Russak.

Savings Bond drive to begin May 16

Department coordinators will meet May 16 to kick off the 1983 U.S. Savings Bond Drive.

With 71-percent current employee enrollment, the goal is to increase participation by signing up employees not on the Payroll Savings Plan, and to increase the allotment of current subscribers.

In a letter to all employees, Thomas G. Pownall, Martin Marietta Corporation President, underscored the goal to increase participation throughout the Corporation.

"It is impossible to overemphasize the importance of U.S. Savings Bonds to our nation or to you. This program . . . (offers) you a systematic and tax-deferred method of accumulating savings The sale of bonds is one of the least inflationary sources of borrowing available to the U.S. Treasury."

U.S. Savings Bonds are an attractive investment. The new variable interest rate lets purchasers share in rates offered by the securities market, with a guaranteed minimum yield of 7.5 percent.

The savings bond drive will continue through June.

Trainers meet to exchange ideas

Denver Aerospace educators and trainers met April 29 to improve communication and to exchange information on special resources, talents, and experiences.

Thirty employees from Human Resources, Business Operations, Technical Operations, Strategic Systems, Denver Data Systems, and Defense Systems attended the one-day seminar.

"Training and educating our employees are critical, ongoing functions," said William Curra, director of Human Resources and seminar host. "We have a lot of skilled people performing these functions in various departments and projects. We often find that one person is developing an offering that someone else has already refined and is using successfully."

Dr. Edward F. Dash, manager of Education and Training, was the keynote speaker.

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

May 6, 1983



Two Florida small business firms have been honored for outstanding subcontract performance in support of the Titan 34D Transtage ground support equipment and the shuttle payload integration facility modifications. Receiving photographs of the first Titan 34D launch and plaques from Eddie L. Roberts, second from right, manager of materiel, were, from left: Frank Howard, Co-Op Power, Inc, of Titusville; Hugh Jones, Jones Machine and Welding, Merritt Island; Robert Holloway, Co-Op; and Billy Jones, Jones Machine and Welding.

Engineer awarded teaching honor

Dr. James A. Bowman, mechanical engineering, received outstanding faculty member honors from the University of Colorado at Denver's college of engineering and applied science.

He accepted the award from his students at the college's 11th annual engineering banquet April 23.

Dr. Bowman teaches mechanical engineering, thermodynamics, chemical engineering, and materials science. A part-time faculty member for 14 years, he has been with Martin Marietta more than 17 years.

Mentor program benefits gifted science students

Four Denver Aerospace volunteers are sparking science interest in gifted fifth-, sixth-, and seventh-graders in the Gove Community School Wiz Kids and Mentor Program.

Highly motivated students will be aided in small-group study and independent study by Richard W. Cheever, Data Systems; Steven M. Pompea, Technical Operations; A. M. (Lex), space operations simulation lab; and John E. Parker, shuttle payload integration facility program manager.

Cheever and Ray have provided valuable guidance in computers and human factors engineering; Pompea and Parker have taught astronomy and aerodynamics.

"The volunteers from Denver Aerospace have been wonderful," says Ronnie Mitzner, organizer of the Mentor Program. "I have the utmost respect for the company and the contributions of these volunteers to our program."

Students from a variety of public and private schools enroll in the program, which emphasizes geology, chemistry, microbiology, and astronomy.

Circus tickets available

Two performances of the El Jebel Shrine Circus will be held for Denver Aerospace employees and their families Saturday, June 11, at 10 a.m. and 2 p.m. at the Denver Coliseum.

Department administrators are to pick up tickets for distribution from the recreation office, Engineering 124G, from 10 a.m. to 3 p.m. May 23.

90 walk for March of Dimes

Employees raised more than \$6,500 in March of Dimes WalkAmerica events in Brevard County.

Two-thirds of the 90 participants completed the 25-kilometer North Brevard event, and another one-third walked 20 kilometers.

Sixty percent of the money is pledged to research; the remainder will go to education and to offset the costs of care for birth-defect victims in Brevard County.

Recreation

Tennis—Entries for the 1983 spring tennis tournament are due to Recreation by May 10. Information and registration forms are available in the Recreation racks.

Soccer—The Martin Marietta Soccer Club is forming a recreation league open to all employees. For information, call Duane Cichy, Ext 3986 or Brian Gallagher, Ext 7281.

Hunting—Ronald Steen will teach a seven-session hunter education course beginning May 11. Cost is \$5.00. For information, call Richard Benson, Ext 6209 or Recreation, Ext 6605.

Vandenberg operations honors employees

Twenty-nine Vandenberg operations employees were honored at the 15th Annual West Coast Gold Medallion banquet.

The Gold Medallion, the most prestigious award given to Space Launch Systems Vandenberg employees, is for "very special and significant contributions to the spaceflight program."

Ground support systems (GSS) employees receiving medallions from Fred H. Hudoff, GSS project director, were: J. L. Abel, Paul H. Bacalis, Walter A. Bilott, John R. Cook, Edward J. Dunvan, Thomas A. Godwin, Kent H. Gunderson, Jerry S. Jenkins, Ralph H. Littlefield Jr, Charles G. Leonard, Harry A. Nesteruk, Robert L. Robinson, Donna M. Rudzinski, and Donald V. Stanley Jr.

Titan and common-support honorees receiving awards from John L. Murphy, director of Vandenberg operations, were: Robert F. Bedard, Charles N. Bowker, Ray Burns, Edward M. Carson, Paul A. Diller, Fred L. Good, Harold R. Harper, Roger A. Jacobson, Richard L. Ligon, Marvin Maggio, Danny L. Mangum, Daniel F. Soza, Joseph L. Thompson, Terry L. Vosburg, and Louise M. Ward.

Also honored at the banquet was Leon Culwell, test operations, who received his Titan Program Test Conductor pin. He was the 31st recipient of the award. Culwell was test conductor on a Titan IIID launched from Vandenberg Air Force Base in November 1982.

First-quarter blood use exceeds 1982 donations

More blood has already been used by Denver Aerospace employees and their families this year than was collected here during 1982.

Last year, 84 units of blood were donated to the Belle Bonfils Memorial Blood Center. During the first four months of 1983, eighty-five units have been used.

Appointments are now being made for the May 24 and 25 visit of the mobile blood unit. The blood bank will be in the SSB sixth-floor presentation room. Hours are 9:00 a.m. to 2:45 p.m.

Eligible donors include anyone 18 to 65 years old, in good health, and weighing at least 110 pounds. Eight weeks must have elapsed since the donor's last blood donation.

Appointments must be made through Lori Sharp, blood bank coordinator, Ext 6605 before May 19.

On blood-drive days, a blue shuttle bus will transport donors to SSB from other buildings at the main plant. The bus schedule is available from department secretaries.



Among Gold Medallion award winners at Vandenberg were, top photo, Thomas A. Godwin, right, who received his award from Fred H. Hudoff, left, GSS project director; and, bottom photo, Fred L. Good, right, who received the award from John P. Murphy, left, director of Vandenberg operations.

Agency to handle business travel

A Chicago-based travel agency will soon provide corporatewide employee business travel services.

The services will begin in Denver in mid-summer and at the Michoud division and Vandenberg operations in the fall. Instructions for use of the travel services will be distributed in June.

Performance Travel, Inc, a subsidiary of IVI Travel, Inc, will provide the lowest available airfare, car rental, and hotel/motel reservations. Other benefits include educational seminars; airtravel accident insurance; advance boarding passes for some airlines; 24-hour, 7-days-a-week service; and management reports on travel.

First-quarter earnings at 60 cents a share

The Corporation had first-quarter net earnings of \$13,811,000, or 60 cents per common share. That compares with 44 cents per share on \$15,806,000 of net income for the first quarter of 1982.

Sales rose more than \$17 million during the 1983 quarter, reaching \$801,922,000, as against \$784,533,000 for the first three months of 1982.

The 1983, per-share earnings were calculated on an average base of 18,231,865 common shares outstanding, which compares with 35,894,181 average shares outstanding a year earlier.

Martin Marietta's 1983 first quarter reflected stronger performance in some businesses, reduced seasonal losses in others, and continued loss in aluminum, although depressed markets and prices for metals began to show some signs of improving. The Corporation had pretax gains of approximately \$28 million from the sale of assets of its Sodyeco division, of its interest in an Alaskan joint-venture minerals exploration, and of a portion of its stake in a bauxite mining consortium. These actions are part of the continuing program to reduce debt and redress the balance sheet.

Consolidated pretax earnings on operations were \$16,522,000, which compares with \$17,307,000 a year ago. Interest expense increased from \$10,502,000 in the 1982 quarter to \$31,749,000.

Martin Marietta registers shares for Pension Trust

The Corporation has filed a registration statement for up to 600,000 shares of its treasury common stock to be contributed to the Corporation's Master Retirement Trust.

The Company stock will be held by the trust as an investment with no present intention to make those shares available for sale.

The new common shares, together with 450,000 shares of common stock issued to the trust earlier this year, and \$25 million of it convertible exchangeable preferred stock, will constitute about nine percent of the Master Retirement Trust's assets. Additional contributions of Corporation securities to the Master Retirement Trust are not contemplated.

Class registrations due

Applications and registrations for State University Research in Graduate Education (SURGE) are being accepted for classes beginning June 13.

Applications for Study Under Company Auspices should be filed with Educational Services by May 23 to enroll in classes beginning June 13. Registrations are due by May 27.

Schedules and registration forms may be obtained from Educational Services, Engineering 231, or by calling Ext 5698.