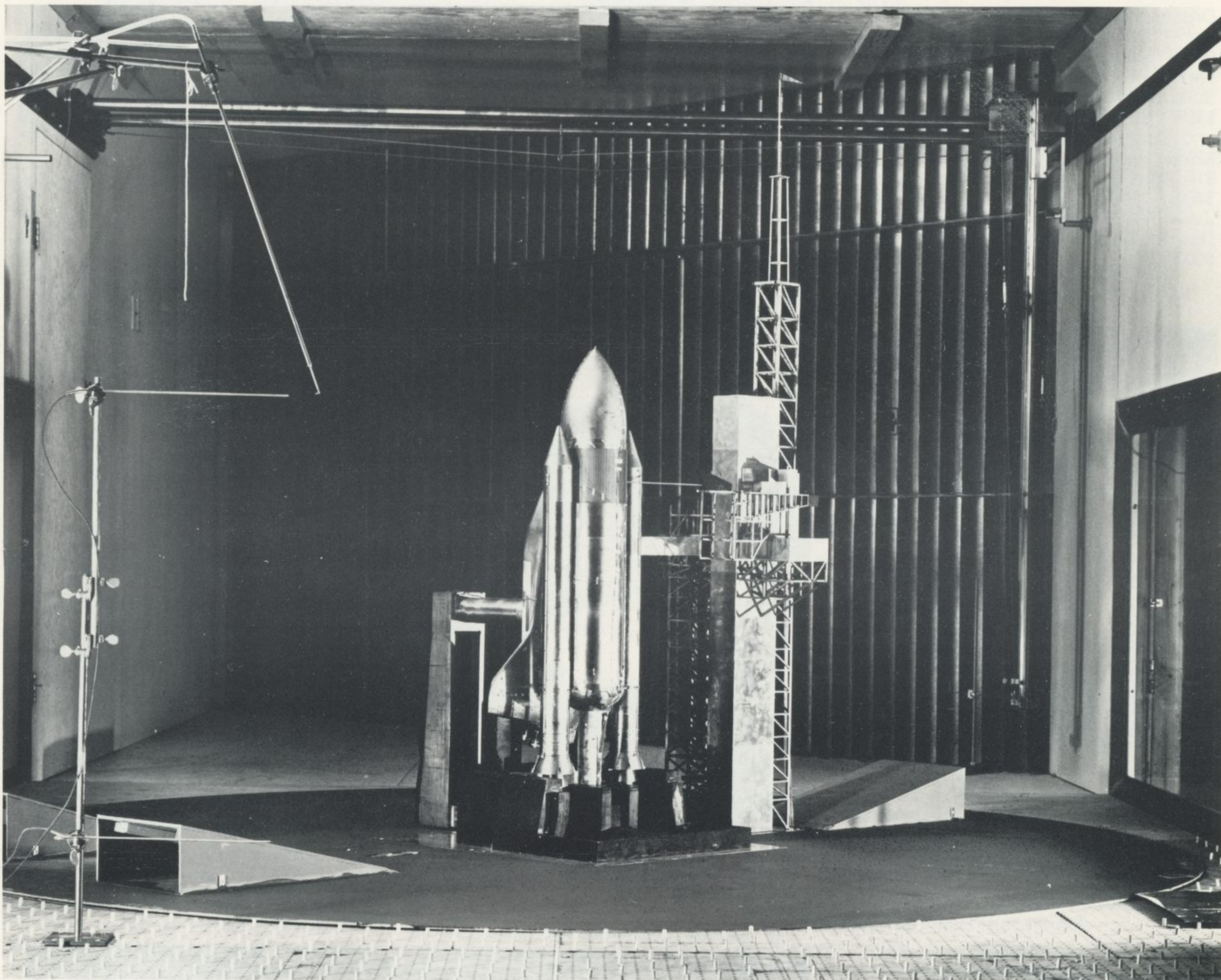


NUMBER 17/1983



Wind tunnel tests on a scale model Space Shuttle are being used to evaluate a proposed ice suppression system for use at Vandenberg Air Force Base.

Ice suppression system studied for Shuttle

Jet engines are being considered as defrosters for the Space Shuttle launch complex at Vandenberg Air Force Base.

The engines would blow hot exhaust between the orbiter and external tank to keep ice from forming on the tank during cold weather.

Military missions planned from Vandenberg require Shuttle launches under a wide range of weather conditions. When

the external tank is loaded with liquid hydrogen and liquid oxygen, ice can form during cold weather. The ice could break up during ascent, thus damaging the orbiter's heat-resistant tiles.

Work here and at Vandenberg is testing the ice suppression system principle.

Limits of temperature and wind velocity are restraints on the use of jet engine exhaust as a defroster. For example, max-

imum launch temperature limit for the orbiter is 100 degrees Fahrenheit, with comparable limits for the tank and solid rocket boosters. Also, the crew access arm has been designed for a maximum wind velocity of 40 miles per hour.

Scale models of the Space Shuttle were used in the study to measure exhaust temperature and velocity, as well as the effect of natural wind on air flowing between the orbiter and the tank.

Area organizations benefit from gifts

Nine area community organizations have received more than \$84,000 in gifts and grants from Martin Marietta this year. Gifts are made on the basis of need, service to the community, and service to Martin Marietta employees and their families.

Organizations receiving contributions were: University of Northern Colorado (UNC) Leaders of Tomorrow, \$1800; University of Northern Colorado Frontiers of Science, \$2000; The Falcon Foundation, \$3000; American Institute of Aeronautics and Astronautics Student Conference, \$3000; Denver Symphony Association, \$10,000; Columbine Kids Against Crime, \$1000; Denver Center Theatre, \$5000; Junior Achievement, \$3000; University of Denver, \$50,000; and St. Joseph Hospital, \$5000.



Sister Mary Andrew Talle, president of St. Joseph Hospital, receives a check for \$5000 from Peter B. Teets, vice president of Strategic and Space Launch Systems division.



Dr. Ross Pritchard, chancellor of the University of Denver, and Dr. Robert C. Amme, physics department chairman, accept a check for \$50,000 from Norman R. Augustine, president of Denver Aerospace.

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

August 26, 1983



Gretchen Vasquez, assistant principal of Columbine Hills School, and Elaine Caudle, vice president of the Parents-Teachers Organization, accept a check for \$1000 from FitzRoy Newsum of public relations for Columbine Kids Against Crime. Three members of the school are (l to r) Jason Francois, Kim Marshall, and Kristy Cobb.



New director named

Robert P. Lopez has been named director of cost management and estimating for Denver Aerospace as of 1 August 1983. Lopez was transferred from the Michoud division where he had been manager of external tank funding and estimating since 1981. A Martin Marietta employee since 1975, Lopez joined the company as a senior industrial engineer. He was promoted to chief industrial engineer and then transferred to the finance office as an estimating supervisor. He became chief of the cost management section in 1979.

Landscaping change underway for median

Red, stone-patterned concrete is replacing loose rock in the median between the main road and parking lot in front of the administration, engineering, and RDL buildings.

Donald L. Miller, maintenance supervisor for roads and grounds, noted "the new median will be safer and more attractive. People won't have to worry about turning an ankle anymore on the median."

Unit values help employees track PSP investment

Each month, *Martin Marietta News* reports unit values for the Corporation's Performance Sharing Plan (PSP) as of the last day of the preceding month.

An employee who contributes \$100 to Fund A, for example, could divide 100 by 2.2184275267 (the latest unit value) to determine how many units he had purchased—in this case, more than 45.07 units. Values are calculated to ten digits for accuracy.

Fund A (Indexed Equity) is a fund of common stocks that approximates the performance of Standard and Poor's index of 500 stocks. Long-term growth is the objective and earnings are not guaranteed.

Fund B (Fixed Income) is invested under terms of a guaranteed investment contract between the corporate trustees,

Bankers Trust Company, and an insurance company or companies. Fund B currently pays 12.20 percent interest.

Fund C is entirely in Martin Marietta common stock.

PSP is a systematic personal investment program that provides a way to reward employees, through Corporate contributions to the fund, based on the Corporation's total performance during the year.

Participating employees receive quarterly reports on the status of their investments. The reports are mailed to homes.

Unit values for the Performance Sharing Plan as of July 31 were:

- Fund A (Indexed Equity) 2.2184275267
- Fund B (Fixed Income) 1.7346685181
- Fund C (Martin Marietta Stock Fund) 2.5785029469

Denver Aerospace employees help plan Lakewood on Parade celebration

Three Denver Aerospace employees on the Lakewood on Parade, Inc. board of governors are helping plan this year's an-

nual Labor Day weekend celebration. One of them also will be a grand marshal of the parade.

Irma Jean Guire, manager of protocol, will be one of three grand marshals, sharing the honors with two other 1982 Lakewood "Women of the Year."

George Hoerter, editorial chief, and John LePenske of the controlled information center, are the other two employee board members.

The three-day celebration begins Friday evening, September 2, at Lakewood Park where there will be entertainment and concessions until Saturday midnight, followed by various Sunday events.

Tips on writing elected representatives

Although Congress is currently in recess, it is always appropriate for voters to write elected representatives with opinions—pro or con—on issues coming up during the next session. Legislators often contend they do not hear from constituents as to how they want their senators and representatives to act on particular issues.

The following tips on writing a correct and effective letter to a member of Congress apply as well for state legislators and other government officials at various levels.

1) Use personal stationary, not a company or organization letterhead, unless the writer's letter does, indeed, represent that group's official position. Avoid postcards or telegrams unless absolutely necessary because, perhaps, of an imminent vote.

2) The writer's signature and address are important to show the letter comes from a bona fide constituent of the legislator's district.

3) Never use form letters.

4) Focus on one issue only in each letter, identifying the bill by both its popular name and its official bill number, whenever possible.

5) State specific reasons for opposing or supporting the question. Offer alternative solutions if against the issue. Be brief and constructive rather than argumentative or hostile.

6) Suggest or recommend; do not demand action. Be courteous—rudeness will diminish the writer's case.

7) Time the letter for the greatest impact, such as having it arrive a day before a crucial vote in committee. Too early or too late are equally ineffective.

8) Keep up with committee activities in which the legislator is involved. Committee and subcommittee hearings precede measures to the full Senate or House floors for action. Any information a legislator has beforehand in considering

a given question can help assure the most effective bill will be proposed.

9) One or two letters from the same individual on the same subject will suffice. That does not preclude motivating others to add their written views on that issue.

10) It is always appropriate—even appreciated—to express one's support or admiration for a legislator's efforts that merit approval.

11) Finally, the correct letter salutation is "Dear Senator [last name]," or "Dear Mr./Mrs./Ms. [last name]" for a member of the House of Representatives. (A letter to the President should bear the salutation "Dear Mr. President.")

Envelopes should be addressed to "The Honorable [full name]."

Addresses of Washington, D.C. legislators are in local telephone directories under U.S. Government listings for "Congress," "Senate," and "Representatives."



A \$4000 gift to the Women's Advocacy Bureau in New Orleans will help women train for mechanical and electrical careers. Pat T. Evans, director of the bureau, accepts the Martin Marietta check from Fred J. Lewis, Michoud division manager of training. A number of Bureau graduates are working at the division. Lewis is a member of the industry board that supports the Bureau's work.

Recreation

Bowling—It is signup time for the Martin Marietta Mixed Winter League. The first meeting will be August 30, 7:30 p.m. at Belleview Bowl, 4900 S. Federal Boulevard. The league will bowl Tuesdays at 9:00 p.m. Signup sheets are in Recreation racks.

Football—An organizational meeting for the fall flag football league will be held in the SSB cafeteria at 5 p.m., August 31. Officials are needed. Call Recreation, ext 6750 or 6605.

Hunters—Hunter ethics will be taught by Dorlan Dewitt through the Skyline Hunting and Fishing Club on September 6, 8, 13, 15, 20, and 22. Cost is \$5.00. Contact Recreation, ext 6750 or 6605.

Skiing—The Satellite Ski Club's fall picnic will be held September 16 at 4:30 p.m. in the recreation area. It will be free to members, \$3.00 for nonmembers. Call ext 3477 for details.

Michoud employees serve community

Employees throughout Martin Marietta have a history and tradition of offering time and talent to service groups and to local and national programs. Those at the Michoud division are no exception.

Robert Smith, director of development, has been appointed to the "Committee of 50," a branch of the New Orleans Chamber of Commerce. The committee sponsors tours for executives interested in establishing businesses in the area. Smith's keynote address during a recent meeting sketched Michoud's experience and the available workforce's capability in New Orleans.

Dr. Marvin Law recently accepted an award presented to the company by the U.S. Army Reserves. The Commander's Employers Support Award recognizes Michoud's support of reservists and the military reserve program. Law, a safety engineer and a reserve major, has been a reservist for 16 years.

Westley Y. Bayas also has a military background—nine years in the Army, with 21 months in Vietnam. Since joining Michoud four years ago, he has become active on the advisory board of the Opportunities Industrialization Center; the board of directors of the Louisiana Office of Federal Contracts Compliance Pro-

grams, a liaison group between businesses, industry, and the government; and the Louisiana Equal Opportunity Association, which promotes minority hiring.

Mark Ripple spends three to five hours each week as a volunteer Big Brother. The project engineer in facilities said 13-year-old Victor, his little brother of three years, loves video games and fishing. The Big Brother program provides role models for young boys without fathers or other adult males in their households.

Gary N. Lipps, an estimator in the materiel department, has been selected Junior Achievement's (JA) adviser of the year by the New Orleans chapter. The 60-company local organization recognized Lipps' third year as volunteer adviser in Slidell. Ralph Ferbosses, finance analyst, was last year's adviser of the year. M. D. Lacy, materiel, is also an active JA volunteer.

Saul Locke heads the gift and donations committee on the board of directors of the Community Living Services. Part of the Volunteers of America organization headquartered at New Orleans, the program helps disabled and handicapped individuals as well as communities during crises. Locke is manager of productivity at Michoud.

Michoud contributes \$5000 to Red Cross

The Michoud division recently contributed a total of \$8000 to three community service and educational programs.

Recipients were the Greater New Orleans chapter of the American Red Cross, \$5000; the Louisiana Independent College Fund, \$1500; and the Louisiana Engineering Advancement Program for Minorities (LEAP), \$1500.

The donation to the Red Cross was to assist in replenishing disaster relief funds, nearly exhausted by the unusual number of natural disasters this year. The Red Cross has spent more than \$5 million assisting victims of the April 7 flood that devastated much of the New Orleans area. Torrential rains dumped 11 inches on the city and caused the Space Shuttle's external tank assembly facility to shut down for a day. Some Michoud employees had as much as six feet of water in their homes. Several received food, clothing, and shelter from the Red Cross during the flood.

The Louisiana Independent College Fund provides support to three Louisiana colleges with a total student body of 3400—Centenary College of Louisiana, Louisiana College, and Our Lady of Holy Cross College.

The three year old LEAP program assists and encourages minority junior and senior high school students to pursue engineering careers. Larry Dennis, a Michoud engineer, is a LEAP volunteer at New Orleans' Xavier University, where he assists in developing an engineering curriculum.

Data Systems gets contract

For the next five years, Data Systems will provide and operate the data processing systems to track power transmission and delivery, revenue collection, and related services for the Department of Energy's Western Area Power Administration (WAPA).

Work on the \$17 million contract, which will include system development and maintenance, computer operations, and distributed network management, will be performed by the company's Denver regional office.

WAPA is responsible for distributing and wholesaling electric power generated at federal dams over a 15-state area.

Photo club sponsors employee contest

The Platte Canyon Photo Club, an employee club, is sponsoring a contest with more than \$1000 in prizes, including a camera, a slide projector, and other equipment.

The photo contest is open to all Martin Marietta employees. Entry forms and information will be available in Recreation racks. Competition includes slides, color prints, and black and white prints in four different subject matter categories.

The deadline for submitting photos is November 4, and the judging, by professional photographers Art Gore, Fred Larkin, Joe Lange, and Walt Muenstermann, will be on November 10.