MARTIN MARIETTA
news
DENVER AEROSPACE

Number 22/1984

Six for six Peacekeepers

Action teams planned to analyze results

Employee survey facilitators being trained

(Editor's note — This is the first follow-up article on the recent company-wide employee communications survey for salaried personnel. Other follow-up reports will appear in future Martin Marietta News *issues as developments warrant.)*

More than sixty Denver Aerospace employees, representing virtually every organization, have been tapped to undergo facilitator training to analyze and interpret results of the recent employee communications survey.

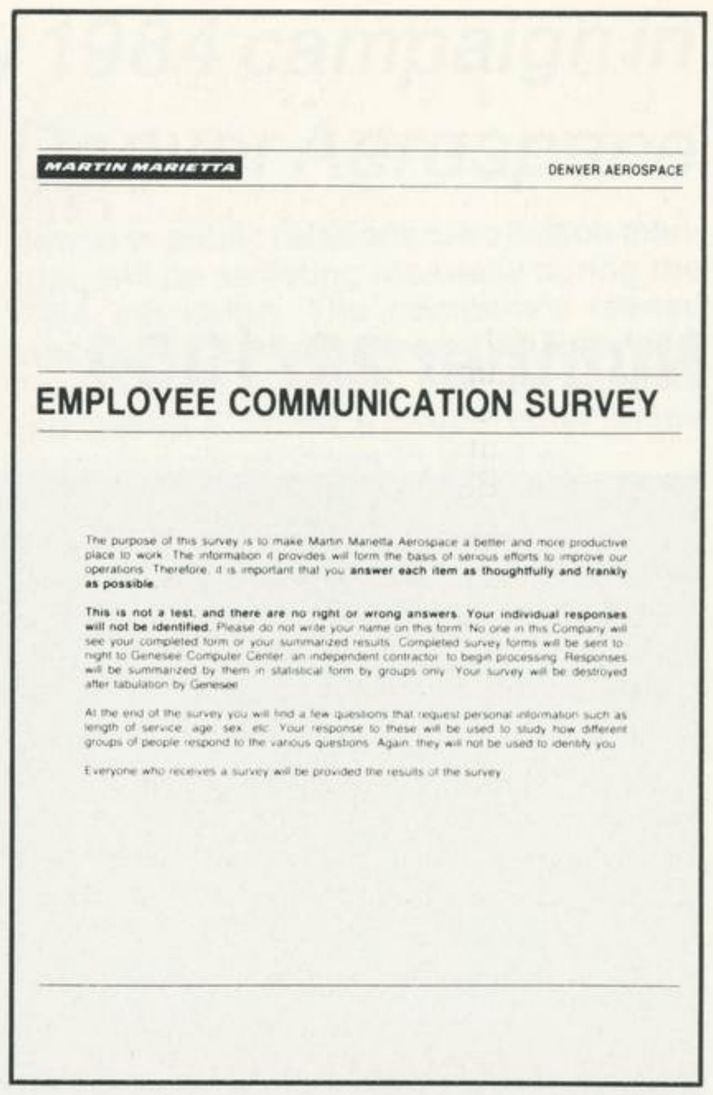
Facilitators will assist managers in leading their groups through further data gathering, understanding nuances of some answers, problem solving, and — most important — action planning around those problems.

Special editions of *Martin Marietta News* printed survey results for each major location — Denver on-site, Vandenberg operations, Michoud and Canaveral operations. Vice presidents and directors now have received reports comparing their organizations' responses with Denver on-site. Some managers have received reports on their own organizations; others will receive theirs during the next few weeks.

Armed with those results, managers can now discuss them with employees and implement desired changes. As Norman R. Augustine, Denver Aerospace president, said in his September 15 letter to all employees, "piles of questionnaires and stacks of statistics are of little value by themselves. What counts is what we do about what we have learned — there is a great deal we can do."

Each major area has a survey manager, responsible for follow-up survey activity. Survey managers are Nancy Pendelton for home shops, assisted by Steve Cohen, production operations; Floyd Teiffel, technical operations, and Daphne Gillison, business management. Space and launch systems division survey manager is Ron Slovikoski and George McCone heads up the effort for information and communications systems, defense systems, and space systems. Offsite activity is being handled by Dick Freeman, Canaveral; Don Brodie, Vandenberg; and Dave Tanzer, Michoud.

All activity is being orchestrated by a survey implementation team headed by Kenneth P. Timmons. Timmons — until recently vice president at Michoud — has appointed a broad-based team to work with him.



MARTIN MARIETTA DENVER AEROSPACE

EMPLOYEE COMMUNICATION SURVEY

The purpose of this survey is to make Martin Marietta Aerospace a better and more productive place to work. The information it provides will form the basis of serious efforts to improve our operations. Therefore, it is important that you **answer each item as thoughtfully and frankly as possible.**

This is not a test, and there are no right or wrong answers. Your individual responses will not be identified. Please do not write your name on this form. No one in this Company will see your completed form or your summarized results. Completed survey forms will be sent tonight to Genesee Computer Center, an independent contractor, to begin processing. Responses will be summarized by them in statistical form by groups only. Your survey will be destroyed after tabulation by Genesee.

At the end of the survey you will find a few questions that request personal information such as length of service, age, sex, etc. Your response to these will be used to study how different groups of people respond to the various questions. Again, they will not be used to identify you.

Everyone who receives a survey will be provided the results of the survey.

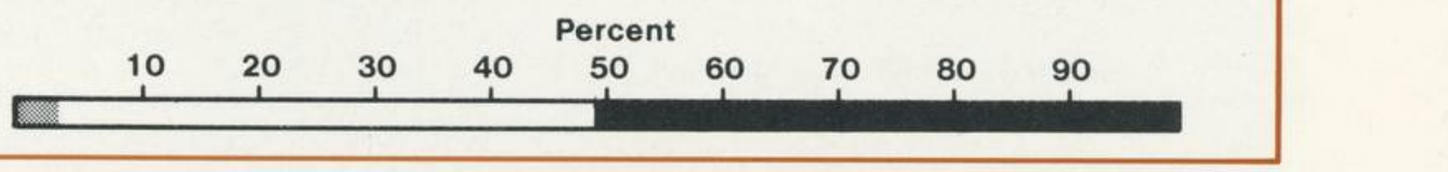
Commenting on the survey Timmons noted "we have a busy three months ahead of us. While some of the things we will want to do will spill over into 1985, it is our intention to wrap up this project before year end."

Survey News bar chart on top 10 concerns at Denver corrected

The bar chart on the top 10 concerns about Denver on-site on the bottom of page five of the special employee communications survey issue of *Martin Marietta News* (#20/1984) contained an error.

Percentages in the fourth item from the top — "Our factory needs to be modernized" — should read: 49 percent (black bar), strongly agree/agree; 47 percent, neutral (white bar); and three percent, strongly disagree/disagree (gray bar) instead of the reverse.

For those who have saved that special survey issue of the *News* the corrected version of that bar chart line is reproduced below. It can be clipped and pasted over the original for an accurate record.



Company, Air Force celebrate 300th Titan launch

About 450 Florida space workers recently celebrated the 300th launch of the Air Force's Titan, the workhorse vehicle that carries most military payloads into space, complete with birthday cake and 204 feet of submarine sandwiches.

Bourne, left and Fields

The Tital III was launched Aug. 28 from Vandenberg Air Force Base, CA, but the celebration was jointly sponsored Sept. 28 by Denver Aerospace's Canaveral Operations and the Air Force at the giant vehicle integration building at Cape Canaveral Air Force Station's launch complex 40.

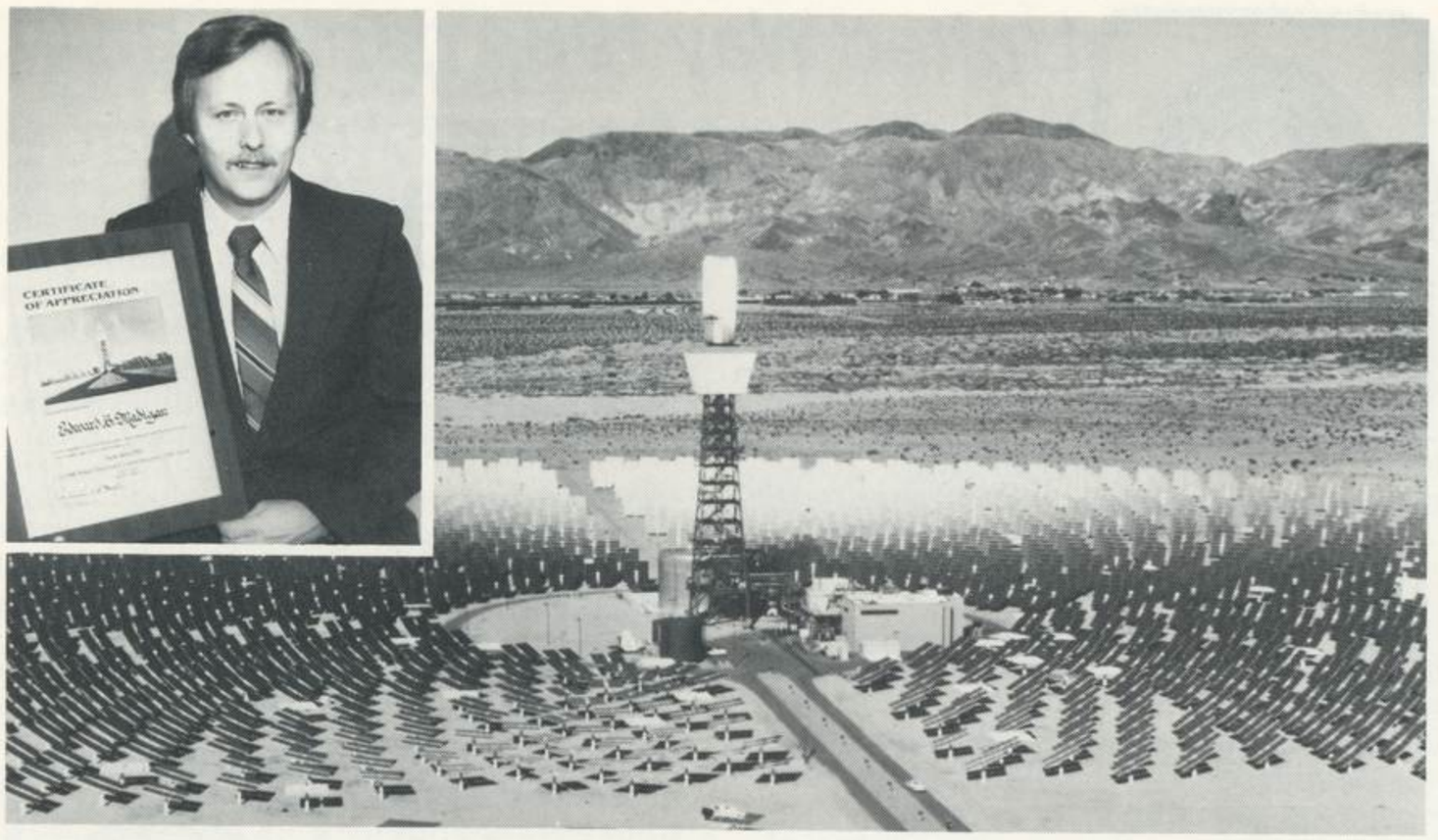
That's because, "... let's face it, it all started here," said Wendell E. Fields, director of Martin Marietta's strategic and launch systems division at the Cape. The very first of the first generation Titans, Titan I, was launched successfully from the Cape almost 26 years ago, Feb. 6, 1959. "We just wanted to pat ourselves on the back, because, frankly, we deserve it."

Lt. Col. Robert Bourne, chief of launch vehicle systems for the Air Force's 6555th Aerospace Test Group, added "this Titan team, which has been so successful, is the standard of how to do business."

Of the 300 Titan launches to date — most classified — 91 were launched from the Cape and 209 from the West Coast site at Vandenberg. That 300th launch marked the 126th success in 129 operational launches for the Titan III series of space boosters, recognized as the country's most powerful expendable launch vehicle.

The latest evolutionary refinement of the Titan III series is the 34D, which has recorded five successful launches since October 1982. Titan 34D is capable of putting heavy satellites into geosynchronous orbit 22,300 miles up in space. A further refinement of that vehicle, a Titan with a Centaur upper stage and two seven-segment solid rocket boosters, has been proposed to the Air Force to meet its needs for assured access to space.

Titan IIIs began service during 1984 and have achieved a 97.7 percent operational launch success record, delivering more than 150 payloads for the Air Force and NASA into Earth Orbits or on missions to the sun and planets. Titan IIIs also were used to launch the Viking spacecraft to Mars during 1975 and the Voyager deep-space probes of 1977 to Jupiter, Saturn and beyond.



Having completed a rigorous two-year test phase, the world's largest solar thermal electric power plant — on the Mojave Desert, near Dagget, CA — now moves into full-time power production. The 10-megawatt Solar One facility began operation during April 1982, using 1818 heliostats (mirrors) focusing the sun's heat on a boiler atop a 300-foot tower, and is capable of providing the electrical needs of a community of approximately 5000 people. The plant is a joint project of the U.S. Department of Energy (DOE), Southern California Edison Company, and the Los Angeles Department of Water and Power. A seven-member industry/government team, including Martin Marietta, recently received certificates of appreciation from California Edison for their efforts on the $141 million showcase cooperative venture. Martin Marietta designed and built the heliostats and the computer controls and operating software. Inset photo at top left shows Edward Madigan, now manager of remote maintenance monitoring systems for the Aerospace Company's Air Traffic Control Division at Washington, DC, holding his certificate. Previously, Madigan was with Denver Aerospace and had been one of the software leads on the DOE project.

Publications awards deadline Jan. 5

The publications awards committee has set Jan. 5 as the entry deadline for evaluation in the Denver Aerospace awards program in that category.

Ten legible copies of each entry must be accompanied by both a completed publications award entry form and a publications clearance form (DEN863870). Forms and detailed information are available from R.W. "Mike" Walker of organization and management development, Engineering bldg module 209, mail stop 1318, ext 3395.

To be eligible for an award, the article must have been published between Jan. 1 and Dec. 31, 1984. Proof of publication rests with the writer or writers and documentary proof — i.e., actual published copy — is required by the awards committee. Signed articles appearing in professional, technical or trade periodicals, journals, books, papers or bound proceedings may be submitted. Publications, however, must be related to the writer's or writers' professional functions in assigned duties.

Entries will be judged on the basis of creativity, technical content, benefit to the company, writing style and quality of publication.

Denver aerospace, defense business outlook for third quarter

Denver Aerospace third quarter figures for 1984 defense and aerospace work show a backlog of $3.361 billion as of September 30, up from almost $2.8 billion last quarter. Last year's third quarter figure was $2.403 billion. New, growth and follow-on orders for this year's first three quarters totaled $1.344 billion, as compared to $1.551 billion for the same accounting period of 1983.

Twenty-five individuals — 18 from the U.S. Air Force, two from Great Britain's Royal Air Force (RAF), and five civilians — recently completed a ten-week maintenance course on the AN/MSR-T4 given by Denver Aerospace's ground electronics production systems (GEPS) for the Air Force. AN/MSR-T4 is a van-mounted automatic electronic warfare signal receiving system to be used at Strategic and Tactical Air Command (SAC and TAC) training ranges. It is designed to evaluate application and operation of airborne electronic countermeasure (ECM) equipment and tactics. Denver Aerospace initiated the program during 1981 under a $30 million contract that has a current value of $44.3 million for seven systems, operational software, and logistics support. Currently two units are undergoing field tests at the SAC range, La Junta, CO and the TAC range at Nellis Air Force Base, NV, respectively. The course at Denver included training in emplacement, performance verification, fault isolation, and systems and unit level maintenance procedures. Shown, left to right, are Daniel L. Nation, course instructor; S/Sgt Dan Fitzgerald, Air Training Command, Keesler Air Force Base, Biloxi, MS; Sgt Keith Rutsey, 1st CEVG La Junta Air Station; and, at the console, Sgt. Barry Earl, RAF Spadeadam, England.

Information & communications company nets $116M Air Force contract

The new Martin Marietta Information & Communications Systems has received a $116-million Air Force contract for an initial delivery of seven communications nodal control element (CNCE) communications systems. Contract options, however, could raise the number of units to 58 over a period of years.

Computerized CNCE systems, mounted in van-type shelters, are designed to provide combat commanders tactically survivable and secure communications centers.

The new operating company is headed by Robert J. Polutchko and was formed last July to focus the Corporation's resources and expertise in various information technologies on a rapidly growing market.

Security duo on National Classification Management Society's board of directors

Two members of Denver Aerospace security have been named to the 950-member National Classification Management Society's 1984-85 board of directors.

The two are Robert C. Moore of Denver and James H. Mathena of Cape Canaveral. Moore, who also serves as the board's treasurer and on its executive committee, added there are plans to establish a local society chapter in the Denver area.

Purpose of the society, headquartered at Washington, DC, is to advance the practice of security classification management and information security as a profession.

Initial SLAT contract worth $6.2M to Orlando Aerospace

Orlando Aerospace has won a significant competition to design, test and produce a supersonic low-altitude target (SLAT) vehicle for Naval Air Systems Command.

The win was announced recently with an initial contract for $6.2 million, which represents an advance acquisition award as the first increment of a $103-million contract for 15 targets, all of which are scheduled to be delivered by November 1987.

Navy awards Data Systems $31.5-million contract to manage computing system

Martin Marietta Data Systems — the information services company of Martin Marietta Corporation — has received a $31.5-million cost-plus-award-fee contract to provide data processing facilities management for the U.S. Navy's versatile computing system (VCS).

Under the three-year contract, the company will design computer hardware and software and install, operate, and maintain computer systems at various naval stations and aboard aircraft carriers.

A new closed-circuit television system — the emergency warning system (EWS) — has been installed at Denver Aerospace's Michoud division, New Orleans to warn personnel of emergencies and alert them to general information. Seventy television monitors throughout the facility give off an audio signal, followed by a voice announcement. The EWS studio has the capabilities of a complete video and audio closed-circuit television station, using a microwave broadcast system. Addition of a satellite receiver dish soon will enable Michoud to pickup NASA feeds, transmitted directly during space shuttle missions, as well as national weather advisories. Jay Heitzman (left), senior video operator, and Lisa MacDowell, audio/visual technician, are shown checking an on-air monitor at the EWS console.

Koshar new Aerospace tech ops vp; Norton takes LANTIRN helm

Martin Marietta Aerospace has announced the promotion of Martin M. Koshar to vice president of technical operations, responsible for the direction of engineering and research efforts through Aerospace operations.

He succeeds Allan M. Norton, who recently was named vice president and general manager of the LANTIRN low-altitude navigation and targeting system program at Orlando Aerospace.

Koshar joined Martin Marietta during 1955, serving in a number of engineering, research and technical management positions in the Corporation's operations at Denver, Baltimore and Orlando.

Before moving to Aerospace headquarters, Norton had been vice president for development at Denver Aerospace's Michoud division in New Orleans.

Copperhead attains 90% success rate

Copperhead — the U.S. Army's laser-guided, 155-millimeter artillery projectile — scored three target hits in three firings during lot-acceptance tests earlier this month at New Mexico's White Sands Missile Range.

It was the third successive test in which the Orlando Aerospace cannon-launched projectile had scored a perfect three-for-three and brought the success rate for all lot-acceptance tests fired this year to 17 hits in 19 firings — a first-round hit rate of almost 90 percent.

Overall success rate of Copperhead in lot-acceptance tests since June 1982 is 84 percent. The Army's expected success rate is 80 percent.

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October 12, 1984

On the cover

Air Force completes sixth Peacekeeper test flight from Vandenberg

The very first day of this month ushered in the second of a four-phase test program with the launch of the sixth Peacekeeper intercontinental ballistic missile (ICBM) from California's Vandenberg Air Force Base (VAFB).

The 30-minute flight of the research and development missile started at 7:34 a.m. PDT (8:34 a.m. MDT), Oct. 1. It covered about 4100 nautical miles to the target area on the Kwajalein missile test range in the Pacific Ocean.

The missile carried six unarmed MK21 re-entry vehicles (RV), the baseline RV for Peacekeeper and marked the second time the MK21 was carried on a test missile (the first was the fifth on June 15) and the first time all six were carried.

Maj. Gen. Aloysius G. Casey, commander of the Ballistic Missile Office (BMO), the Air Force's executive management for the ICBM, described it as "a completely successful launch," after reviewing initial launch data. Another spokesman, with the Air Force Space and Missile Test Organization, added all RVs "were deployed in the proper time sequence and each was tracked to the end of the target."

Denver Aerospace has been assigned a principal role in developing the system, its strategic and launch systems division responsible for multiple developmental tasks under assembly test, and system support (AT&SS): launch system development; and basing studies contracts. The company also will have a major role in the assembly, checkout and support of the Peacekeeper during its deployment.

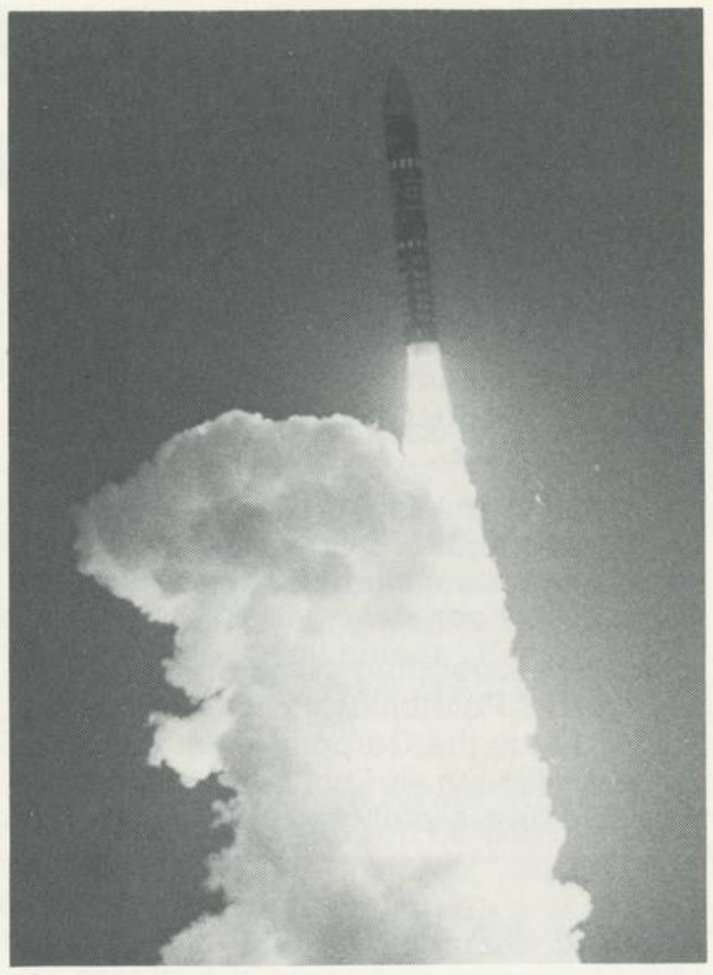
The latest flight, sixth of 20 planned test flights, launched phase two of a four-phase program. The current phase is intended to demonstrate the system in a more stressing environment and will include Peacekeeper launches from modified Minuteman silos as well as full integration of the MK21. The first phase emphasized missile functional performance and included initial validation of the missile guidance system and booster performance.

The sixth test missile was launched from an above-ground canister on a concrete test pad. Current plans call for the next two Peacekeepers to be launched the same way. The final 12 research and development test missiles will be launched from those modified Minuteman test silos at Vandenberg.

The latest flight, "carrying a development instrumentation package, demonstrated its capability to perform an operationally realistic test mission," according to an Air Force press release. The missile also carried a command destruct package which would have ensured the missile could have been destroyed safely had it strayed from its planned flight path.

Peacekeeper will carry 10 independently targetable RVs with a range exceeding 5000 miles. It is significantly advanced over the existing Minuteman missile in range, accuracy and payload capability.

All Peacekeeper flight tests are designed to verify weapon system performance. As testing progresses, objectives for each flight will shift gradually from component functional performance objectives to systems and operational objectives. None of the tests will include an actual warhead. Missile testing allows maximum evaluation of critical performance factors which support the operational Peacekeeper weapon system and its planned initial operational capability for late 1986.



Peacekeeper #6

Ed Slifker (right), manager of Titan production at the Baltimore division, receives a Titan etching award presented to the Baltimore production team by Robert Johns, director of Titan programs at Denver. The Baltimore team surpassed productivity goals established for Titan skirt fabrication and assembly.

Data Systems forms new software, systems integration divisions

Martin Marietta Data Systems has formed two new divisions to strengthen its position in development and marketing of computer software and the company's growing role as an integrator of complete systems for data management.

The information technology division combines four existing units that develop and market software and related services for commercial markets. It incorporates most of the elements of Mathematica, which merged with Data Systems last year, and includes products trademarked RAMIS II, MAS-Manufacturing, MAS-Financials, and ITSoftware.

The systems engineering division reflects the growing demand among large institutional customers for complete systems that integrate all data management functions required to operate large complex operations efficiently. It will concentrate on data processing systems for facility management in government agencies and for health and educational institutions.

Richard H. CVobb, who has been president of the company's Mathematica Products Group at Princeton, NJ, will be vice president and general manager of the information technology division. Robert V. Windley, who has been vice president and general manager of Data Systems' U.S. operations, will be vice president and general manager of the systems integration division. Both division will be headquartered at Greenbelt, MD.

Data Systems, an operating company of Martin Marietta Corporation, employs 4000 persons worldwide and had 1983 sales of almost $280 million. It provides a full range of computing services, applications and systems software, and professional services to industry, government, business, and financial institutions. A third division — Hoskyns Group Ltd, the international division headquartered at London — is unaffected by the new alignment.

Recreation:

(Editor's note — Martin Marietta Denver Aerospace's Recreation Department, exts 6750 and 6605, is located in Engineering Bldg module 124. Flyers on sports and other extracurricular activities; discounted sports, entertainment and travel tickets; and special sales are available from the department's information racks throughout the company.)

BASKETBALL—An organizational meeting for the 1984-85 Martin Marietta Intramural Basketball Association men's and women's winter basketball leagues will be held in the Space Support Building (SSB) cafeteria, beginning at 4:30 p.m., Monday, Oct. 29. There will be a competitive league for those interested in more serious playing challenges, two recreational leagues, and an open women's league. Roster information blanks must be completed and returned by November 12 (Kevin Odle, ext 3598).

BOWLING — Martin Marietta's Mixed Bowling League is looking for keglers to compete Tuesday nights, beginning at 6 p.m. and possibly starting Oct. 23 at Green Mountain Bowling Lanes, 945 South Kipling St. (Diane Lewis, 973-3849, or Carol Dergance, 795-9475)

CHESS — The month's regular second meeting of the Martin Marietta Chess Club will begin at 6:30 p.m., Thursday, Oct. 18 in the second floor Snack-a-teria at Denver Systems Center (DSC) I. Membership is open to all employees and dependents over 16.

PARAPSYCHOLOGY — "Profit is not a Dirty Word" is the topic of a lecture by Chuck Kramer, certified public accountant, to the Parapsychology Club at 5:15 p.m., Thursday, Oct. 18 in room 200 A at Denver Systems Center (DSC). A program synopsis states "an understanding of the role of profits in the American economy will affect the way Americans think, talk, work, vote, purchase, invest and choose their employers. Names of guests and spouses must be submitted to Gloria Kratz, ext 5609, by Oct. 17 for security badging.

PHOTOGRAPHY — The Platte Canyon Photo Club has scheduled a field trip for members and guests in Roxborough Park, beginning at 7:30 a.m., Sunday, Oct. 14 (John Smith, ext 6751, or Tim Sobotka, ext 4432).

RIDING— The Ridgeriders Saddle Club's open O-Mok-See that was snowed out last month has been rescheduled to begin at noon, Sunday, Oct. 21. All employees, their families and guests may enter the five-event horse racing competition, which includes barrel and flagpole contests, in three classes — seniors, juniors and sub-juniors. Ribbons and belt buckles will be awarded to high-point scorers in those three classes (Irene Woodzell, ext 5804, Bruce Torbeck, ext 1685, or Frank Roe, ext 9592).

United Way 1984 campaign in full gear at Denver Aerospace

Support Your Mile High United Way

Coordinators will be conducting group meetings between now and Nov. 9, asking employees to sign pledge cards indicating their contributions to support the work of the more than 88 member agencies of the five-county Mile High United Way.

The 1984 campaign kicked off officially last Monday.

Through the payroll deduction plan, the tax-deductible contributions can be spread over the entire year.

"For the past number of years, our participation has always been excellent," said James W. McAnally, vice president of defense systems and this year's company campaign manager. "Our goals are to increase our participation and to increase our per capita gift to United Way."

Leroy Hollins, recreation and personnel services administrator, and Fitzroy "Buck" Newsum, public relations civic liaison manager, will be assisting McAnally during the 1984 campaign. The company's loaned executives to United Way are Tom Roseland, Peacekeeper software test department; and Gilbert E. Smith, a project chief on the Peacekeeper program in logistics.

Department coordinators include: Floyd Tieffel, Jerry Turco, Geneva Purdy, Horace Clair, Martha Reif, Clare Bena, Roselyn Weimer, Roy W. Hall, Jr., Dick Berry, Donna J. Petersen, Lenny Taylor, Daphne Gillison, Jim Defibaugh, Judy Wheatley, Howard Delchar, Cheryl Howard, Nadine Holder, Al Mann, Lucy Winka, Linda Weaver, Mary Lou Motsinger, George McCone, John Dominguez, Barbara Roepke, Bev Thompson, Joy Archibald, Betty Purkey, Roger Callahan, Barb Hoeft, Steve Cohen, and Robert Weston.

Support Your Mile High United Way

Remember: no claim form, no disability pay

Hourly employees, unable to work through illness or injury, must complete and file a group disability income claim form with the company's employee benefits office in Engineering Bldg module 125 to receive payment for eligible lost time.

The form must be completed by both the individual and the employee's attending physician, and is not to be sent directly to Connecticut Life Insurance Company.

Employee benefits office hours are Monday, Wednesday and Friday from 10:30 a.m. to 12:30 p.m. and 2-3 p.m. The telephone extension is 3009.

Orlando lands Army missile contract

Martin Marietta Orlando Aerospace has been awarded a $98.8-million dollar contract for production of the Army's hellfire laser-guided anti-tank missile.

The 29-month contract covers manufacture of 2095 missiles, 49 trainer rounds, spares, and engineering and test services. It was one of two awarded for continued production of Hellfire by Army Missile Command under a dual-source production program. The other prime contractor is Rockwell International.

Charles E. Carnahan (second from left), vice president of Denver Aerospace production operations, presents a check for $11,000 to Lowell E. Palmquist, president of Swedish Medical Center. The donation is part of Martin Marietta's continuing program of grants and awards to Colorado agencies and community organizations. Also pictured are Dr. Leonard R. Kowalski, director of medical services for the Aerospace company, and Margaret Pearson, assistant administrator for emergency medical services at Swedish.