MARTIN MARIETTA

# NOS

DENVER AEROSPACE

#### **NUMBER 1/1983**



### Snow, wind make long hours for some

"The snow was deep, and it was wet, and it was cold, but it was kinda fun," said Lt. Sharon A. "Casey" Norman, who reported for her second-shift duties just before the Colorado State Patrol closed the roads December 24.

As the officer-in-charge in plant protection, Lt. Norman was to spend nearly 60 hours being, as she put it, "the boss, the cook, and also shoveling some snow."

She was one of about 30 employees who spent the Christmas weekend working to keep plant roads open and facilities secure.

Heavy equipment operators Al Myers and Bill Lammers were called about midnight Thursday when the snow began. They worked the next 48 hours trying to keep the main plant roads open. Duty supervisor, George Dickens, was also on site.

"Plant protection always calls us when it begins to snow at night," said Charles Ames, chief of facilities and maintenance operations. "We want to start plowing as soon as we can. Even though it was a holiday, we wanted the roads open so plant protection people could make their rounds or respond to any emergency."

And plant protection did make the rounds both inside and outside. All buildings were checked early to determine if any employees were stranded. A few cars had been left in parking lots; these were searched to ensure that no one was in trouble.

There were other employees at the plant. Duane VanVleet and John Brown were in the boiler room and stayed on the job until Sunday. At the waste treatment plant, Kirk Siekman, John Everett, and Tim Smith worked until Monday after the storm.

In plant protection, some first-shift, some second-shift, and some night-shift people were on duty.

Two of the night-shift people couldn't get home after their shift ended Friday morning, and four day-shift people who got to work early Friday were unable to leave when their tours were over.

As the storm worsened Friday afternoon and evening, preparations were made for a long stay.

"I called Phyllis Montgomery, the cafeteria manager, and Bud Saunders, who handles the vendng machines, and asked for their help," Lt. Norman said. "They told me to use whatever was necessary. All we had to do was keep a list."

Supplies were moved from the cafeteria kitchen to plant protection headquarters. A stove, refrigerator, and microwave are set up in headquarters for night-shift and emergency use.

Hamburgers were served Friday night in the makeshift cafeteria, and headquarters became a dormitory.

Breakfast Saturday morning was substantial. The menu was scrambled eggs, fried potatoes and onions, slice ham, bread, and apple sauce.

"The eggs were scrambled because Inspector Leah Bullard and I had broken most of them moving them over the snow and ice from the cafeteria to the firehouse," Lt. Norman said.

Plant protection personnel at other locations subsisted on food and drink from vending machines.

"They do not have keys to the machines, so it was pay as you go," Lt. Norman reported. "God was with them. They all had enough change to use the machines."

Security people, other than those at headquarters, missed out on a traditional Christmas dinner. But, for those at Security Headquarters, the menu was turkey, potatoes, cranberry sauce, apple sauce, and pie. The turkey was donated by Inspector James Hamman, who had received it as a gift.

Meanwhile, the plowing and patrols continued. Drifts as high as nine feet were reported in some places and were piled as high as four feet in front of building doorways.

"We got into all the buildings regularly," Lt. Norman said. "We shoveled, and in one case pushed an officer through a snow drift, but we made it."

Things were back to almost normal Sunday night for plant protection, with Lt. Norman and her crew being relieved about midnight.

But conditions weren't normal for facilities.

Taking only New Year's Day off, the crew worked 12 hours each day to keep roads open, clear sidewalks, and plow parking lots.

Parking lots at the Denver Systems Center and the Littleton Systems Center also had to be plowed.

"Our people and equipment held up well," Ames said. "The people did just a fantastic job."

Because of the hard work by all involved, there was no damage to facilities and the plant was ready when employees reported to work after the long holiday.

Plant protection people who weathered the storm were:

At the main plant: Lt. Norman, Sgt. Dale Swallow, Sgt. Clarence Bosse, Cpl. Kyle Corray, Paramedic Sharon Baker, Paramedic James Keates, Inspector Leah Bullard, Cpl. Robert Glover, Inspector Bob Cunningham, Cpl. George Benway, Cpl. Joe Anselmo, Inspector Wayne Hayes, Inspector Frank Whatley, Inspector Frank Harmon, and Cpl. Sullivan Willis.

At DSC: Inspector Jimmie Weaver.

At Greenwood: Cpl. Robert Runkles, Inspector George Horvath, Inspector Ruben Ortega, Inspector Art Miller, and Inspector Bob Coleman.

At Littleton Systems Center: Cpl. Albert Singer and Inspector Myron Timmons.

### Applications available for 1983-84 scholarships

The application deadline for Martin Marietta Foundation scholarships for the 1983-84 academic year is February 15, 1983.

To be eligible, the employee whose son or daughter is an applicant must have been a Martin Marietta employee for at least two years as of January 1 of the award year and be on the active payroll at the time of the award. The applicant must be a graduating senior of a secondary school in the year of the award.

Applications for the \$3000 scholarship awards will be evaluated and the winners selected by a committee of three persons not associated with the company. The committee will be chosen by Foundation trustees from the academic and business communities.

Application forms and information about the scholarship program may be obtained from R. W. Walker, organization and management development, Eng. 225, Ext. 3395 in Denver.



The System Safety Society Professional Development Award was presented to George G. Mumma, right, director of Peacekeeper system safety, by Stanley F. Albrecht, director of systems integration for the Strategic Systems division. The award is the most prestigious recognition given by the Society and has been granted only four times since 1976.

## **Employees earn cash** awards for inventions

Nineteen employees have earned cash awards for their inventions.

Those receiving honors from the Denver product development review board and their inventions are:

Lawrence W. Loechel, engineering mechanics: application of fracture mechanics technology weld-acceptance criteria.

Neil J. Butterfield, engineering mechanics: low pyroshock separation nut; orificed separation nuts; and redundant separation nuts with retained stud.

Dr. Wayne E. Simon, engineering mechanics: swirl diffuser.

Dr. Patrick C. Hardee, electronics: heliostat drive mechanism.

Charles W. White, engineering mechanics: synthetic coulomb damper.

Mohan S. Misra, engineering mechanics: increased weld penetration and fusion-zone grain refinement in titanium alloys by microalloying; and improved corrosion resistance of 51200 bearing steel by ion-implantation process.

Joseph D. Miller and Steven C. Copsey, engineering at Michoud: TPS core removal cutter.

Ernest Berliner and Thomas E. Bailey, engineering mechanics: cold launch eject system for missile from a canister.

Burt J. Bittner, electronics: dielectric antenna system.

Frederick E. Lukens, electronics: low harmonic distortion power supply.

Frederick S. Felt, electronics: "active" personnel grounding wrist strap.

William C. Brown, electronics: innovative laser applications.

William H. Tobey, system engineering, and John V. Coyner Jr., engineering mechanics: lattice mast truss.

Charles A. Brosemer, Marshall Space Flight Center operations: plasma arc torch light beam adapter.

Tibor Buna, engineering mechanics: a novel approach for establishing heliostat aiming strategies for solar thermal central receivers.

Dr. Harold A. Papazian, electronics: fractionating inlet system for mass spectrometers.

### MARTIN MARIETTA NEWS Published by Public Relations MARTIN MARIETTA AEROSPACE

Call Ext. 5364 with information or suggestions for articles, or call one of the following coordinators.

Technical Operations: Kenneth E. Sedimayr 6872
Solar Energy Systems: Leon E. Taylor 0660
Business Development: Leonard G. Taigman 4466
Space/Electronics Systems Division: J. H. Guilfoyle 6944

Strategic Systems Division:

Space Launch Systems Division:

Business Management

Michoud Division:

Canaveral Operations:

External Tank Operations (KSC):

John H. Pond 9165

Steven L. Cohen 2037

Daphne R. Gillison 3155

Evan D. McCollum 3788

Donald T. Beck 9108

Melodie deGuibert 3160

William Leary 2202

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

Vandenberg Operations:

January 14, 1983



Weld-acceptance criteria developed for use on external tank are discussed by originator Larry Loechel, right, with James W. McAnally, vice president for technical operations when Loechel developed the analysis technique.

### Employee is honored by national athletic group

The Athletics Congress of the USA has presented its top award for long-distance running to Joseph Arrazola.

Arrazola, a pipefitter here, was voted the Scott Hamilton Award of Merit for his "outstanding contribution and service to the sport of long-distance running."

The Athletics Congress is the governing body for all amateur track and field and long-distance running competition in the U. S., and it represents this nation in the International Federation.

Arrazola has been active as a runner, official, and coach since his high school days. He has been a Martin Marietta employee for 24 years.

He is a member of the board of directors of The Athletics Congress, serves on its International Competition Committee, and is chairman of the Long-Distance Running Committee in Colorado. He also is a member of the selection committees for the Pan American games, the World Championships, and for the 1984 Olympics.

Arrazola still runs, but not competitively, and assists with the cross country team at Arapahoe High School in Littleton.

## Silver Snoopy awards go to four employees

Astronaut Maj. Woody Spring (USA) presented Silver Snoopy awards to four employees at Kennedy Space Center in December.

William J. Enos, H. Dee Trimble, and J. Michael Orr, external tank operations; and Raymond F. Rood, checkout, control, and monitor subsystems group, each received the award.

The Astronaut Silver Snoopy award is presented for outstanding contributions to the Space Shuttle program. Only one percent of all aerospace employees receive Silver Snoopies each year.

## Scientists to study Mars rock sample

A 17-pound meteorite discovered in Antarctica may be a fragment of lava thrown off the surface of Mars by a giant impact.

Data from the Viking mission support such a conclusion.

According to Dr. Benton C. Clark, developer of the x-ray spectrometers that measured the composition of Martian soil, the high iron content and low amounts of aluminum, potassium, and trace elements in the soil are almost an exact match with the meteorite.

"We tried for two years of mission operations to get rocks into our instrument," says Angelo Castro, who engineered the flight instruments. "Now we have the rock here on Earth."

A consortium of scientists is being organized for extensive laboratory analyses of this meteorite and three similar ones, which could prove to be the first samples from another planet in our solar system.

## Technician is cited for on-job alertness

Ordnance technician Laurie Tuohy discovered a critical disparity in the assembly of the first Peacekeeper (MX) test flight vehicle.

Her alertness was cited as a significant contribution to mission success of the test flight program.

Tuohy was praised for her attention to detail and technical proficiency in an employee commendation spot award presented by John R. Adamoli, director of Vandenberg test operations.



A mission success spot awarded was presented to Laurie Tuohy by John R. Adamoli, director of Vandenberg test operations, for her discovery of an assembly error in the second stage of the Peacekeeper test flight vehicle.

#### Shuttle bus schedule changed

A new shuttle bus schedule will go into effect January 17.

Pick-up points for the bus are the engineering building lobby, SSB lobby, DSC lobby, West Point south door, Greenwood Commons Building 6050, and Littleton Systems Center north door.

The new schedules have been posted.

## Employee of year named at Michoud

Richard Hinson has been named Michoud Division employee of the year for 1982. He is assistant supervisor in the small component section of thermal protection system (TPS) application.

The award entitles Hinson to attend a launch of Space Shuttle as the honored guest of NASA and Martin Marietta.

Employed since July 1978, Hinson has taken an active role in his work at Michoud and at Kennedy Space Center. He was a member of the team sent to KSC to complete TPS application on the external tank for the first Shuttle.

As his dependability gained notice, Hinson was assigned to critical tasks in the TPS area. His supervisors call his work professional, showing great concern for quality, safety, and reliability of production hardware and personnel.

Hinson's department loaned him to final assembly and testing to inspect ET-5 before shipment to KSC. The assignment called for long hours and extended shifts, which Hinson performed carefully and well, say his supervisors.

During the past three years, Hinson found 34 ways to improve his work area and increase safety. To date, ten of his suggestions have been implemented.

## Patents, checks awarded employees

Four employees have received patents on their inventions and award checks from the Denver product development review board.

Those receiving the awards and their patents:

Dr. Harold A. Papazian and Dr. Murlin T. Howerton, engineering mechanics: chemical storage of energy.

Thomas E. Zaczek, electronics: antenna scan pattern generator.

William J. Owen, electronics: optimum second-order digital filter.



Michoud employee of the year Richard Hinson, center, is flanked by Norman R. Augustine, left, Denver Aerospace president, and Kenneth P. Timmons, right, Michoud division vice president and general manager, as he receives his awards.

## Management association to install '83 officers

All employees are invited to a January 22 dinner dance hosted by the Denver Management Association. The event at the Brown Palace Hotel will feature installation of recently elected officers for 1983.

The new officers are Richard E. Hallam, president; Roselyn A. Foran, vice president; Beverley K. Dare, secretary; and Harold O. Wallace, treasurer. The current president, Dr. Jackie O. Bunting, will be chairman of the board of directors.

Board members are Georgette S. Forrest, Ralph L. Galbrath, David G. Hamling, James A. McKinnis, George W. McGee, and Beverly J. Thompson, who is serving her second year on the board.

For dinner dance information and reservations, call Georgette Forrest, Ext. 3010.

#### Recreation

Globetrotters—Discount tickets for the February 19 performance of the Harlem Globetrotters, 7:30 p.m., at McNichols Arena, may be purchased from Recreation through February 8. Cost is \$6.50.

Computers—Employees can purchase Hewlett-Packard computer systems at discounts up to 33 percent through the Waterton Computer Club. Call William Horger, Ext. 4147, or James Herrington, Ext. 5533.

Chess Club—The Chess Club invites interested employees to meetings held the first Wednesday and third Thursday each month, at 6:00 p.m., DSC I lunch room. For information, call James Mulberry, Ext. 5702.



Denver Management Association officers who will be installed January 22 are, from left: Harold Wallace, treasurer; Roselyn Foran, vice president; Richard Hallam, president; and Beverley Dare, secretary.

## Performance sharing sick leave changed

A change in Performance Sharing Plan policy gives employees new flexibility in time of illness.

Regular contributions to participants' Performance Sharing Plan accounts will continue for those on salary continuation, unless they elect to have monthly contributions suspended during sick leave.

Suspension of regular contributions, if elected, begins after five consecutive days of absence from work when the employee is placed on salary continuation. Contributions resume immediately on returning to work.

The change in policy became effective January 1, 1983.

To request suspension of Performance Sharing Plan contributions, the participant should contact employee benefits, Ext. 3009.