

August 1, 1986

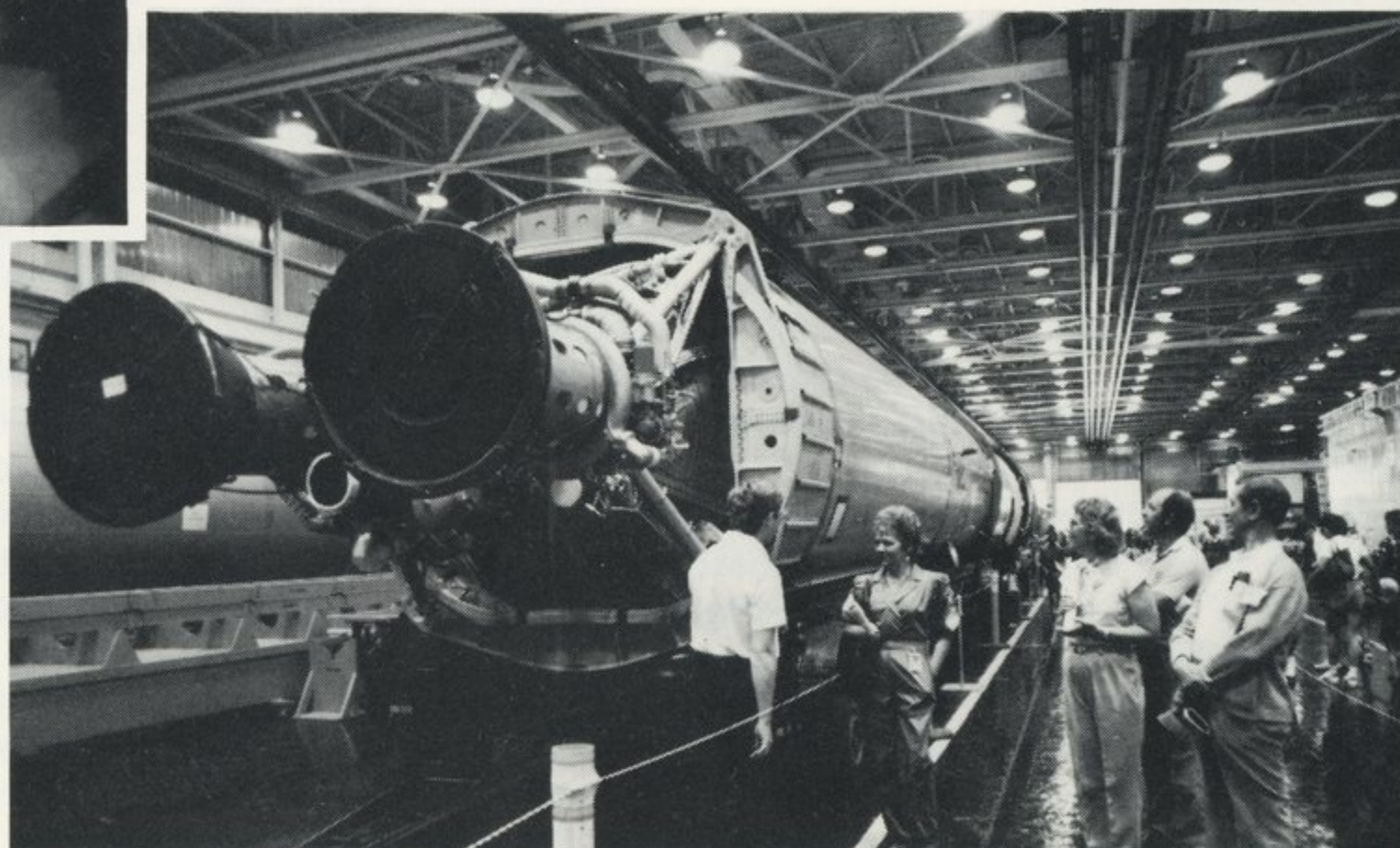
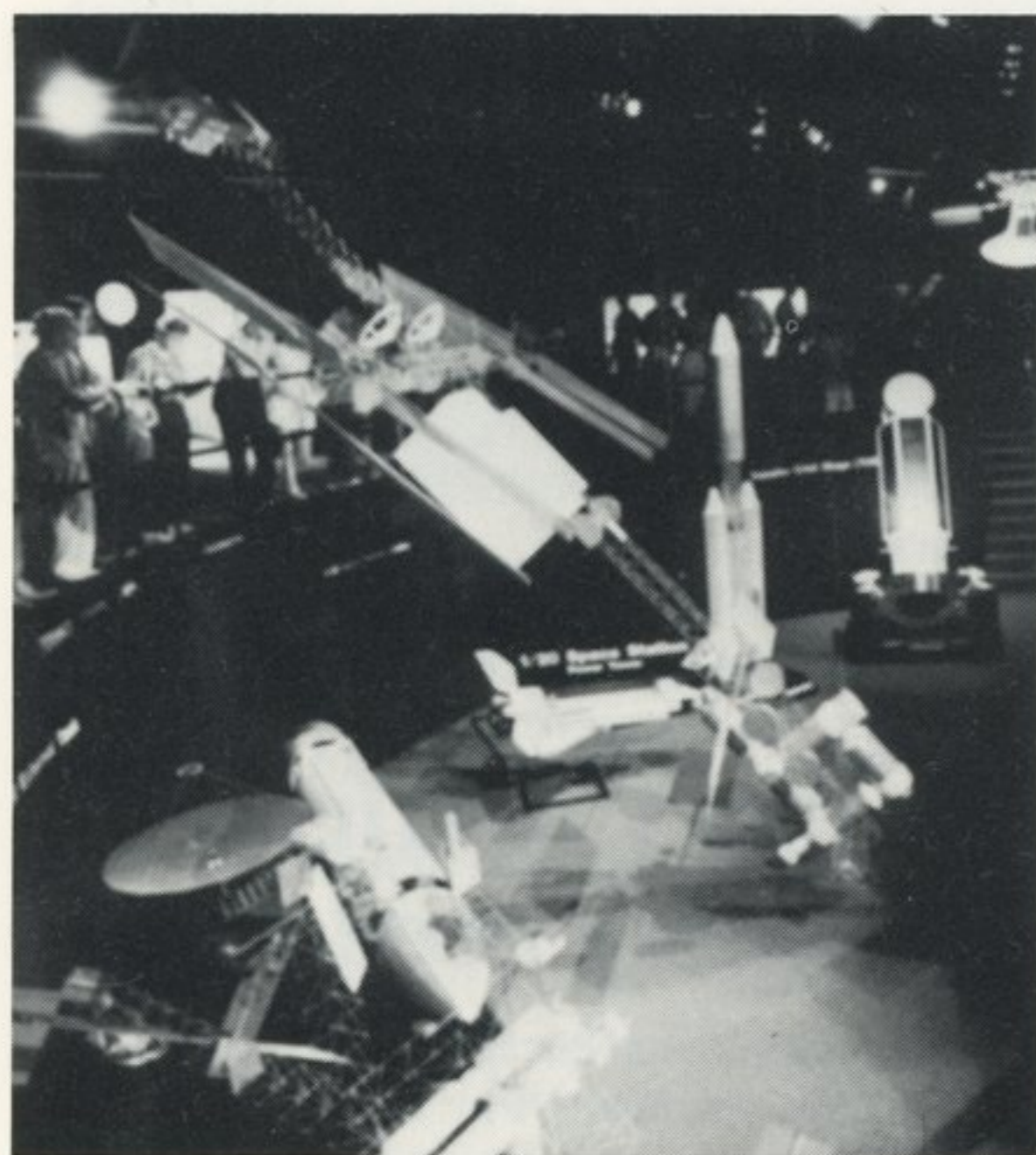
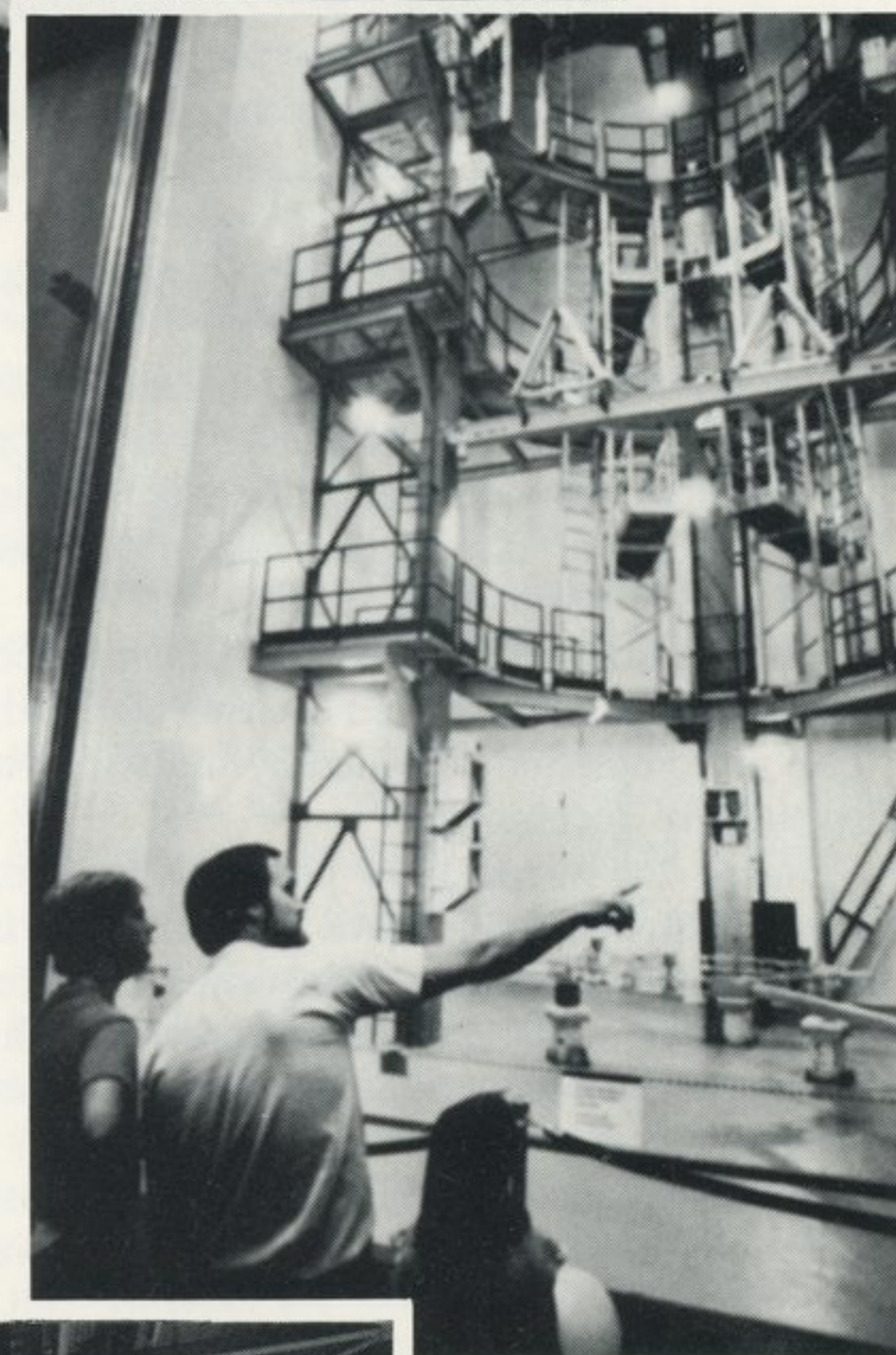
Number 15

Family open house draws 21,000

When Geoffrey Garner headed for work a week ago Monday, his 3-year old son David wanted to go with him.

"After seeing the clowns and balloons and 'spaceships' on Saturday, he thinks I work in a fun place," Garner said. "He wanted to come with me and eat hot dogs and drink soda pop all day with me," he added. Garner works for operations planning in manufacturing.

The open house attracted more than 21,000 employees, families and retirees on July 19. In addition to displays of current and past achievements by Martin Marietta employees, the event featured Astronaut Bruce McCandless, entertainment groups, food, a bronze medallion and a new book, "30 Years of Progress," which chronicles the past 30 years of Denver Aerospace success. ■





Company contribution benefits gifted students

Todd Mackintosh, second from the right, assistant director of Mackintosh Academy, accepts a check for \$5,000 presented by James W. McAnally, vice president of Defense Systems. Looking on are a host of happy students, and Harold E. Cook, a Martin Marietta employee and a volunteer for the academy, and Eva Mackintosh, president and founder of the academy. Mackintosh Academy is a tax-exempt independent school for gifted children. The contribution will go toward science text books and materials, science labs, computers and software.

Officers finish education program

U. S. Air Force Capt. Randal Canales, Miguel Caraballo and Ronald K. Unruh completed their 10-month Education with Industry tour at Denver Aerospace with a luncheon held in their honor June 20.

At that time Peter B. Teets, Denver Aerospace president, presented each with a certificate of completion provided by the Air Force Institute of Technology.

During the work-study phase of the program, designed to improve their managerial and technical competence, the officers worked in one or more areas of the company. This phase provided experience inline with their Air Force career objectives.

Canales' objectives concentrated in the cost-analysis option of the program, and he was

able to complete these objectives by working in the space station cost management department.

Caraballo, who chose the manufacturing management option of the program, accomplished her objectives by working assignments in the manufacturing engineering organization on the Peacekeeper contract, in the industrial engineering organization and then completed her assignment in the production operations organization.

Unruh accomplished his program option in contract management by concentrating his efforts in the technical operations contract administration division. He was able to broaden his understanding of government and commercial contracting. ■

Office automation systems to hold show

Data Systems' office automation department, with a local market development group, will present the Office Automation Systems (OAS) Information Show for Martin Marietta employees.

The show is scheduled Aug. 15-29 and will be in the following locations:

- Waterton—Engineering and Space Support Building (SSB);
- Inverness—Building 104;
- Littleton Systems Center (LSC); and
- Terrace Towers II.

The group plans to demonstrate the following products, microcomputers and other hardware such as modems and portable terminals:

- Professional office systems;
- Dataconferencing;
- MailIT; and
- VM/CMS applications.

Data Systems representatives will demonstrate these products for about 30 minutes each.

The displayed hardware will also be available at adjacent facilities for viewing and hands-on testing. Technical personnel will answer questions and show applications.

Specific show dates and locations will be posted on bulletin boards. For more information, contact Eva Macaj, OAS Information Show coordinator, 790-3299. ■

AF awards \$3M basing studies

Martin Marietta has won a two-part contract to study advanced basing concepts for the Peacekeeper.

The Air Force Ballistic Missile Office awarded \$1.5 million to extend the shallow tunnel basing study for Peacekeeper for 6 months. Another \$1.5 million will fund a new study called the carry hard basing concept.

The first involves concealing the Peacekeeper on a mobile carrier in a series of tunnels. The second study will consider carrying a hardened capsule containing the Peacekeeper for placement in multiple, austere, vertical shelters.

Dr. Michael Henry is director of advanced basing, and reports to John Murphy, program director, Peacekeeper program. John Johnson is project manager for the shallow tunnel study and Kenneth Payne is project manager for the carry hard study. Dr. Robert Humphreys is project manager for a parallel test and analysis on concealing the Peacekeeper in tunnel modes. ■

Minority group honors company

Denver Aerospace was honored recently for its minority business at a recognition ceremony and dinner. A plaque reading "Few have done as much—No one has done more" was awarded to the company at an Albuquerque, N.M., business seminar on July 17.

The seminar was sponsored by the Southwest Business Network, a minority business development project of the U.S. Department of Commerce and the Albuquerque Hispano Chamber of Commerce. The seminar dealt with various aspects of business life for minority business: doing business with corporate America, contracts and procurement opportunities, and minority business development.

Russ Simpson, chief, materiel operations, participated in the conference and accepted the plaque on behalf of Martin Marietta. ■

Auxiliary firefighter volunteers needed

All employees at Terrace Towers II who belong to the Auxiliary Fire Brigade, or who wish to become members of the brigade, should call Ron McConnell, Ext. 1-1769, or John LePenske, Ext. 1-1234.

"Our move from Greenwood Commons to Terrace Towers II has obviously disrupted the brigade and we must reorganize to become effective," LePenske said.

An organization meeting will be held in mid-August after the volunteers are located.

"We have the task of producing an emergency evacuation plan for Terrace Towers II, and developing training for the fire brigade and those who wish to take CPR classes," LePenske added. ■



Handing building keys to Robert Cryor, second from right, Titan II program manager, is Col. David Richardson, second from the left, commander of the 6595th aerospace test group (ATG). Richard B. Hooley, right, manager of Titan test operations, and William J. Hunt, left, chief of support operations, will be responsible for vehicle processing in the VAB.

Titan II building dedicated at VAFB

The first building for the Titan II Space Launch Vehicle (SLV) program at Vandenberg Air Force Base (VAFB) was turned over to Martin Marietta by the Air Force July 1.

Known as the VAB or Vehicle Assembly Building, the 40,000-square-foot facility, Building 8337, will house up to seven Titan IIs

in their various stages of production.

The VAB is where Titan II SLVs will receive flight components, engines and final assembly before being transported to Space Launch Complex-4 for final checkout and launch.

Arrival of the first Titan II SLV is planned for August 1987. ■

NASA names space station associate administrator

Andrew J. Stofan has been appointed NASA associate administrator for space station. He has been director of NASA's Lewis Research Center in Cleveland, Ohio, since July 1982. Before his Lewis Research Center assignment, Stofan was acting associate administrator for Space Science and Applications at NASA headquarters.

Dr. James C. Fletcher, NASA administrator, announced the appointment and some organizational and management structural actions that are designed to strengthen technical and management capabilities to move into the development phase of the space station program.

Fletcher said the program will use the services of a top-level, non-hardware support contractor. In addition to the systems engineering role, the program office will contain a strong operations function to assure that the program adequately deals with the intensive needs of a permanent facility in space.

A systems integration field office will be established in Houston, Texas, as part of the

space station program office organization. Fletcher said Stofan will define the longer-term role of the Houston office, the role of the systems engineering and analysis function in Washington D.C., and the development schedule and transition of functions in Washington.

Project managers located at Goddard Space Flight Center, Greenbelt, Md.; Johnson Space Center, Houston; Kennedy Space Center, Fla.; Lewis Research Center; and Marshall Space Flight Center (MSFC), Huntsville, Ala., will report to Stofan.

One change is a shift in work package assignments from the Johnson Space Center to Marshall. The Marshall Center was in charge of the common module design and outfitting of modules to serve as a laboratory and a logistics element, among other responsibilities. Fletcher said that MSFC will be in charge of outfitting the habitability module and airlock. This gives MSFC responsibility for all habitable areas of the space station provided by the United States (two modules are being provided by the European Space Agency and Japan). ■

New machine aids precision

A Zeiss coordinate measuring machine was installed recently in the detail inspection area in the factory. The equipment, which includes the Zeiss machine, a computer, a plotter, a disk drive and software, was purchased to provide close tolerance inspection capabilities required by various programs.

The machine has a measurement accuracy of 0.00004 inches. This means measurements with up to 25 probes can be made at any one time to allow inspection of complex geometry. It is capable of programming itself from the first part and then automatically inspecting any number of like parts. It can plot circles, lines, cylinders and surfaces; and scan spheres, circles, cones, cylinders, surfaces and lines.

"The Zeiss machine is crash protected, meaning it will not harm itself, an individual or the hardware it is inspecting," said Jim Baldwin, quality engineer in the detail inspection area. "Once programmed, the Zeiss will run unmanned and it can batch-run hardware to be tested."

Baldwin listed some other benefits not anticipated when the machine was purchased. Its plotting capabilities have been useful in failure analysis and engineering design. It has been a useful tool in helping the machine shop and engineering determine the cause of discrepancies and in tests by plotting contours. It also can scan surfaces by measuring up to 1000 points.

Tim Williams and George Lorentz attended an intensive one-week training session offered by Zeiss in Detroit, Mich., followed by on-the-job training. Baldwin is in charge of training, programming and getting the system on line at Denver Aerospace, and was recently named vice chairman of the Colorado Zeiss-user group. Six persons now operate the equipment on a production basis.

The equipment, which was installed in December, was on line and inspecting production hardware in less than a month. ■

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Pictured, left to right, are Owen B. Smith, manager, power systems; Virgil F. Young, director, electronics; and Leo W. Lech, senior engineer, power systems.

AIAA awards banquet honors Denver Aerospace employees

Several Denver Aerospace employees were honored June 26 when the Rocky Mountain Section of the American Institute of Aeronautics and Astronautics (AIAA) had its annual awards banquet.

A special citation was awarded to Robert N. Hansen, the outgoing chairman of the Rocky Mountain Section, for his "valuable service and outstanding leadership during the past year."

Virgil F. Young, electronics director, was

also honored. He will succeed Hansen as section chairman.

Dr. Benton C. Clark was named the AIAA-Central Area engineer of the year. Clark was recognized for "notable technical achievements during the 1985-86 year."

Leo W. Lech was also honored. Lech, a senior engineer for power systems, was recognized as the AIAA-Central Area young engineer of the year. ■

Corporate news

Corporation reports net earnings

Martin Marietta Corporation reported net earnings for the second quarter of \$55.1 million, or \$1 per share, and \$101.3 million, or \$1.84 per share, for the first six months of the year.

A non-recurring gain last year of \$73 million, or \$1.29 per share, from the sale of the Master Builders division was reflected in 1985 second-quarter net earnings of \$122 million, or \$2.09 per share, and in 1985 first-half net earnings of \$149.8 million, or \$2.63 per share.

Second-quarter 1986 sales were \$1,226,472,000 compared with \$1,108,335,000 last year. Sales for the 1986 first half were \$2,310,670,000, compared with \$2,115,126,000 in the first half of 1985.

Thomas G. Pownall, chairman and chief executive officer, said, "Earnings from operations in the second quarter were up in spite of sharply higher spending in pursuit of new business and continuing marginal losses in the packaged software segment of our Data Systems company. Our second-quarter results reflect earnings gains in both our aerospace and materials businesses and support our belief that full-year results will be improved over last year, excluding the one time 1985 gain on asset sales."

News briefs

Security awareness rebriefings slated

All Denver Aerospace and Denver I&CS employees will receive their annual security awareness rebriefings Aug. 4 to Sept. 12.

The rebriefings will stress the importance the company places on protecting classified and proprietary information.

Because of the number of rebriefings scheduled, employee attendance at the scheduled time and location is essential. Schedules have been distributed throughout Denver Aerospace facilities. Each presentation will be about 30 minutes. A limited number of makeup sessions are scheduled for employees who are unable to attend their designated presentation.

The following areas have been reserved for the briefings: Waterton facility—sixth-floor presentation room, Space Support Building (SSB); Littleton Systems Center (LSC)—cafeteria; SouthPark West (SPW) I & II—presentation room, SPW I; Denver Systems Center (DSC)—Management Information Center, Room 200K; Greenwood Commons Facility (GCF)—presentation room, Building 8100; and Terrace Towers II—ninth-floor Management Information Center.

Security asks for employee assistance in achieving 100-percent participation. For additional information concerning rebriefings, call a government security representative or the government security office, Ext. 7-3905. ■

Smoking cessation facilitators needed

The employee services office is seeking former smokers interested in leading the American Cancer Society's "Fresh Start Program." The stop-smoking classes consist of four 90-minute sessions over a 2-week period.

Classes will be established based on employee interest. Class coordinators must not have smoked for 6 months. Four-to-eight hours of training are provided. Facilitators will be paid an hourly rate. Interested individuals can contact Lori Sharp, employee services coordinator, Ext. 7-6605 or 7-6750, by Aug. 15.

Corrections

Issue 13 of the *Martin Marietta News* incorrectly reported Mary Jo Osborne as Mary Jo Malinzak in the golf section of the Denver Corporate Games. The names of the Denver Management Association board of directors in Issue 14 should include Barbara Cash rather than Barbara Dash, who heads the Career Women's Association.

I&CS wins Phase II contract for SDI National Test Bed

Martin Marietta Information & Communications Systems was awarded a \$2.7 million contract July 28 for the Phase II option of the Strategic Defense Initiative (SDI) National Test Bed (NTB). The program will be centered in Denver under Gerald A. Zionick, program manager.

In its announcement, the SDI Office stated that Martin Marietta Corporation and Rockwell International were selected for these Phase II awards. Members of the I&CS team include: Hughes Aircraft Corp., IBM, Singer-Link, Logicon, Geodynamics, Computer Technology Associates, and the Ralph M. Parsons Company. Phase I competitors included TRW and the Boeing Corp.

The NTB will provide a comprehensive ca-

pability to simulate and evaluate strategic defense architectures. It also will determine the hardware and software needed within the national test facility to assess potential battle management and command, control, communications and intelligence architectures for alternative strategic defenses. This evaluation will support a design and development decision by President Reagan and Congress on whether to proceed to full-scale engineering design and development in the early 1990s.

The NTB will include a number of geographically distributed evaluation and simulation facilities. They will be electronically linked. This 3-to-6 month study is a follow-on effort to determine the design specifications and to develop initial operational software for the NTB. ■



Thorson



Van Rensselaer

New product areas formed

A NASA Space Systems product area has been formed and Space Systems has been reorganized and renamed Military Space Systems to focus additional attention and resources on current projects and anticipated new business in these two areas.

"Significant recent wins in the Strategic Defense Initiative area, such as the Agile Control Experiment, and upcoming major bids on the Kinetic Energy Weapon and other SDI programs, make this a logical move at this time," said Peter B. Teets, Denver Aerospace president.

Frank L. Van Rensselaer has been named acting director of the new NASA Space Systems group, reporting directly to Teets. Morris H. Thorson will continue to head the renamed Military Space Systems organization.

Van Rensselaer has extensive background in civilian space programs, having held key positions at NASA's Johnson and Marshall Centers, as well as at NASA Headquarters. More recently, he directed technical work on the Transfer Orbit Stage for Orbital Sciences Corporation before joining Denver Aerospace.

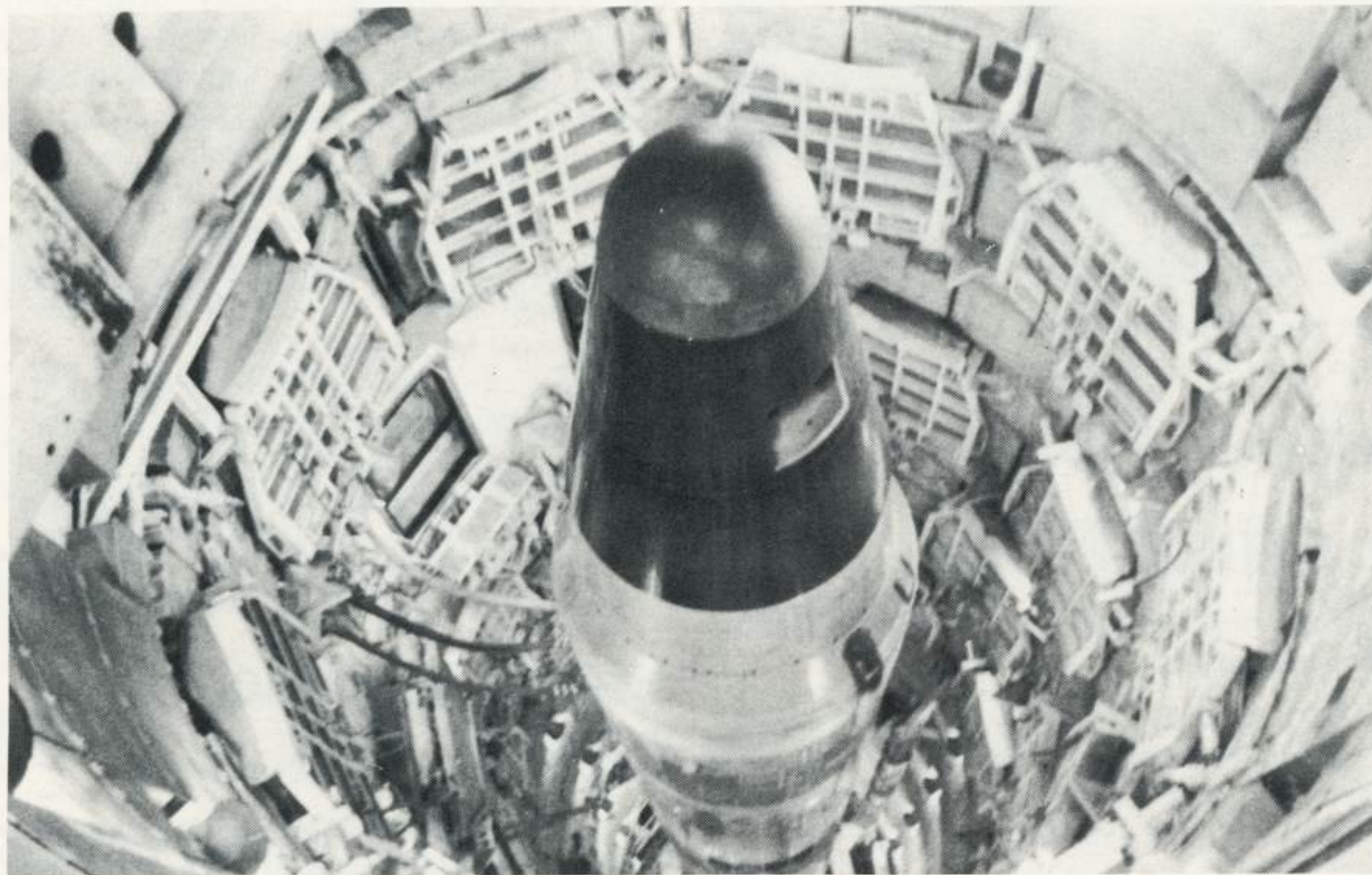
Thorson joined Martin Marietta in 1960 and progressed through various assignments, including chief, propulsion and mechanical engineering, on the Titan II and Titan III programs. He was director of the Faint Object Spectrograph program from 1979 to 1980.

"Denver has a long history of participation in major NASA programs such as Skylab, Viking, other NASA planetary probes, space shuttle, and, currently, space station," Teets said.

Denver Aerospace is also the prime contractor on the Magellan spacecraft that will map Venus' surface, the Tethered Satellite System to be carried aboard the space shuttle, and a number of studies and instrument development programs vital to NASA's future efforts.

"The time is also ripe to regroup a number of related programs that for historical reasons have been in separate product areas," Teets added.

To do this, the STS Integration and Operations project, including the Mission Integration Support Center and the Independent Software Validation and Verification programs, were moved to Military Space Systems from Space Launch Systems, as was the Albuquerque-based Laser Technology group formerly in Technical Operations. The advanced systems work headed by Joel S. Porter in Space Systems was transferred to Defense Systems. All moves were effective July 28. ■



A Titan II missile is on display in a silo at the new museum.

Titan missile museum opens this fall

A new museum—converted from a deactivated Titan II silo and containing an inert Titan II intercontinental ballistic missile (ICBM)—will open this fall in Arizona.

It was officially dedicated May 8 as the Titan Missile Museum, a part of the Pima Air Museum in Tucson, Ariz., that will be the operating agency for the museum.

The idea for the museum originated among a group of individuals who saw deactivation of the Titan silos as an opportunity to preserve weaponry from the 1960s and 1970s for future generations to view. The site is easily accessible from two major tourist highways in the popular Southwest vacation area.

As soon as tentative approval was received in the spring of 1984, the 390th Strategic Missile Wing commander and staff began work, restoring the site and locating film, photographs

and other memorabilia.

The Strategic Air Command (SAC) arranged for delivery of Missile No. 10 from Sheppard Air Force Base in Texas, where it had been used for training throughout the Titan II program. The museum will display the missile and the re-entry vehicle. Long-range plans include arrangements for a permanent service building to accommodate an expected 350 visitors daily. Visitors to the museum will be able to view the deactivated missile and silo through several observation windows. Bert Bridges, a former Martin Marietta employee for 41 years, had a key role in developing the museum.

Martin Marietta, which built the original Titans, is converting deactivated Titan IIs from ICBMs to space launch vehicles for various Department of Defense satellites. ■

Employee services/ recreation

Auto emission testing—Testing at work locations will be Aug. 4-6 at the following sites: Monday, Aug. 4, Waterton facility; Tuesday, Aug. 5, Greenwood Commons and Littleton Systems Center (LSC); and Wednesday, Aug. 6, Denver Systems Center (DSC). Detailed schedules are in all recreation racks. Consult schedules regarding designated key drop points. Car keys must be left at drop points before 8:30 a.m.

Public speaking—The LSC Toastmasters meet at noon every Thursday in Room 103 at LSC.

Riding—The Ridge Riders Saddle Club will meet at 7 p.m. Tuesday, Aug. 5, in the club meeting room at the recreation area.

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

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

Running—The Waterton Shepherders Running Club fall race series begins at 4:45 p.m. Thursday, Aug. 7, in Waterton Canyon. The series consists of eight races, beginning with a 2-mile scratch-start race, where new runners establish handicap levels. Schedules are in recreation bulletin boards and in racks. Contact John Huleatt, Ext. 7-7705, for information.

Archery—The Red Rock Bowmen Club will meet at 4:45 p.m. Tuesday, Aug. 12, in the club meeting room at the recreation area.

Hunting—The Skyline Hunting and Fishing Club will meet at 5:00 p.m. Monday, Aug. 11, at the club meeting room in the recreation area.

Rocky Mountain Alpine Club—The club plans the following trips: Aug. 3—mountain bike day trip. Rent bikes and then cruise offroad near Breckenridge for the day. For information, call Steve Ahmann, Ext. 1-6322. Aug. 10—Roxborough State Park day hike. Bring a sack lunch and water. For information, call Larry Espelage, Ext. 7-6156. Aug. 16-17—Front Range backpack trip. Enjoy a peaceful backpack trip along the Front Range. For information, call John Ramage, Ext. 7-9147.

Bicycling—The Mile High Rollers Velo Club plans the following trips: Aug. 2—Chatfield ride. Meet at Waterton Canyon. The round trip is approximately 25 miles. Aug. 6—Pizza ride and meeting. Gather at 5 p.m. at the entrance to Chatfield State Park. Aug. 9—Deer Creek Canyon ride. Meet at the main entrance to Chatfield State Park. The round trip is approximately 25 miles (moderate to difficult). Aug. 16—Club picnic at Ken-Caryl Ranch. Meet at the Ranch House for a short ride, food and fun starting at 10 a.m. If you have ideas or are willing to help, call Jim Pulliam, Ext. 7-0790 or Ext. 7-0735.

Special events—Discounts for Denver Zephyrs games for enclosed press-level (regular price \$6) and field-level box seats (regular price \$5) are available. The \$1 discount on these seats can be obtained by mail order or by presenting a Zephyr discount flyer on game day at the north ticket office. Discount flyers are available in recreation racks or at the recreation office.

Tickets are available for the Denver Broncos vs. New Orleans Saints game. This game is the only one open to non-season ticket holders, and is set for 7 p.m. Aug. 9 at Mile High Stadium. Top-price tickets for the best seats are \$22 each and are available from the recreation office, Engineering Building, Room 124G, through Aug. 1 (today), or until the supply of 300 tickets is gone.

Health Awareness Week set for Aug.

Concerned about your health? Health Awareness Week will be Aug. 11-15, and is sponsored by the employee services and recreation department.

The week will include high blood pressure testing, diabetes screening, skin cancer screening, taking-control seminars on nutrition and lifestyles, stop-smoking seminars, and seminars on wellness in the professional style.

The programs will be at the following locations: Monday, Aug. 11, at Denver Systems Center (DSC); Tuesday, Aug. 12, at the Space Support Building (SSB), Waterton facility; Wednesday, Aug. 13, at the Engineering Building, Waterton; Thursday, Aug. 14, at Greenwood Commons/Terrace Towers; and Friday, Aug. 15, at LSC/South Lincoln/SouthPark. The programs are free to Martin Marietta employees.

Blood pressure testing will be done by the American Red Cross. The testing takes approximately 6 minutes and is painless.

Diabetes screening will be done by the American Diabetes Association. While the screening detects an increased level of sugar in blood, it is not a complete diagnosis. The screening takes approximately 2 minutes.

Skin cancer screening will be done by University of Colorado doctors, who are volunteering for the American Cancer Society. Private areas for the doctors and employees will be available during the screening. An appointment is required for this screening; call the employee services and recreation office to schedule a 10-minute appointment.

Taking-control seminars will be led by an experienced volunteer of the American Cancer Society. The seminars will discuss the relationship between nutrition and cancer and preventive measures. The seminar will be approximately 30 minutes.

The smoking cessation seminar will be led by an experienced volunteer of the American Lung Association. The seminar will discuss the effects of smoking and suggest ways to stop smoking.

Wellness in the professional style seminars will be led by Dr. Mark Gleser of Health Mark Centers, Inc. Dr. Gleser will discuss the effects of high blood pressure, stress, high-fat diets and cancer on one's life.

Displays and literature from the American Cancer Society, American Lung Association, Arthritis Foundation, Center of Hearing, Speech and Language, and the Colorado Otolaryngologic Center will be available.

Schedules giving exact times and locations will be available in the recreation racks after Aug. 4. ■

New lab to answer computer questions

If you have a special problem with your microcomputer, help is on the way.

A consulting microcomputer laboratory begins Aug. 1 and will be held twice a month by Data Systems' training and education department.

An instructor will be available the second and fourth Thursday of every month in the

General Purpose Laboratory (GPL) to answer employees' questions concerning PC DOS command language, Writit, Multimate, LOTUS 1-2-3, KeepIT, CalcIT, dBASE III and R:BASE 5000. Employees may call the laboratory (Ext. 7-5104) to ask questions, or to reserve a seat in the laboratory.

Laboratory hours will be from 8 a.m. to 4 p.m. in Room 163-I of GPL. ■

