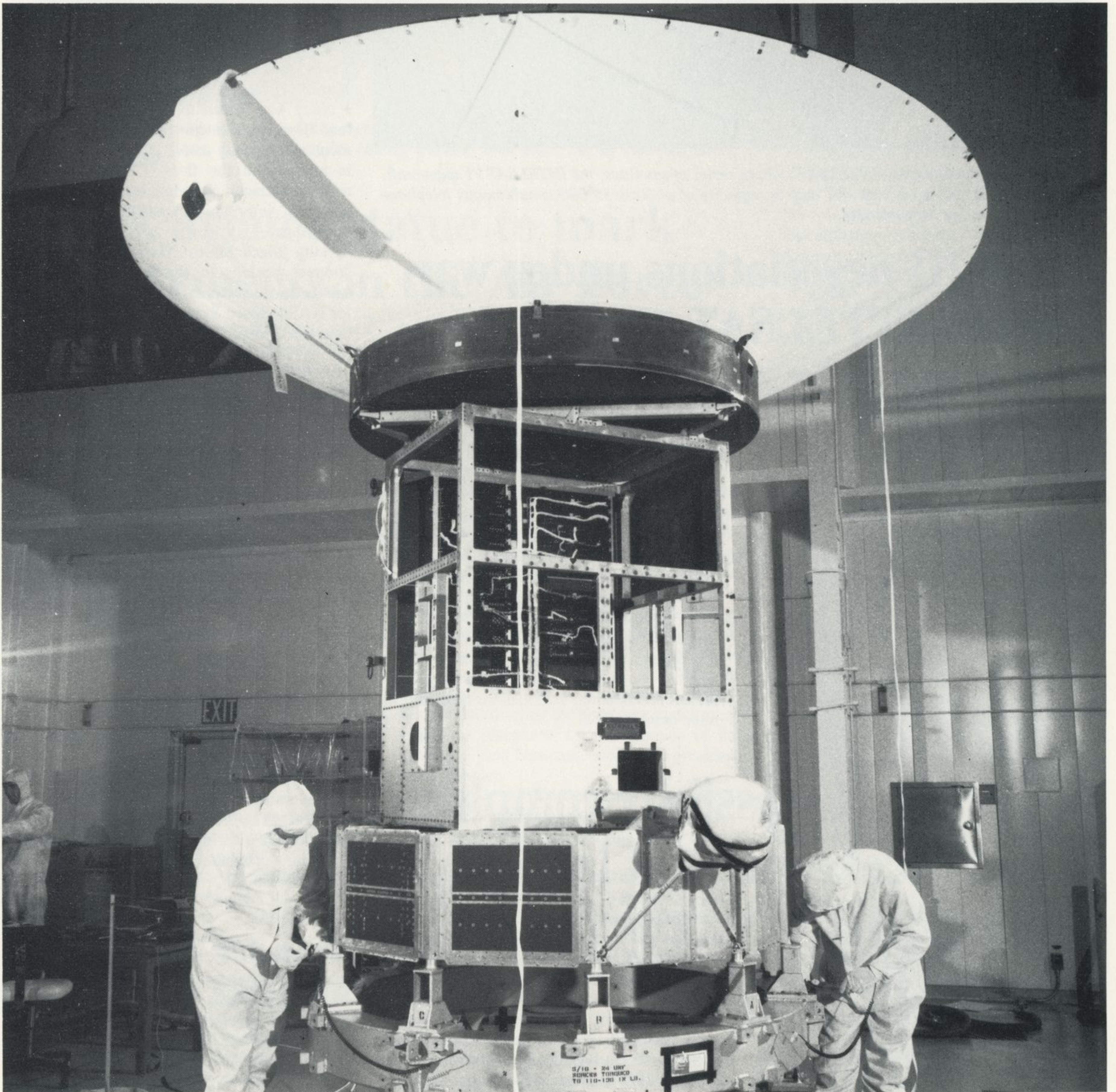


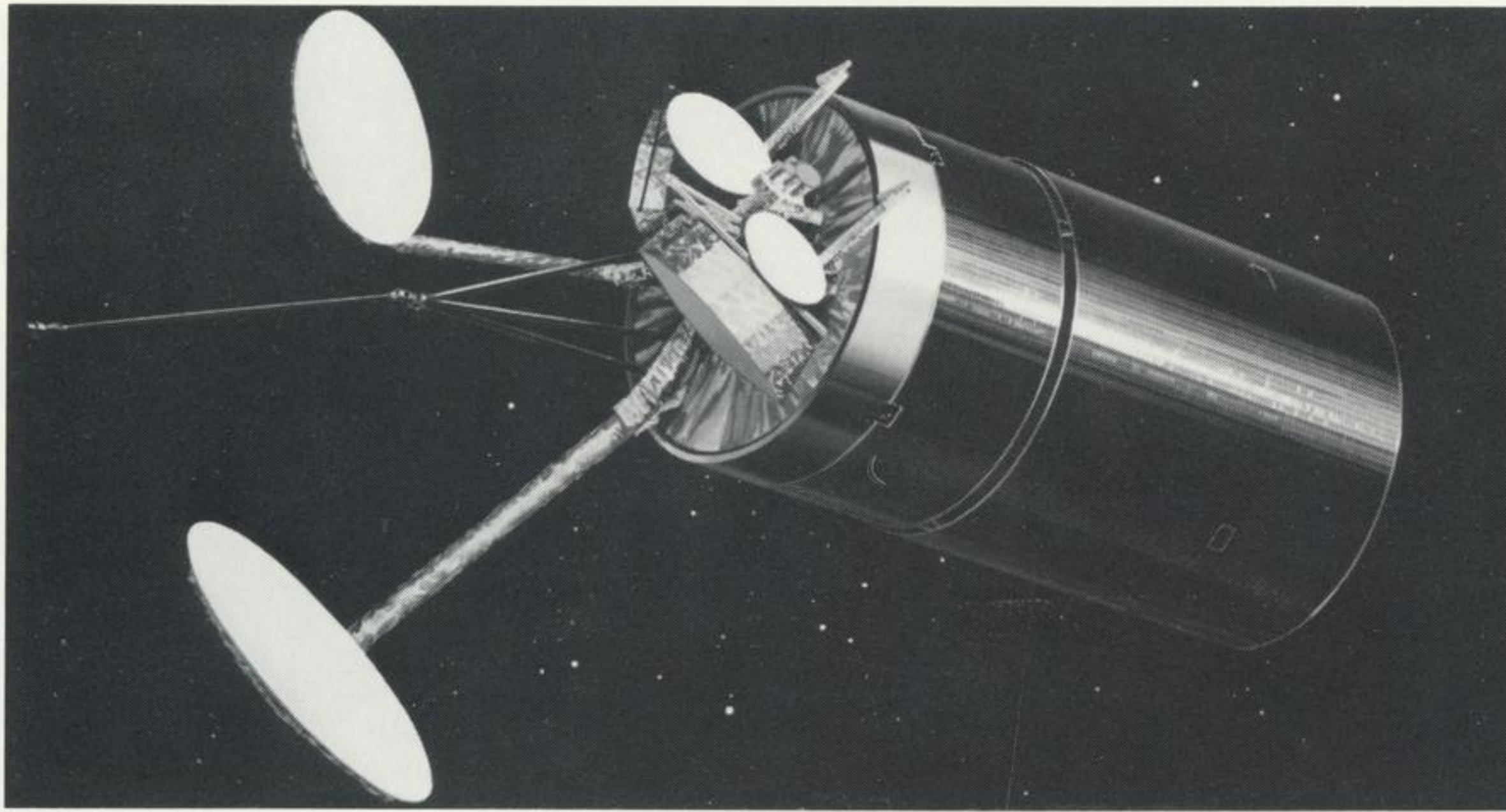
March 27, 1987 Number 6



Magellan spacecraft successfully undergoes test

Martin Marietta technicians recently completed a major test of the Magellan spacecraft, which is scheduled for launch from the space shuttle in April 1989. During the fit test, the spacecraft's 12-foot-diameter, high-gain antenna was attached to the upper body structure to make sure it fits. The company will continue subsystem integration and

assembly testing through June 1988. The Magellan spacecraft will use synthetic aperture radar to map the surface of Venus. Denver Aerospace, under contract to NASA's Jet Propulsion Laboratory, is responsible for the spacecraft's overall design and implementation, launch operations, and mission operations support.



This artist's concept depicts INTELSAT's future series of satellites, the INTELSAT VI spacecraft. Each INTELSAT VI spacecraft will have a capacity of at least 33,000 simultaneous telephone calls plus television transmission.

Titan III negotiations under way for two INTELSAT VI launches

The 71st meeting of the International Telecommunications Satellite Organization (INTELSAT) Board of Governors in Washington, D.C., March 11-18, resulted in an authorization for INTELSAT's director general to contract with Martin Marietta Corporation for the launch of two INTELSAT VI spacecraft. The authorization is subject to satisfactory resolution of certain issues related to U.S. government support and indemnification.

Martin Marietta's Titan III commercial launch vehicle will be used for these launches and will complement the three Ariane 4 launches already contracted by INTELSAT. NASA's space shuttle was to have provided some launches of INTELSAT VI spacecraft, but schedule delays caused by the Challenger accident made it necessary for INTELSAT to seek other launch opportunities to ensure

timely launches.

INTELSAT, headquartered in Washington, D.C., is an international cooperative of 113 member nations that owns and operates the global commercial communications satellite system used by countries around the world for international communications, and by 25 countries for domestic communications.

In addition to international telephone and television services, INTELSAT offerings include a digital service designed for handling worldwide video teleconferencing, facsimile, data, packet switching, digital voice, electronic mail, and telex; a data gathering and distribution service using microterminals (as small as two feet in diameter); and basic satellite communications facilities for rural and remote communities. ■

Air Force successfully completes 17th Peacekeeper test launch

The 17th successful launch of an Air Force Peacekeeper intercontinental ballistic missile (ICBM), this one carrying six unarmed Mark 21 re-entry vehicles, covered the 4,100-nautical-mile flight March 21 from Vandenberg Air Force Base, Calif., to the Western Missile Range in the Pacific Ocean.

The flight continued the Peacekeeper's record as the most successful ICBM development in Air Force history.

The missile was launched from a modified Minuteman III silo at 7:15 a.m. PST. This flight is part of a 20-missile flight test program designed to examine development, testing and operational requirements. These included verifying the accuracy and military utility of the Peacekeeper weapon system.

Initial operational capability of 10 missiles on strategic alert in Minuteman silos was accomplished in December 1986 near F. E. Warren Air Force Base, Wyo. Plans call for deploying 50 missiles in silos by December 1988.

On Dec. 19, 1986, President Reagan announced his decision to develop plans to base additional Peacekeeper missiles in a rail garrison basing mode. This would involve basing missiles onboard special railroad cars based on existing Air Force installations. The railroad cars would remain within military installations until needed. During periods of increased alert, the trains would be dispersed onto the existing rail network for increased survivability. ■

News briefs

Nalty promoted to vice president

Raymond J. Nalty has been promoted to vice president of Business Management for Denver Aerospace, President Peter B. Teets announced March 17.



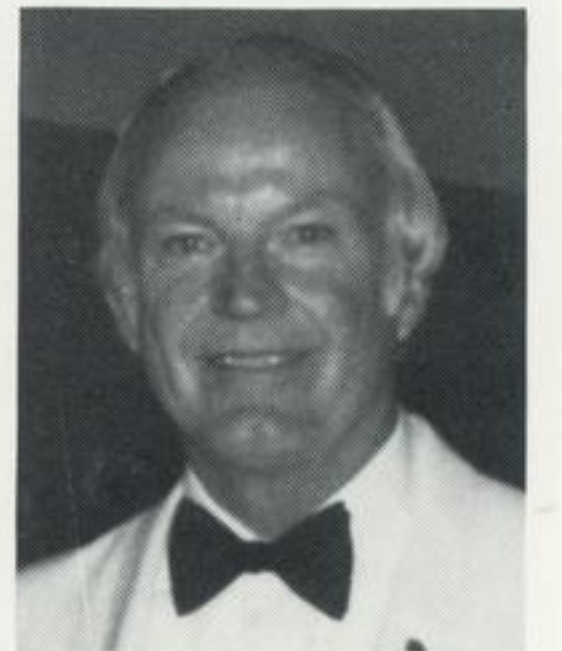
Nalty

Nalty was named to lead Business Management in February and is responsible for finance, contracts, planning, estimating, capital planning, information systems and business operations.

Nalty joined Martin Marietta in 1967 as a contract specialist for the Skylab program. He was named director of Business Management for NASA Space Systems when the organization was created in August 1986.

Fullerton appointed to Lions Club post

Don Fullerton, a staff engineer in systems requirements for the Small ICBM program, has been elected district governor for the International Association of Lions Clubs in District 6 Central.



Fullerton

Fullerton, a Lion for 13 years, has served as president twice, received three awards for starting three new clubs, and held other offices.

Lions International is a service organization with more than 1.35 million members in 161 countries. The association has been involved in sight and hearing programs, youth drug-awareness programs, and diabetes screening and research.

Transfer information available on April 4

The University of Colorado at Denver will sponsor Transfer Day on Saturday, April 4, for students interested in transferring to the center. Transfer Day will be from 10 a.m. to 2 p.m. at the St. Francis Interfaith Center on the Auraria Campus. Employees can talk with advisers about degree programs and transfer of credit from other universities, and tour the campus.

For more information, call CU-Denver at 556-2274 or the Education office at Ext. 7-4050, 7-3736, or 7-5226. ■

PROJECT CHALLENGE

(Editor's note: The following update by John Pauly introduces the manufacturing resource planning (MRP) II section of Project Challenge. Pauly heads the MRP II for Project Challenge.)

A vital aspect of the new Project Challenge productivity initiative for Denver Aerospace involves integrating manufacturing resource planning (MRP) II. MRP II will change software, hardware, and employee attitudes that make up Martin Marietta's environment.

MRP I, which stands for material requirements planning and is the precursor to MRP II, was first introduced in the late 1960s in manufacturing companies in the East and Midwest. As products became more complicated and multiplants commonplace, better communication methods were needed. With increasing computer speeds and communication capabilities, it was natural to use these tools to assist manufacturing, with the intent to integrate all into one computer. This process begins with engineering and extends through planning, scheduling, production, material acquisition and handling activities, receiving, quality and shipping. Efficient engineering and production results from precise and current communication throughout an organization.

The involvement of Department of Defense (DOD) aerospace companies in one single integrated, companywide, planning process started in the early 1980s. Many companies sought standardized computer programs to install on massive computer networks. As a result, in-house data processing companies developed separate systems or islands for each user's needs. Ten years ago, commercial computer programs did not address critical issues of tracking costs by separate program (or contract ownership) inventory and assembly of parts into finished products. Each product was

a new configuration.

Suitable products for DOD contractors are now available. As part of Project Challenge, we have decided to integrate a proven, commercially available DOD MRP II software package (called MAC/PAC-D) with our existing islands of automation. The software will span the void between engineering and manufacturing by connecting a single integrated company master schedule, supporting cost management reporting, and connecting our manufacturing and materiel systems. As part of the process, we intend to shut off unnecessary current systems.

Our plan is to install this new capability at the Electronic Manufacturing Facility (EMF) and convert the current Small ICBM contract at the Design to Produce facility to this new software. We expect this effort to be fully operational by Labor Day.

The key to this plan's success is educating people to use the new tools. The new process will allow us to change many policies and procedures. We have selected an aggressive plan that places Denver Aerospace on the new system by the end of 1989. At that time, all non-classified programs and facilities will operate on the same system.

It is a major undertaking to change a company's culture and processes. We believe we have the right formula: top management involvement and support, a team willing to take the challenge, and people at all levels who want Martin Marietta to excel using the best tools available.

MRP II capability is a journey upon which Martin Marietta has embarked. Many articles will appear in subsequent issues of the *Martin Marietta News* to inform employees how MRP II fits with computer-integrated manufacturing and other capabilities. ■

—John Pauly

Employee ideas merit recognition

The following people earned acknowledgments recently for submitting ideas to the Success Through Suggestions program:

David Rizzuto, inspector A-test; Patrick Wild, quality engineer; Richard Tomaskovic, associate analyst (four awards); Gerald Ivarson, pipe fitter (A), operations and maintenance; Dave Thompson, millwright A, operations and maintenance; Ronald Lewis, assistant foreman, operations and maintenance; Frank Kraus, milling machine operator, manufacturing machine shop; Mike Serafin, engineer, advanced manufacturing technology; T. O. Bourdon, milling machine operator, manufacturing machine shop; Sam Scarpello, NC mill operator, manufacturing machine shop; Darrell Phippen, senior engineer, structures laboratory; R. A. Roach, senior specialist, facilities requirements; Theresa Cascio, inspector, structures and components; Suzanne Trupiano, quality operations; Marbeth Wilder, section secretary; John M. Fasciani, chief, materiel cost management; Barbara Young, drafter II, Peacekeeper; Tony Mitchell, transportation and handling; James Paradise, senior quality engineer; Kenneth Ott, quality engineer; Robert S. Pearson, senior engineer for contract technical requirements; Charles Winfield, assistant CCCB chairman, Peacekeeper; Ed Stefanovich, assistant foreman, EMF test; Robert Myers, technician, electrical test equipment; Art Warnier, lathe operator (A), machine shop; Michael Allen, senior manufacturing engineer; Alex Esparza, grinder (A); Frank Kraus, milling machine operator, manufacturing machine shop; Damon Oswald, lathe (A) operator, manufacturing machine shop; T. Wolters, manager, program development; Ellen Jones, senior engineer, robotics systems; M. Darlene Desch, administrative secretary, product area; David Dudenhofer, senior engineer; J. E. Rhodes, technician, Comm-Link program; Becky Roberts, analyst clerk, personnel I; James Bucks, senior engineer, contract technical requirements; Alfred Trujillo, technician, electronics System Technology Laboratory; Mary Schell Close, analyst associate, estimating support; L. D. Jarman, welder (A), operations and maintenance; Kyran Stevenson, painter, operations and maintenance; Michael Amerman, technology, research and development III; Albert D. Brakin, Jr., Vandenberg Operations; Chuck Bird, foreman, maintenance administration; Robert Barnes, quality engineer, product assurance; and Glenda Jacobs, supervisor assistant, word processing services. ■



Credit Union Clips

Credit union saves time and money

Free checking, 5-1/4 percent dividends and 16 percent overdraft protection line of credit are three good reasons why employees should have accounts with the Red Rocks Federal Credit Union, said a credit union spokeswoman. "We offer a fantastic comprehensive checking account program," she added. "We'll save you time and money."

The credit union cites the following benefits: direct payroll deposit that places employees' checks into their accounts each payday, which avoids wasting time in lines; payroll deduction helps save money for a rainy day; free checking (no monthly service charge on

the account) will save money in the long run; and a 5-1/4 percent dividend is earned on each low monthly balance and paid monthly.

The "star of the show," according to the credit union, is the overdraft protection line of credit at 16 percent. The credit union issues a debit card with this line of credit that gives ATM 24-hour access through the MiniBank/CIRRUS network. The MasterCard II carries an annual fee of \$6.

"All in all," said the spokeswoman, "if you're still checking at a bank, you owe it to yourself to check us out and make the switch to your credit union."

PR relocates

Public Relations has moved to offices located in Room 131 on the first floor of the Engineering Building at Waterton. The department's phone numbers remain the same.



Stanley F. Albrecht, left, vice president, Production Operations, presents Martin Marietta's donation to Junior Achievement executives Lynn Curtis, staff president for JA Metropolitan Denver, and Richard Heiserman, board chairman.

Employees support Junior Achievement

Martin Marietta employees are participating in two Junior Achievement (JA) programs designed to help junior high and high school students understand business.

In the regular JA program, high school students learn by forming their own company and taking it through a complete business cycle.

In a new program called Project Business, volunteer consultants visit ninth grade social studies classes. They supplement the usual classroom work by leading discussions and activities related to economics, competition, consumerism and career exploration.

During the fall 1986 semester through February 1987, Martin Marietta sponsored two JA companies and one Project Business class. The volunteers from Martin Marietta were Tom Elbring, Mark Dunning, John Lincoln, Dave Spangler, Mike Montgomery,

Leslie Munsey and Mike Caslin. Mark Hooper acted as the Project Business consultant. Bernie Wenninger acted as a fundraising volunteer for JA.

In the current spring semester, Don Joy, Adrian and Susan Lafitte, and Matthew Tache are advising a JA company at George Washington High School. Project Business consultants are Bruce Kostival at Deer Creek Junior High and Chuck Blanchard at Bear Creek High School. Other employees who have assisted in recruiting students from high schools for the JA program include Jack Blaylock, Carol Romero and Darlene Smith. Stanley F. Albrecht, vice president, Production Operations, is a JA board member.

Those interested in becoming involved in the fall semester can contact JA Coordinator Lori Sharp, Ext. 7-6605. ■

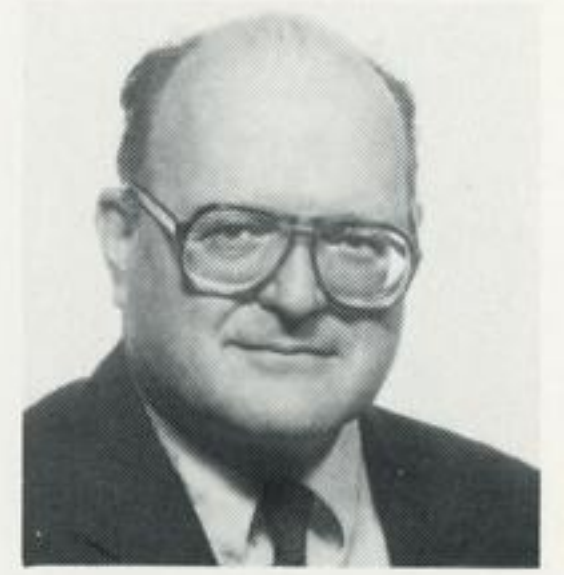


Long-term service recognized

A service recognition dinner Feb. 18 honored employees who celebrated 35, 40 and 50 years of service with Martin Marietta. The honorees attending were, standing, left to right, Tom Goodelinas (35 years), Lew Moyer (35 years), Peter B. Teets, president, who officiated at the ceremonies, Carroll Curlander (40 years) and Richard E. Weber, vice president, Personnel and Facilities, who also officiated. Seated are Rex Glesner, Jr. (35 years), Bill Dowe (50 years), Vernon Coy (50 years) and Betty Hilton (35 years). Other honorees not pictured are John Goodlette (35 years), Vincent Moravek (35 years), Daphne Gillison (35 years) and Lee Bogema (40 years).

Tefft receives top Camp Fire award

George Tefft, Magellan spacecraft manager for NASA Space Systems, received the highest award a local Camp Fire council can bestow at the recent annual meeting of the Denver Area Council.



Tefft received the *Tefft* Luther Halsey Gulick

Award, named in honor of the founder of Camp Fire, an organization devoted to promoting development of today's youths. The award is given for outstanding council leadership that has had a positive effect on both the council and the community.

"We are very proud of George Tefft, and hope Martin Marietta will share that pride," said a spokesman for Camp Fire. Tefft has served as council vice president and president, as well as serving on many committees since 1978. He has traveled extensively to represent the Denver Council nationally and has brought excellent management skills to the board of directors, said the spokesman. ■

USC degree briefing scheduled for April 8

Gayle Ganger, coordinator for the University of Southern California (USC) extension program, will brief employees interested in the systems management master's degree program at 10:30 a.m., Wednesday, April 8, in the Engineering Conference Room 234. She will discuss the University of Denver's future role in this program.

USC students may register for Term VI from 11:30 a.m. to 1 p.m. The term begins May 4.

For more information, contact educational services at Ext. 7-5226, 7-4050, or 7-3736. ■

MARTIN MARIETTA NEWS

Published by Public Relations

Editor Jan P. Timmons

MARTIN MARIETTA

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

Business Management	Daphne R. Gillison	7-3155
Defense Systems	Norma I. Emerson	1-8089
Military Space Systems	Mary Lou Motsinger	7-6461
NASA Space Systems	Austin E. Fehr	7-5775
Personnel/Recreation	Leroy Hollins	7-6750
	Lori A. Sharp	7-6605
Production Operations	Guy R. Coombes	7-6911
Space Launch Systems	John H. LePenske	1-1400
Space Station	David J. Hughes	1-5946
Strategic Systems	Richard L. Kline	7-7475
Technical Operations	Floyd R. Teiffel Jr.	7-6872
Canaveral Operations	Robert V. Gordon	7-9108
Vandenberg Operations	Robert L. Ruck	7-2202

Prepared and produced by the publications department

DENVER AEROSPACE

P.O. BOX 179—Denver, CO

March 27, 1987



World War II Tuskegee aviators are, left to right, Lt. R. Highbaugh, Lt. Samuel Lynn, Lt. Daniel (Chappie) James, (later, Gen. James); Lt. Harvey Puckney and Capt. Fitzroy Newsum (later, Col. Newsum).

Black aviator statue to mark achievements in the Air Force

A bronze statue of a World War II black aviator will be placed on the grounds of the U.S. Air Force Academy as a symbol of accomplishment and courage by a unique group of flyers.

From the beginning of military organizations in this country through World War II, the armed forces restricted blacks to segregated units. When World War II began, blacks were not permitted to train to fly in the Army or Air Force regardless of experience and education.

After years of pressure from individuals and the black news media, the Army agreed to organize a single squadron in 1941, to be staffed completely by black personnel.

The squadron, later called the Tuskegee Experiment, started at Chanute Field in Indiana in 1941, and later moved to Tuskegee, Ala. A local college, Tuskegee Institute, had started a student flying program and had instructors to conduct a primary flight program. An airfield built in 1941 accommodated basic and advanced flight programs. The first class of five graduated in 1942.

Fitzroy Newsum, now public relations manager for Denver Aerospace, was stationed in an anti-aircraft regiment in the Pacific Theater when he was selected for the experiment. He later became vice commander of the 381st Strategic Missile Wing at McConnell Air Force Base in Wichita, Kan.

When black participation was allowed to expand by forming a bomb group, Newsum said, he was in the second graduating class. The bomb group needed navigators, bombardiers, crew chiefs, radio operators and gunners. All were trained at separate locations, generally in a segregated status.

"This mirrored the complexity and confusion which occurs when social standards override even military necessities," Newsum said. "When World War II ended, four of the longest, and, in my opinion, best-trained bomb squadrons, were still waiting for word to go."

After the war, both the fighter group and the bomb group combined into one group of

bombers and fighters, and finally into the 332nd Fighter Group, still segregated on one field—Lockbourne Air Force Base, Ohio. President Harry Truman's order to desegregate the armed forces in 1949 "sent us scattering to the four winds," Newsum said. "We were, in the words of Martin Luther King, 'free at last,' " he added.

The first Tuskegee Airmen chapter was formed in 1972. Today, there are 30 chapters throughout the world that raise money to support a scholarship that goes to outstanding young people interested in careers in aviation and aerospace.

In 1984, the Hubert L. (Hooks) Jones Chapter in Denver and Colorado Springs recommended offering a statue of a black aviator to the U.S. Air Force Academy. "The U.S. Air Force gave the Tuskegee Airmen Inc. the privilege of constructing the eight-foot high bronze statue for placement on the grounds of the academy," said Newsum, who is the president of the chapter.

"For all of us who were part of the experiment, the statue will stand as a shining example of the strength and courage of the human spirit," Newsum said.

The statue will depict a World War II flyer gazing upward into the sky. Sculptor Clarence L. Shivers is one of the Tuskegee Airmen, class of 1944. The statue, including placement at the Air Force Academy, will cost an estimated \$250,000, and dedication is set for late 1987 or early 1988. Small 18-inch replicas of the statue are being sold for \$1,000 each to raise money for the main piece of artwork, with the remaining funds to come from supporting organizations and individuals.

"Far from being 'just a statue,' this artwork will reflect the sacrifices, hopes and fears, traumas and ultimate emergence of pilots, navigators, bombardiers, ground crewmen, and all support people who persevered through the experiment into aviation and aerospace ranks," Newsum said. ■

Company buys tickets to benefit Symphony

Marvin Hamlisch and the Denver Symphony Orchestra (DSO) will perform a benefit concert for the orchestra on April 3 entitled "Music from the Heart of the City." Martin Marietta has purchased a block of tickets to the concert at the McNichols Sports Arena.

Metropolitan State College is presenting the concert as a fund-raising event for the orchestra. The concert is billed as the first outdoor concert of the season, and McNichols will be decorated with trees, shrubs, park benches and street lamps, and will resemble a "cabaret in the park."

Hamlisch is an acclaimed composer, pianist and entertainer. Among his credits are musical scores for "A Chorus Line," "The Sting," "The Way We Were," "Ordinary People," and "The Prisoner of Second Avenue." Philippe Entremont, principal conductor of the DSO, will give a special guest appearance. Hamlisch will premiere a special song he wrote as a 21st birthday present for Metro State College. Hamlisch will perform the school song with the school's choral show group.

Martin Marietta tickets have been distributed to each member of the executive staff on a proportional basis. Those employees who would like to attend the concert should inform their department administrators. Requests will be filled by administrators in the order they are received until the allotment is exhausted. ■



Hamlisch

PSP values

Unit values for the performance sharing plan (PSP) for salaried employees in January (December values in parentheses) were:

Fund A (indexed equity)
4.3543098817 (3.8429598865)

Fund B (fixed income)
2.5918410344 (2.5690687286)

Fund C (company stock)
4.6081585535 (4.0245445571)

Martin Marietta stock closed at \$44.50 on Jan. 30, 1987.

Employee services/recreation

Amateur Radio—The Waterton Amateur Radio Society will meet at 5 p.m. Tuesday, April 7, in the Hamshack, west side of the recreation area.

Riding—The Ridge Riders Saddle Club will meet at 7 p.m. Tuesday, April 7, in the club meeting room at the recreation area.

Chess—The Chess Club will meet at 6:30 p.m. Wednesday, April 8, at DSC I, second-floor snack room.

Hunting—The Skyline Hunting and Fishing Club will meet at 5 p.m. Monday, April 13, at the club meeting room in the recreation area.

Archery—The Red Rock Bowmen Club will meet at 4:45 p.m. Tuesday, April 14, at the clubhouse in the recreation area.

LSC Toastmasters—The group meets at 4:30 p.m. Wednesdays in Room 103 at LSC. All interested employees are welcome. Contact Henry Evans, Ext. 7-0575.

Corporate Games Update—Women and men are needed to participate in track events at the Denver Corporate Games on Friday night, June 5. Track events include 100- and 200-meter dashes; 400-, 800- and 1,600-meter coed relays; 1,500-meter run; 1,500-meter masters (35 years and older) and

the long jump. Interested employees are urged to call Todd Myers, Ext. 7-4101, or Marlene Gunther, Ext. 1-6202, as soon as possible.

Softball Umpires—Umpires are needed for the preseason tournament, April 24-26, and regular season play that begins May 4. Employees interested in training to become umpires should contact the recreation office, Ext. 7-6605 or 7-6750, before April 10.

4th Annual Preseason Softball Tournament—The double elimination tournament for coed, open and competitive divisions will take place April 24-26. Team members must be Martin Marietta/Air Force employees or spouses and dependents of employees. The entry fee will be \$90 per team, payable at registration. Registration and roster deadline is Friday, April 10, in the recreation office. Preseason tournament rosters are available in the recreation racks.

Softball—Softball rosters for regular season play will be in the recreation racks the first week of April. The softball organizational meeting for team captains will be at 5 p.m. Monday, April 13, in the SSB cafeteria. The fee for regular season play is \$5 per person. Rosters must be submitted by April 20,

with a minimum of 10 persons paid.

Singles Club—More than 100 employees attended the organizational meeting of the Singles Club, March 12, at the Holiday Inn. Committees have been formed to plan programs and social events that will be publicized in the *Martin Marietta News*.

Golf—Golf league reservations are available at Foothills Golf Course, 4:45 p.m., Tuesday, from April 28-Aug. 25 for up to 24 members. Interested golf league chairmen can contact Jim Cordova, Ext. 7-5387.

Hunter Education—The Skyline Hunting and Fishing Club will have hunter education classes in April, May, June and July. The April and May class dates are: April 14-18, and 20; May 26-30 and June 1. The times are 7-9:30 p.m. (week nights) at DSC I on South Wadsworth, and 8 a.m.-1 p.m. (Saturday) at the Skyline Hunting and Fishing Club Range. The cost is \$7 per person, with a minimum of 10 students needed at the first class to continue the class. Preregistration is not required, but students must attend all six classes. The course is required now for all trappers. Contact Dick Benson, 985-3728 (home), or the recreation office, Ext. 7-6605 or 7-6750, for more information.

THANK YOU FOR THE NICEST MERGER, YET.

When major companies and their employees merge their desire to help, great things can happen.

For instance, Martin Marietta led metro area donors with over \$1,500,000 in contributions to the Mile High United Way. Along with Mountain Bell, The Public Service Company of Colorado, King Soopers, United Airlines and AT&T, and their employees, they contributed over \$4,500,000 to Mile High United Way. A very special thank you.

Of course, we'd like to thank *all* the people who helped us in 1986. With your contributions, we were able to exceed our goal.

And we ask for your support again next year. It will be a very special year for the United Way and Mile High United Way. Because it all began here in Denver in 1887. And we're looking toward our 100th year of helping people.

Thank you for sharing the United Way.



(Editor's note: This thank you from the United Way ran in the Denver Post and Rocky Mountain News on Feb 1.)