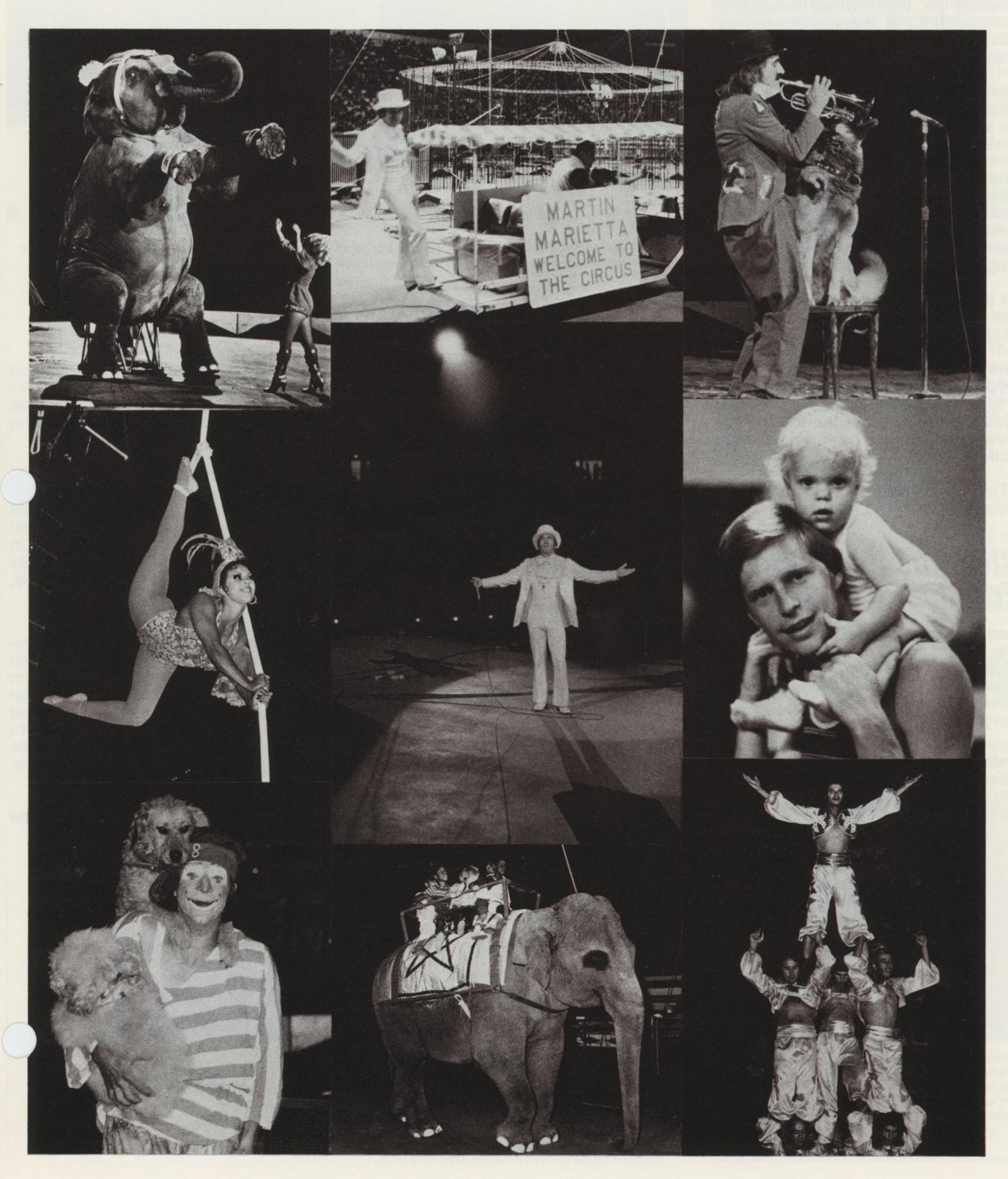


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MARTIN MARIETTA

DENVER AEROSPACE



Houston employee wins 'Name Game' Acapulco trip

G. N. Henning, a senior staff engineer working on the Payload Integration Contract (PIC) at Houston operations, has won the first Acapulco trip in "The Name Game" drawing.

Henning was one of 286 employees eligible in the drawing. To be eligible, an employee's qualified referral had to result in the candidate being hired.

The drawing June 8 was the first for the three-day stay in Acapulco. The award includes round-trip airfare for two and three nights at a seaside resort. The next Acapulco drawings will be held August 10 and October 5.

Of the 286 eligible for the drawing, 235 were employees at Denver and 51 were at offsite locations.

The next drawing in "The Name Game" employee referral program will be July 6 when two employees whose candidates have been called in for interview will each win a two-day Las Vegas holiday for two.

"The Name Game" program ends December 7.

Students named for Frontiers of Science

Two Littleton area high school students are attending the 1981 Frontiers of Science Institute this summer at the University of Northern Colorado under scholarships provided by Denver Aerospace.

Selected for the program were Beth Ellen Ebel of Littleton High School and Chris Lee Thetford of Heritage High School.

The Frontiers of Science Institute is designed for high school juniors who have interest and aptitude in science. The activities are selected to give students a better understanding of the nature of scientific investigation, some of the problems and limitations, and to encourage them to continue with advanced study and careers in science.

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Call Ext. 5364 with suggestions for information or articles

Denver Aerospace
P.O. Box 179 • Denver, CO 80201

June 1981



This metal shipping container will be used to transport MX soild fuel stages from manufacturers in Utah and California to assembly and test areas. Quality tests have begun on the containers.

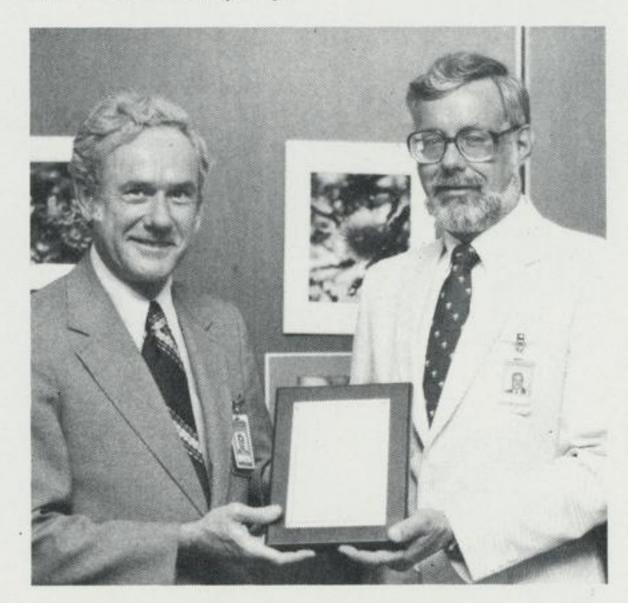
Tests start on MX shipping containers

JA company earns product sales awards

Hot Stuff Industries, a Denver Aerospace-sponsored Junior Achievement company, received a runner-up award for the best product at the recent Denver Junior Achievement Conference. The company sold its inventory of fireplace bellows and was awarded a Gold Company rating for its efforts.

Employees serving as advisers to the company were Clinton Kitchel, Patricia Plumbo, Kevin James, and Leonard Franzblau.

The Roll Data company also received a Gold Company award for its success. Employees serving as advisers for Roll Data were Joseph Cook, Kurt Dietle, and David Shipley.



An award for outstanding service to Junior Achievement was presented to George C. Kenry Jr., center, of quality, by John M. McCorkle, a member of the JA board of directors. Kenry was honored for his work as a loaned executive to JA.

Quality tests have begun on the first special containers designed to transport stages of the MX mobile ICBM. The tests are being conducted in Arizona.

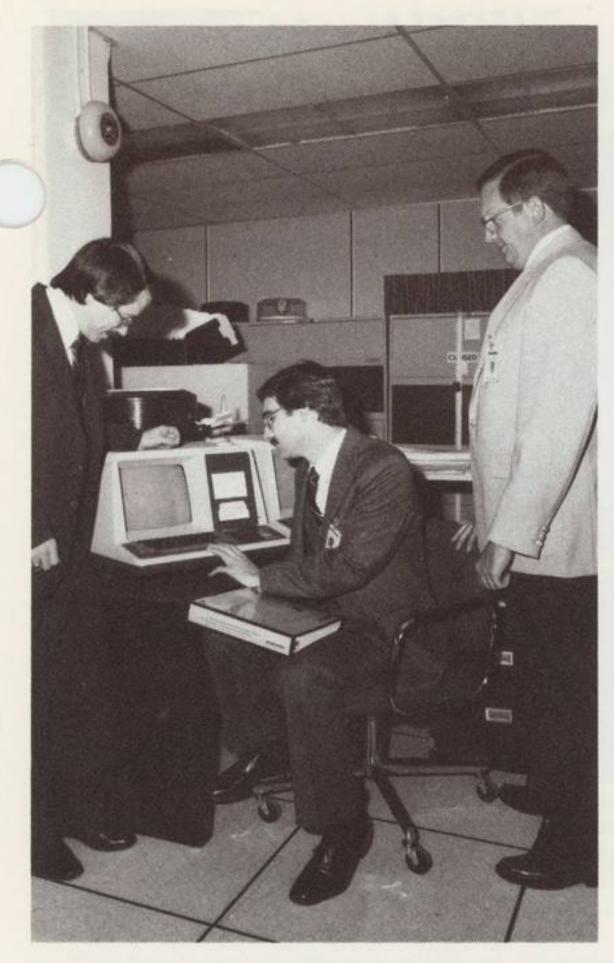
Designed and built by Goody Aerospace under a subcontract Denver Aerospace, the containers will be used to ship the three solid fuel missile stages from manufacturers in Utah and California to assembly facilities at Vandenberg Air Force Base, the MX flight test location.

Two types of containers are being produced. One will carry the large first stage and the other will carry either the second or third stage. Each of the steel and aluminum box structures is 34 feet long, 9 feet 10 inches wide, and 9 feet 2 inches high. The containers can be used for transporting by rail or over-the-road.

Twenty-six stage containers will be built.

On the cover

The ringmaster welcomed employees and their families at two special performances of the Shrine circus Saturday, June 13. While some youngsters rode in a cart at the beginning of the show, others took a more lofty ride atop an elephant. The circus was one of the special employee events marking the Denver Aerospace 25th anniversary.



A major refinement and extension of the Shuttle/payload contamination evaluation computer program has been developed by, from left to right, Lyle L. Bareiss, Frank J. Jarossy, and Joseph C. Pizzicaroli. They are preparing for a demonstration of the refinement in the photo. The program supports the Shuttle and Titan 34D programs, and defense systems work.

J.S. Savings Bond drive to end June 26

The annual Denver Aerospace U.S. Savings Bond drive will end June 26.

"Our goal is to achieve more than 90 percent participation in the payroll deduction program," said Leroy Hollins, overall coordinator for the campaign. "With the increase in interest rates for bonds, they are an attractive investment."

Division and department coordinators for the campaign are:

Leon Taylor, solar engergy systems; Susan Douglas, space launch systems; Beverly Thompson, quality; Donna Peterson, space and electronics; Irene Woodzell, executive management; Daphne Gillison, business management; Kenneth Sedlmayr and David Prince, technical operations business operations; John Youtman, engineering mechanics;

Geneva Purdy, software; Roy Hall and Craig Scott, electronics; Horace Clair nd Darlene Holt, test department; Nadine Holder, technical operations for strategic systems division; Betty Purkey and John Hannigan, manufacturing; Leroy Hollins, personnel; Debra Kauffman, central materiel; Lucy Winka, ground electronics products systems.

New technology awards presented 10 employees

Ten employees have received cash awards for new technology disclosures submitted as a result of work on NASA contracts.

Those receiving awards:

Dr. Joseph P. Martin, electronics: throw-away test cell liner for planetary soil chemistry instrument.

Jeffrey L. Hayden, electronics: micrometering fluid pump.

Richard G. Goble, engineering mechanics: a simplified ray-tracing technique to calculate augmented form factors (image factors) for thermal radiation models specularly reflecting surfaces.

Carl L. Jensen, engineering mechanics: hybrid method for calculating thermal radiation form factors.

Lyle L. Bareiss, Frank J. Jarossy, and Joseph C. Pizzicaroli, engineering mechanics: contamination multiple-reflection technology development and verification.

Mark D. Matlin and Arthur M. York, electronics: buffer status servocontrol.

Charles W. White, engineering mechanics: an approximate solution to improve computational efficiency of payload load predictions.

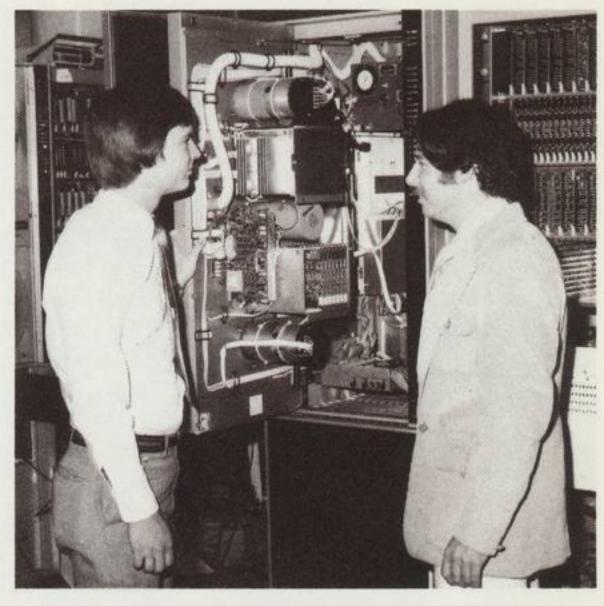


Jacques H. Croom

Aerospace names Croom its general counsel

Jacques H. Croom has been named general counsel for Martin Marietta Aerospace. He will continue his duties as counsel for Denver Aerospace until a replacement is named.

Frank Menaker, whom Croom replaces, has been appointed deputy general counsel for the Martin Marietta Corporation.



A buffer status servocontrol developed by Arthur M. York, left, and Mark D. Matlin, right, has been incorporated in the Landsat D high-density digital recorder the two men are examining here. They received a new technology cash award for their work.

Cafeteria, vending prices to increase on selected items

The first price increase in more than two years will go into effect Monday, June 22 on some items in the cafeterias and vending machines.

Items to be increased include fruit juices; fresh fruit; ice cream and ice cream-related items; milk; bread, rolls, and butter when not a part of the entree; some candy bars; and vending machine-dispensed cookies, canned chili and stew, canned soda pop, and cigarettes.

"Coffee prices were increased about two years ago," said Phyllis K. Montgomery, who heads the food and vending services. "At that time, we also increased the entree price to cover the cost of the coffee included with the meal.

"We have not had a general price increase since 1976," she said.

There will be no price increase in the entree, on the deli line, or for soups and salads prepared by the cafeteria staff.

The new prices are on items on which there is little or no preparation time.

"We are simply passing on our breakeven costs," Mrs. Montgomery said. "For example, fruit juice costs have more than doubled in the past two years.

"We do not intend to operate at a profit—or at a loss," she added. "We attempt only to cover food and related labor costs."

More than 3500 employees eat daily in the five food service areas and nearly every employee uses the vending machines.





John D. Goodlette

James L. Burridge

Two executives honored by AIAA

Two Denver Aerospace executives were honored recently at the 50th anniversary banquet of the American Institute of Aeronautics and Astronautics.

John D. Goodlette, vice president for space systems, was named an AIAA Fellow and James L. Burridge, chief engineer, was honored as a Pioneer for Industry.

In recognizing Goodlette, the organization said, "AIAA Fellows are persons of distinction in the arts, sciences, and technology of aeronautics and astronautics. Election to the rank of Fellow represents one of the highest recognitions of achievement and professional standing that the AIAA can bestow upon its members."

Burridge was cited for his 38-year contribution to the aerospace industry. He was a pioneer in the design of early U.S. rockets and missiles, including the Viking sounding rocket which set the altitude record for single stage rockets and for Matador, the first U.S. Air Force operationally deployed tactical guided missile. In Denver, he has played a leading role in the Titan I and Titan II programs, Skylab, and more recently on Space Shuttle.

Titan II replacement filter in production

The pace of fabrication and assembly on the Titan II powerline filter is approaching peak levels, according to Paul Janke, project lead on the program.

The filter is a replacement for those installed early in the Titan II program. Its purpose is to keep the electrically damaging effects of lightning or nuclear explosions from entering Titan II launch complexes, reducing damage to equipment and preventing a lessening of launch capability.

The new filter is designed with lower electrical stress values, extending the filter's life. The filters are field-repairable and eliminate use of polychlorinated biphenyls (PCB).

Improvements are made in salaried group insurance plan

Two improvements have been made in the group insurance plan for salaried employees.

The first improvement eliminates the preexisting conditions limitation. The second changes the major medical deductible to reduce the out-of-pocket expenses when husband and wife are both Martin Marietta employees.

By eliminating the preexisting conditions limitation, an employee and/or covered dependent is covered for expenses incurred, while employed, for any illness, injury, or pregnancy regardless of when the condition was incurred or first diagnosed. Previously, coverage was extended for preexisting

conditions only after three months had passed in which no expenses were incurred or at the beginning of the second year of employment.

The second improvement eliminates an inequity that prevented one employee spouse from benefiting from the maximum family deductible, thereby incurring up to an additional \$100 of deductible expense. Prior to the change, each employee spouse had to satisfy an individual major medical deductible, which had the effect of raising the total major medical expense for such a family. The plan has been amended to provide that one employee spouse is considered a dependent of the other for purposes of the major medical deductible.

Recreation

Information on all clubs and activities may be obtained from the recreation office, room 124, engineering building, Ext. 6750.

Radio Club—The Waterton Amateur Radio Society will conduct its annual field days June 27 and June 28 at Daniels Park in conjunction with the annual ARRL field days. In the exercise, "hams" set up and operate radio equipment under simulated emergency conditions, including the use of emergency power generators and portable antennas. Activities this year will include a Saturday night steak fry. All radio amateurs, whether club members or not, are invited to participate. Specific information on the event may be obtained from Jack Crabtree, ext. 4672, or Harold Beaver, ext. 3426.

Lakeside Discounts—Discount coupons for Lakeside Amusement Park and Lakeside Speedway are available in recreation display racks.

Quality beats Materiel—Quality golfers won 13 matches and Materiel 11 in the annual golf tourney between the two departments. Three teams tied with a 54 in the partner best-ball event: Earl Gipe and Rudy Jugert; Ralph Stegman and Donald Martin, and Harry Long and Marshall Pitts. Jugert was medalist with a 78. Stegman had the low net with a 59. Harry Wilmot was closest to the pin on No. 3 and Gipe was closest on No. 17. Gene Adamson (No. 6) and Guy Wallin (No. 13) had the longest drives.

Bears Baseball—Adult discount tickets and Bear Cub Badges for children under 12 are available at the recreation office. Both reduced price programs include the July fireworks game.

Chess Club—Registrations will be accepted through June 23 for the summer chess tournament. First round play in two divisions will begin June 24. Each round will last two weeks. The first division is for ranked players above 1600 and for those who want the most challenging competition. The second division is for those ranked under 1600 or for unranked players. Twenty-seven players participated in 192 games in the recent "Five-Minute Pot Tournament" sponsored by the Chess Club. The top five positions were captured by Bruce Markielewski, 30 trophy points; George Tefft, 29; Richard Pickerell, 26; David De-Jaeger, 24; and Steve Lewis, 23.

Best-Ball Golf Tourney—Clyde Robinson and Horace Ford teamed to win the partner best-ball golf tournament with a combined 69. Low net in the tourney was Steven Humphrey who shot a 69. Low gross was Robinson with a 74. The two closest to the pin awards went to Ernest Naveja (hole 8) and George Duvall (hole 18). Longest drive on No. 9 was Ford and David Banerian had the longest drive on No. 12.

Canaveral technicians are specialists in payload protection

A select group of technicians at Canaveral operations have a unique task—processing and installing Titan launch vehicle payload fairings.

The fairings protect the payload from prelaunch contamination and from atmospheric heat buildup during launch.

It takes an average of 64 days for the group to process and install the fairings that are manufactured to meet specific payload or satellite requirements.

After a mechanical and electrical receiving inspection, the fairing sections are cleaned in a three-step process before the ablative coating is applied. Silver paint covers the ablative material to allow for discharge of static electricity built up during launch.

The fairings are then weighed, checked to verify engineering design requirements for the explosive ordnance, cleaned internally, inspected for contaminants, and double wrapped for the move to the launch pad.

The Canaveral technicians assist in mating the payload to the Titan launch vehicle and, after payload inspection, install the protective fairings.

Kenneth Boone is lead engineer for the group with Edward Rogers as the backup engineer. Others in the group are Harold Kidd, lead technician; Dale Custer, Howard Earles, James A. Weeks, and J. R. Frick, systems technicians; and Cyril M. Holley, quality. The group is part of the test operations support section. Louis Vittor is chief of the section and Edward V. Stephenson is manager of test operations.



Col. Kenneth G. Haug, the Air Force Plant Representative, right, receives the boss of the year award from the Foothills Chapter of the American Business Women's Association. Making the award is Ms Sara Moore Brooks, a member of the chapter and a price analyst in the Air Force Plant Representative Office.



An assembled payload fairing is in place over a satellite for mating with a Titan launch vehicle.

Recreation program participation is up

Employee participation in recreation programs is increasing, with more than half the employees taking part in the organized activities.

For example, more than 1800 employees are playing on the 93 softball teams; more than 800 employees were on 80 volleyball teams; the spring tennis tournament has more than 300 entrants; another 100 employees are playing soccer.

More than 1000 employees will participate in summer golf and bowling leagues, and in golf tournaments.

Throughout the year, club activities attract more than 3000 employees.

"We believe we offer something for everyone," said Leroy Hollins, head of recreation and employee services. "However, if something is missing, we will assist in the formation of new activities. If 20 or more employees have the same interest and want help, let us know."

In addition to the sports and club activities, the recreation office also has arranged for a wide variety of discount programs.

Corporation declares 63-cent dividend

The Martin Marietta Corporation board of directors has authorized a quarterly cash dividend payment of 63 cents per share on the Corporation's common stock, payable June 30, 1981, to shareowners of record at the close of business June 8, 1981.

Programs at KSC earn safety awards

Three Denver Aerospace programs at Kennedy Space Center have earned 1980 safety awards from NASA.

External tank operations; the checkout, control, and monitor subsystem (CCMS) project; and the solid rocket booster decelerator subsystem (SRB/DSS) parachute project each received the Accident Prevention Award. The award was presented for completing 1980 without a lost-time accident.

External tank operations has completed five calendar years and more than 1.4 million man-hours without a work-related lost-time accident. CCMS and SRB/DSS have completed two calendar years without a work-related injury. CCMS worked 203,000 man-hours and SRB/DSS 17,000 man-hours in that period.

CCMS and SRB/DSS also received the Center Director's Award for outstanding accident prevention programs. The award is the highest given a contractor and is awarded for no work-related injuries or vehicle accidents. Only seven of the awards were presented for 1980.

Employees participate in Space Congress

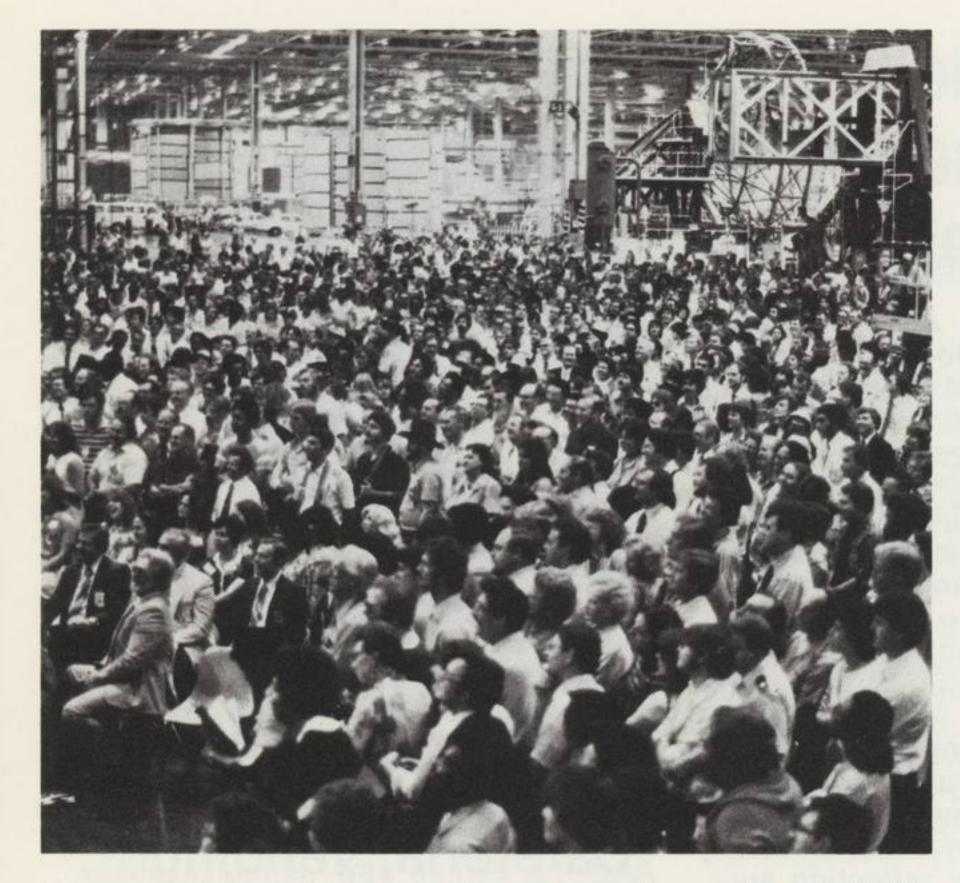
Two employees presented papers at the 18th Space Congress held recently at Cocoa Beach, FL, and others assisted in the operation of the annual event. Theme of the congress was, "Year of the Shuttle."

Joseph T. Keeley, space launch systems division, presented a paper, "The Titan System," during a session on expendable launch vehicles.

Allan M. Norton, Michoud division, spoke on "External Tank Performance Improvement."



A \$1,000 Martin Marietta contribution is presented by Felix J. Scheffler, left, Canaveral operations director, to U. S. Congressman Bill Nelson for the congressman's student intern program. Under the program, two Brevard County high school students will participate in a one-week internship in Washington, DC.



Thousands of Martin Marietta employees and other workers at NASA's Michoud assembly facility gathered to hear Space Shuttle astronauts John W. Young and Robert L. Crippen report on the first Shuttle flight.

JOHN YOUNG BOB CRIPPEN

At a welcome home reception for Space Shuttle astronauts John W. Young and Robert L. Crippen, the honorees wait for the applause to die down. Left to right are Crippen; Kenneth P. Timmons, Michoud division vice president and general manager; Young; and James Odom, NASA external tank project manager.

Shuttle astronauts visit at Michoud

The first two astronauts to fly Space Shuttle recently visited Michoud division to thank employees for building the external tank that helped boost them into orbit.

Astronauts Robert L. Crippen and John W. Young were greeted by a cheering crowd in the manufacturing building at Michoud.

As a gesture of their appreciation, they showed "home movies" of the inaugural Shuttle mission. Narrating the film with charateristic dry wit, Crippen remarked, "Some people called the Shuttle a turkey. But I tell you, that turkey sure can fly!"

Government officials and business leaders also were present, including Louisiana Governor David Treen, Congresswoman Lindy Boggs, New Orleans City Councilman Joseph Giarrusso, and Chamber of Commerce President Morrell Trimble.

"You have done a great job," said Young. "My congratulations to you. Keep on building those tanks!"

Development vice president is named at Michoud

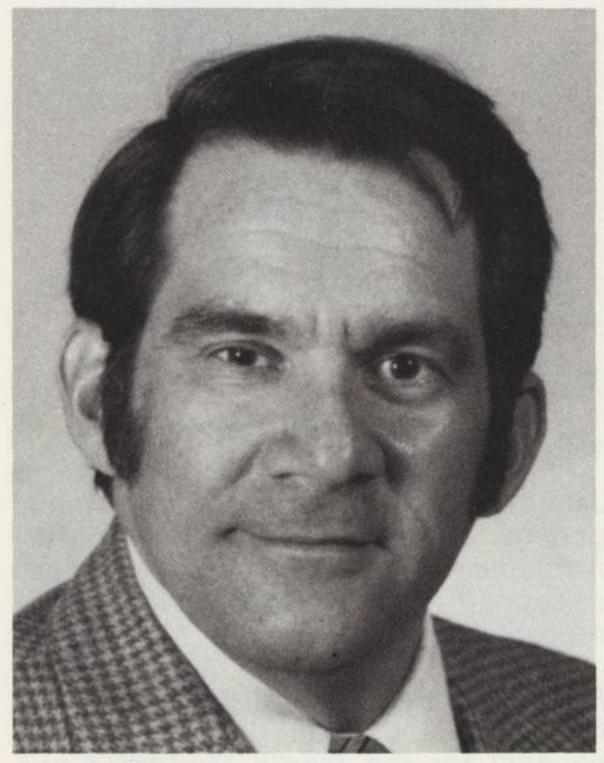
Allan M. Norton has been named vice president for development at the Michoud division. He will continue his reponsibility for engineering and will assume additional reponsibilities that will be defined later.

NASA honors employees for Voyager project

Two employees have been awarded NASA public service medals and 12 others will receive group achievement certificates for their contributions to the Voyager project. Denver Aerospace will receive a company achievement award for the manufacture of the the Titan III-E launch vehicle.

James W. McAnally and Alan L. Schaefle received the public service medals for their contributions to the "engineering design and development and the management coordination... related to the accomplishment of the mission."

McAnally was honored as program



Allan M. Norton

manager for the Hybic contract that included electronic hardware for the spacecraft attitude control system. Schaefle was cited for his efforts on the launch vehicle.

Group achievement awards will go to:

Propulsion subsystems components group: Raymond G. Horner Jr., Samuel Lukens, Ernest Moser, and Richard E. Nenno.

Attitude and articulation control subsystem electronics: W. E. Dorroh, L. R. Fondacaro, Grover Hall, J. M. Kappel, McAnally, Edwin L. Sipos, and J. T. Tutchton.

Planetary radio astronomy receiver: Burt M. Imber and Gene J. Lang. The awards ceremony was held recently at the Jet Propulsion Laboratory.

H. M. Schurmeir, who was the Voyager project manager from 1972 to 1976, said, "Voyager's mission to the outer planets set new standards for scientific return from space and for the engineering skills that bring this new knowledge to the world. I wish to extend my congratulations to all members of the Voyager team.

"The mission is far from complete," he said. "Voyager 1 is searching for the boundary of the solar wind; Voyager 2 has yet to visit Saturn, Uranus, and perhaps Neptune. Everyone who has participated in this great journey should take special pride in the engineering and scientific accomplishments of the entire team."