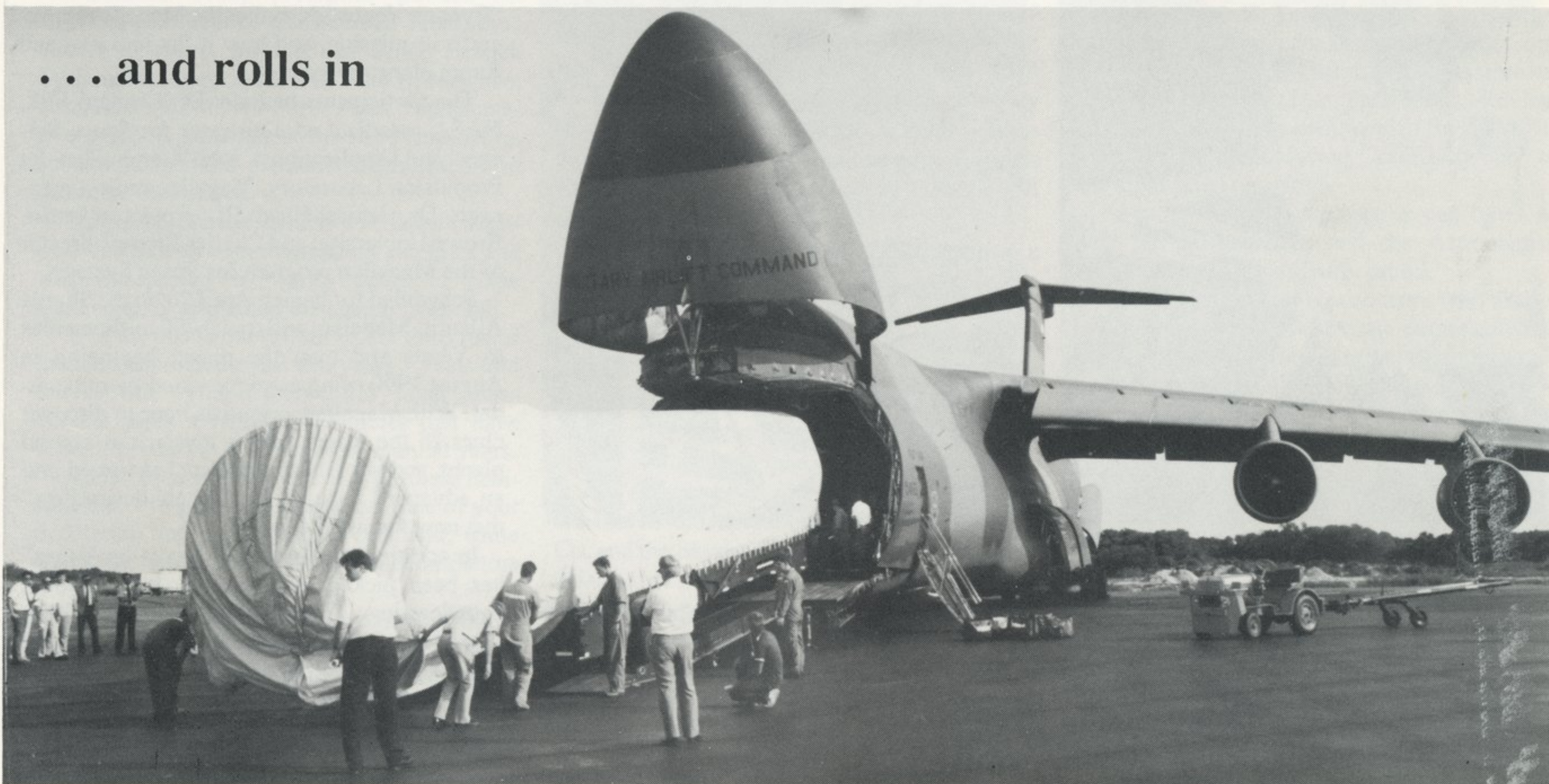


April 21, 1989 Number 9

Commercial Titan rolls out . . .



. . . and rolls in



Employees say Magellan "... more than a job"

"Magellan is more than a job; it's a cause."

Frank McKinney should know. He was one of more than 100 Space Systems employees who packed up and moved to Florida last October as part of the Magellan spacecraft team. Built by Space Systems for NASA's Jet Propulsion Laboratory, Magellan is now on board Space Shuttle Atlantis awaiting launch April 28, ready to begin a 15-month journey to Venus to map the planet.

The employees in Florida are part of a combined team of Space Systems people, located also in Denver and at the Jet Propulsion Laboratory in Los Angeles, who will support launch activities.

The road to the launch has been a long one. Magellan spent the better part of a decade being designed and assembled. The program was canceled once, changed twice, and delayed due to the Space Shuttle Challenger tragedy.

When the spacecraft was finally rolled out of Denver last fall, the Magellan team literally transplanted itself to NASA's Kennedy Space Center on Florida's east coast. Magellan arrived on the dock of NASA's planetary check-out facility Oct. 7, and the Magellan team went right to work.

Already pressed by severe schedule constraints after the Challenger accident, the Magellan team had little breathing room to prepare for launch. In addition to long hours of work, the team also had to contend with problems finding housing and getting settled.

But some enjoyed the move. McKinney, whose children are grown, brought his wife and

found some time to enjoy the balmy weather. "It's been like a second honeymoon," he said. For Chris Miller, an engineer, the visit gave him time to explore a part of the country he hadn't seen before.

Then on October 17, just as the team was getting familiar with the new facilities, an electrical fire erupted in the spacecraft during the installation of a battery. It was, program director Charlie Brown said, "the low point" for the team.

But within 10 days, the problem was identified and fixed. Additional people were brought in from Denver and the Magellan team began working 24 hours a day, seven days a week, to get back on track. An integrated test with NASA's communications network was successful in November and by January, the team was ahead of schedule. On Feb. 17, the spacecraft was mated to its rocket booster and a month later Magellan arrived on time at the launch pad for installation into Atlantis.

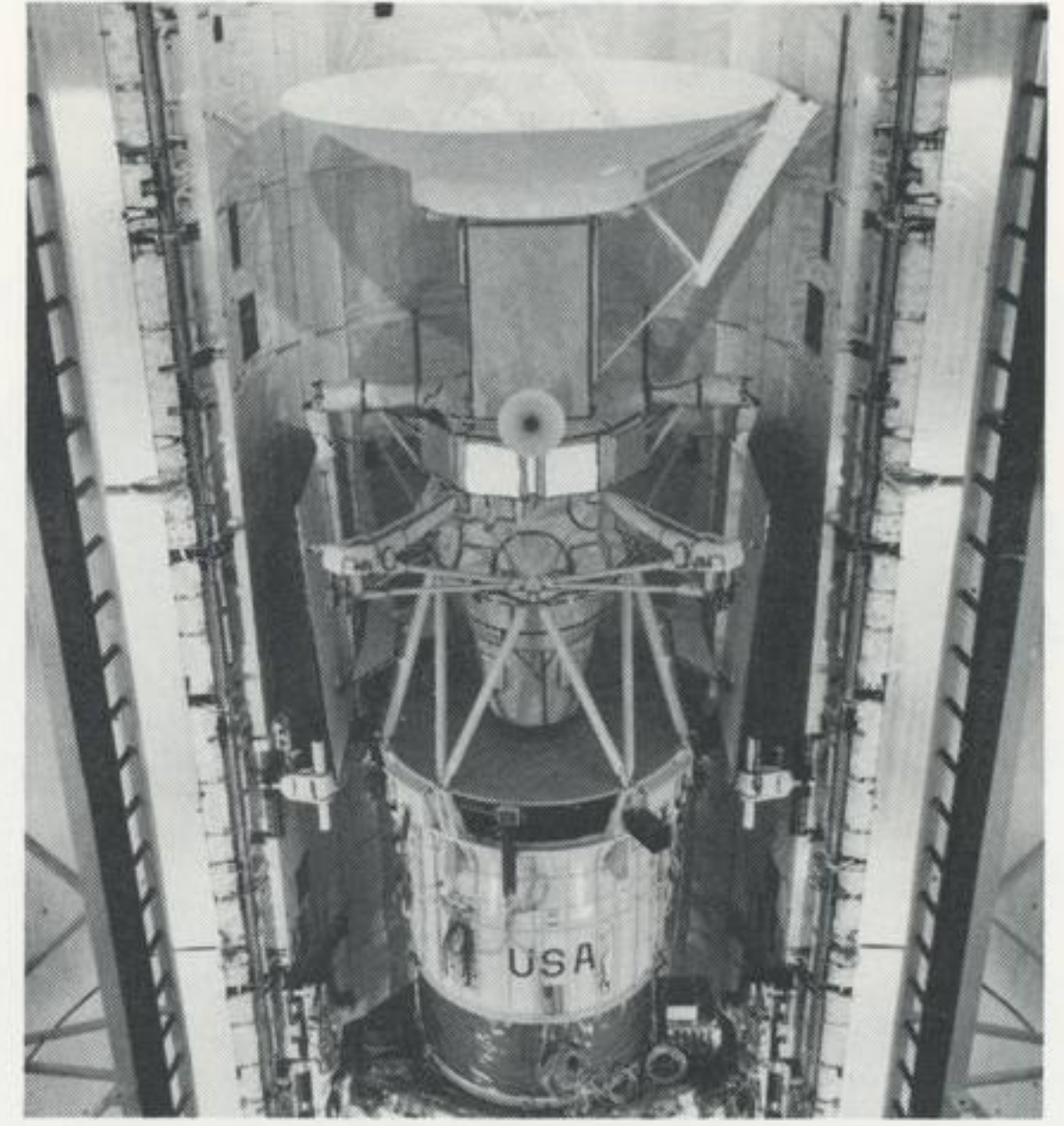
"With all the problems, both at work and at home, I sensed that our employees just decided that they would do whatever it took to make it happen," said Dave Olschansky, integration manager. "And they did."

Contributing to the spirit was the fact that Magellan was the first U.S. planetary spacecraft launched in more than a decade, and that the nation was watching.

"Our folks are insufferably proud," Brown said. "They realize that we're all making a significant contribution to a critical scientific mission for the nation."

Virgie Woods, a secretary, agrees.

"We're all ready to go home, but I know I wouldn't have missed it for the world. It may sound corny, but I think there was a real team effort here, with our people, NASA, and the Jet Propulsion Laboratory," Woods said. ■



Magellan rests in Atlantis.

"Eyes on Venus" to air on Channel 6

A half-hour documentary on the Magellan program, produced by Public Relations, will be aired at 9:30 p.m. Tuesday, April 25, on KRMA-Channel 6.

"Eyes on Venus" is a new program exploring the rebirth of the National Aeronautics and Space Administration's planetary program, focusing on the upcoming Magellan mission to Venus.

Using exciting space footage, animation, and interviews with top scientists and engineers, "Eyes on Venus" describes the Magellan spacecraft, its mission, and how it fits into past and future planetary missions.

The participants include: Dr. Lennard Fisk, NASA associate administrator for Space Science and Applications; John Gerpheidie, Jet Propulsion Laboratory, Magellan project manager; Dr. James Head III, project scientist, Brown University; and Charles Brown, director of the Magellan program for Space Systems.

Scheduled for launch April 28 on the Shuttle Atlantis, Magellan will travel 700 million miles to Venus and map the planet beginning in August 1990 using a unique cloud-piercing radar. With Magellan, scientists hope to discover clues to the origin of the mysterious second planet, and why its atmosphere has turned into an advanced case of the "greenhouse effect" that now threatens Earth.

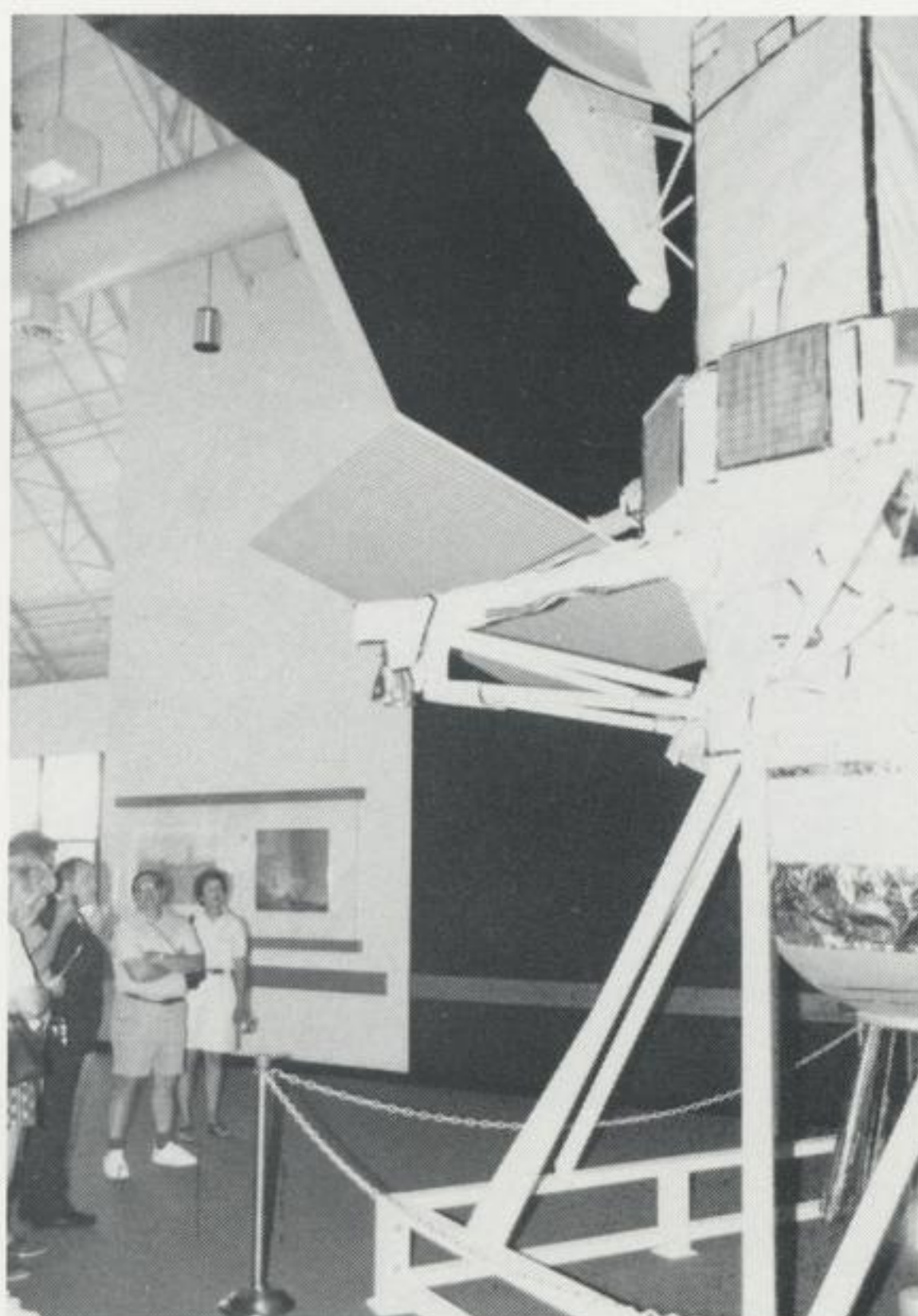
In addition to Channel 6, "Eyes on Venus" has been picked up by a number of Public Broadcasting Systems stations for airing around time of the launch, including stations in New Orleans, Orlando, Baltimore, Miami, Austin, and Huntsville.

The show will be repeated on Channel 6 at 7:30 a.m. April 29. ■



Magellan model

Visitors to NASA visitor's center at Spaceport USA in Florida enjoy seeing a full-scale model of the Magellan spacecraft, built by the Astronautics Group's public relations department. After two weeks' viewing at the visitor's center, the model will be dismantled and taken to the NASA press site, where news media will use the model as a backdrop for stories and interviews before and after the Magellan launch. The 22-foot high model will be shipped to the Paris Air Show in early May to highlight the Martin Marietta exhibit.



Martin Marietta scholarship winners announced

Thirteen sons and daughters of Astronautics Group employees have been selected to receive Martin Marietta Corporation Foundation scholarships. They are among 50 selected throughout the corporation.

Each \$3,000 scholarship awarded for the 1989-90 academic year is renewable for three years, provided the student maintains academic standards required by the university or college.

The chairman of the scholarship selection committee was Joshua R. Wheeler, retired former superintendent of Baltimore County Public Schools. Serving with him were Dr. Donald Maley, professor emeritus, Department of Industrial, Technological, and Occupational Education at the University of Maryland and Howard Staley, a retired executive from the Exxon Corp.

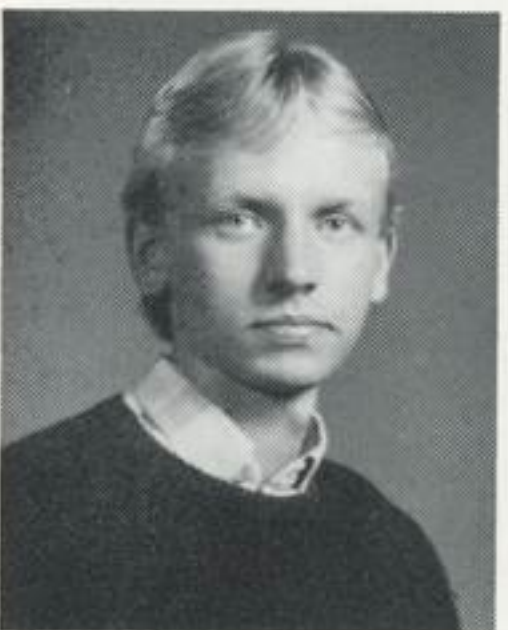
The Foundation Scholarship Committee selects scholarship winners based on secondary school records, Scholastic Aptitude Test (SAT) scores, American College Test (ACT) scores, regional aptitude and achievement tests, letters of application, recommendations from school principals, headmasters and/or guidance counselors and others not associated with the Martin Marietta Corp., and financial need.

Scholarship winners are as follows:



• **Holly Amsbury** will attend the University of Colorado at Boulder upon graduation from Columbine High School. She is the daughter of Mr. and Mrs. Merrill Amsbury. Her father is materiel chief, Space Systems

company. Holly is a member of the Columbine Concert Choir. She enjoys dancing, music in general, and reading.



• **Mark Astley**, stepson of Roger Fife and son of Judith Gerba, will major in computer science in college after graduating from Liberty High School in Colorado Springs. His stepfather is a staff industrial engineer with the Astronautics Group. Mark's extra-curricular activities include varsity hockey and soccer all four years of high school. He also is an avid computer programmer.



• **Mari Breneman** is the daughter of Mr. and Mrs. David Breneman. Her father is a senior contracts engineer with the Space Systems company. Mari will graduate from Oxon Hill High School in Oxon Hill, Md., and

plans to major in aerospace or astronautical engineering in college. Her career objective is to

become an astronaut. Her extra-curricular activities include: Girl Scouts, in which she received the Gold Award, the highest award possible; National Honor Society; and serving as an Honor Guard for the Inaugural Parade in Washington, D.C.



• **John Calhoon**, son of Mr. and Mrs. George Calhoon, will graduate from Arapahoe High School and plans to major in law, government, or medicine in college. His father is a manager in financial accounting

with the Astronautics Group. John has held leadership positions in student council and at Colorado Boy's State, where he was elected governor. He has been president of the student body and was president of his sophomore and junior classes.



• **Kimberly Casey** will graduate from Columbine High School this spring and plans to major in advertising at Pepperdine University in the fall. Her father, Thomas C. Casey, is manager of Small ICBM system testing

for the Strategic Systems company. Kim is a member of the National Honor Society. She also is a cheerleader and a member of Columbine Blue, a vocal group.



• **Angela Chea** daughter of Mr. and Mrs. Raymond Chea, plans to major in English literature at the University of Colorado at Boulder after graduation from Arvada Senior High School. Her outside interests include writing short stories and poetry. She also has tutored in French and geometry. Angela's father is a supervisor of materiel operations for the Astronautics Group.



• **David Conca** is the son of Mr. and Mrs. Vincent Conca. He will graduate from Green Mountain Senior High School and plans to major in genetic botany in college. His father is a senior engineer for technical operations at

the Astronautics Group. David's activities include working with computers to program, entertain, and telecommunicate. He stays fit by working out with weights and participating in recreational sports. He also is interested in current affairs and world events.



• **Jeannae Dergance**, the daughter of Mr. and Mrs. Ralph Dergance, plans to major in pre-medicine after graduating from Heritage High School. Her goal is to become an orthopedic surgeon. Jeannae's activities include

basketball and participating in state and regional all-star teams. Her father is a manager of technical operations for the Space Systems company.



• **Nancy Golubiewski** will graduate from Columbine High School and plans to pursue studies in international relations. Her many extra-curricular activities include National Honor Society, of which she was president for the 1988-89 school year; features editor on the Courier newspaper staff; National Catholic Youth Conference participant; student council representative; outdoor lab counselor; and peer counselor. She is the daughter of Mr. and Mrs. Arthur Golubiewski. He works as a senior staff engineer for Space Systems.



• **Kelly Jackson** will graduate from Bear Creek High School and plans to major in international business at the University of Colorado at Boulder. She is the daughter of Tom and Karen Jackson. Her mother is a clerical analyst in central procurement for the Astronautics Group. Kelly was a leader for Jefferson County sixth graders at the Outdoor Education Laboratory School and participated in the YMCA's Youth in Government Program. She also was involved in varsity athletics and was president of the National Honor Society.



• **Jason Jeffery** is the son of Mr. and Mrs. Craig Jeffery. His mother is an executive secretary with Space Launch Systems. After graduating from John F. Kennedy High School, Jason plans to major in engineering in

college. He was president of his church youth group, lettered in swimming four times, and in soccer for three years. He also is a member of the National Honor Society and is an Eagle Scout.

Continued on next page



Savings bonds campaign continues

Leroy Hollins, manager of employee services and coordinator of the U.S. Savings Bonds campaign for the Astronautics Group, right, meets with Corporate Treasurer Robert W. Powell Jr., chairman of the corporate-wide 1989 campaign, left, and Norman R. Augustine, chairman of the corporation, during a recent savings bonds campaign meeting at corporate headquarters in Bethesda.

Parking modifications to be implemented

Parking modifications at Greenwood Commons, Deer Creek, and Littleton Systems Center will be completed late this month, Gordon Egger, planner for facilities planning and design, said.

At Greenwood Commons, parking will be arranged to conform with the practices at the other Astronautics Group facilities.

Changes at Littleton Systems Center include additional reserved parking for the new east lot.

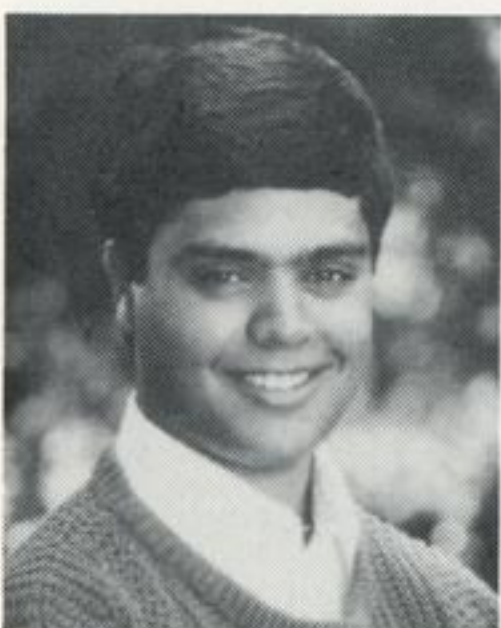
Deer Creek changes include expanded parking for managers and directors on the east roof and new areas for the Air Force Plant Representative's Office (AFPRO) and the Defense

Contracting Audit Agency (DCAA) on the west roof.

The entire plan provides named reserved parking for presidents and vice presidents. Directors, managers, the executive staff, AFPRO, DCAA, couriers, and customers will be provided reserved parking areas. Handicapped spaces will be marked with standard handicapped signs.

Designated parking areas will be marked with signs, and corresponding decals will be available from security for authorized personnel per Standard Procedure 6.2.

Scholarship winners (continued from page 3)



- **Michael Krzyzek** is the son of Mr. and Mrs. Kenneth Krzyzek. His father is a senior engineer in Space Systems. After graduating from Arapahoe High School, he will major in physics, chemistry, or engineering

at the University of Colorado at Boulder. His extra-curricular activities include Boy Scouts, Martin Marietta-sponsored Engineering Explorer Post, Civil Air Patrol, Drama Club, and Key Club.



- **Daniel Silver** intends to pursue an undergraduate degree in political science after graduating from Rocky Mountain Hebrew Academy. His activities include creative writing, playing drums, managing his school's

basketball team, acting as assistant director of the school play, skiing, and camping with his family. He is the son of Dr. and Mrs. Aaron Silver. His father is a program manager in the software center of excellence for the Astronautics Group.

TQM technical committee meets

The technical program committee for the First National Total Quality Management Symposium held a highly successful meeting at the Astronautics Group last week to plan for the symposium.

J. Richard Cook, vice president of Technical Operations and chairman of the technical program committee, hosted the meeting.

The other attendees were the chairmen for the four technical program sections. They were:

- Dr. Richard Sapp, corporate director of product assurance for Lockheed Corp., who is chairing the Support Processes section;

- C. Gerald King, executive vice president of Boeing Advanced Systems, who is chairing the Engineering and Technical Processes section;

- Joel Smith, vice president and general manager for quality at Douglas Aircraft Co., who is chairing the Production and Procurement Processes section; and

- Fred Zimmer, vice president of contracts and pricing for Rockwell International Corp., and Wally Luther, vice president of quality assurance for North American Aviation, who are chairing the Business Processes section.

"It was a terrific meeting," said Cook. "The section chairmen all were enthusiastic about the possibilities offered by the symposium. They left here anxious to get to work."

Meanwhile, Astronautics Group's steering committee for the symposium continues to work action items.

Ted Sundin, who is taking abstracts for the symposium, said a number of people have expressed interest.

"It looks like we'll have a good turnout of papers from Astronautics Group," he said, "but people shouldn't delay getting their abstracts in. The fuse is pretty short. June 15 is right around the corner."

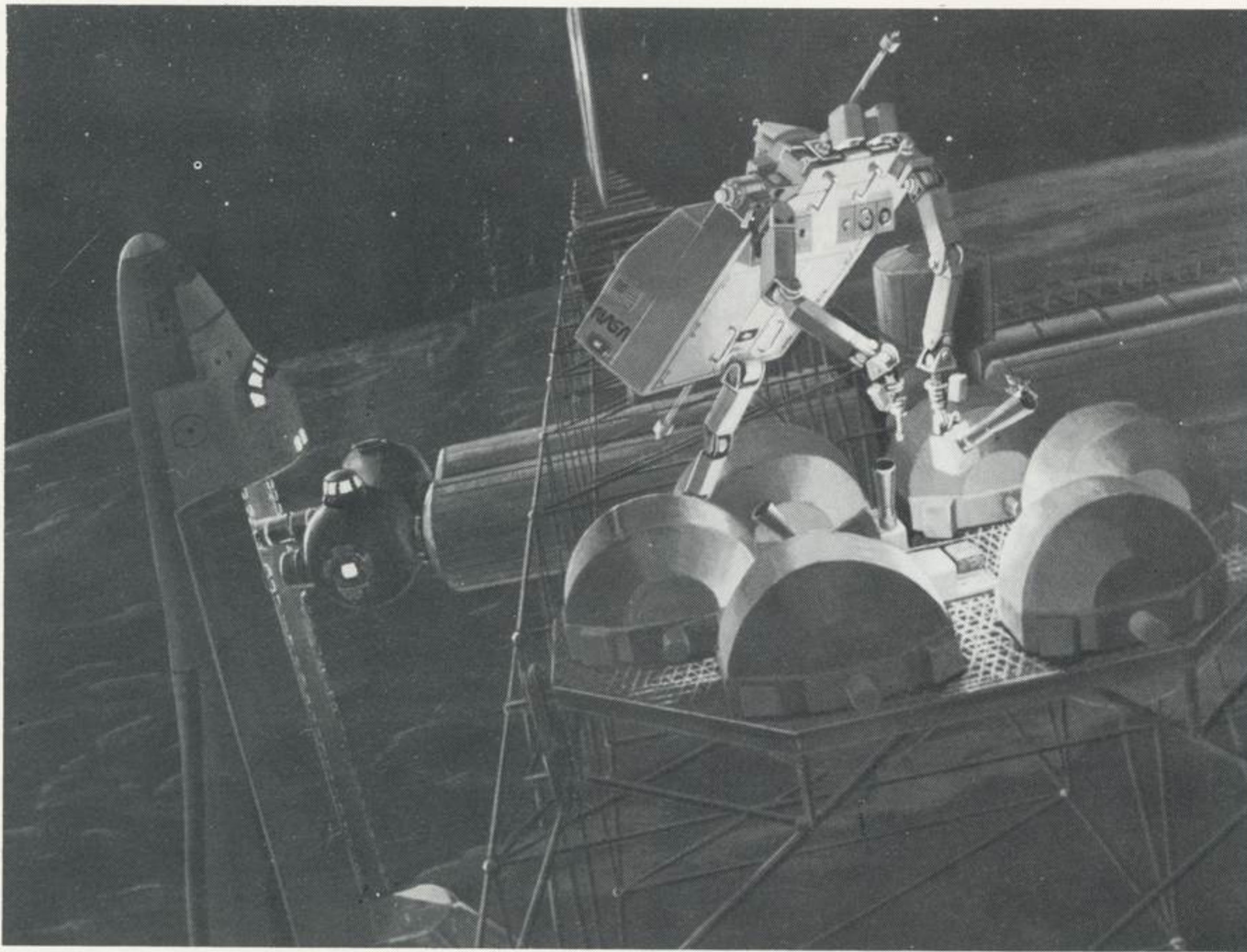
Walkers needed for WalkAmerica

Employees are encouraged to help the March of Dimes by signing up for the WalkAmerica/Teamwalk on Saturday, April 29, said Debbie Smith, Martin Marietta TeamWalk captain.

"Many employees have already signed up to walk in the 20-kilometer event to prevent birth defects," Smith said. "Our team's goals are high and we need the rest of the company to help build the biggest team possible."

Participation in TeamWalk is voluntary, and Smith said Martin Marietta actively supports and encourages employees to join the team.

Additional details, and sponsor forms, are available through Smith at Ext. 7-5364.



FTS wins!

In this artist's concept, NASA's Flight Telerobotic Servicer is repairing a component of the Space Station Freedom in the mid-1990s. Martin Marietta Space Systems has been awarded a contract by NASA's Goddard Space Flight Center to design and build the servicer, a space robot that will help astronauts assemble the Space Station and eventually be used to repair the Station and other satellites.

First Commercial Titan rolls out of factory and rolls into Cape Canaveral, Florida

The first Commercial Titan space launch vehicle rolled out of the factory at Waterton to the enthusiastic applause of employees April 7, and one week later rolled into Cape Canaveral Air Force Station, Fla.

Colorado Gov. Roy Romer; Peter B. Teets, Astronautics Group president; Edward M. Browne, president of Commercial Titan, Inc.; Gareth D. Flora, president of Space Launch Systems company; and, Col. John B. McCabe, commander of the Air Force Plant Representative's Office, joined more than 800 employees, subcontractors and members of the media to celebrate the rollout.

The space booster, which will launch Japanese and British communications satellites and was transported by cargo plane to Cape Canaveral, is scheduled for launch in the fall.

"For us, this is the rollout of the third major launch system in the last two years," Teets told the crowd. "This Commercial Titan space booster joins a family of vehicles that have served this nation well for more than 30 years.

"I feel good because this is a business decision that will prove profitable because of your dedication and hard work," Teets said, while also thanking the customers and subcontractors involved in the project.

"As a state, we need to recognize that the world is changing around us, and we need to change with it," Romer said. "I am pleased that Martin Marietta is a part of Colorado, and I am particularly pleased by the job you will continue to do in the future.

"You represent a challenge to public agencies to get their acts together to provide you with the tools that will give you the ability to change with the changing times," Romer said.

"This rollout is a significant milestone for Martin Marietta and for the U.S. space launch industry," Browne said. "The launch vehicle we're unveiling today represents the culmination of efforts beginning in August 1986, when we became the first major American company to enter the commercial launch vehicle business. This is the first of what we hope will be a steady procession of Commercial Titans to roll off our assembly line.

"I am particularly pleased today, because a program of this magnitude requires teamwork. My hat's off to each one of you," Browne said to employees who have worked on Commercial Titan. "The road has not been easy to get to this point, but I can honestly say, I am proud to be a member of this team and we're now ready to penetrate this marketplace."

The new booster will launch the JCSAT-2 satellite for the Japan Communications Satellite Co. and the Skynet 4A for the United Kingdom Ministry of Defence.

W. E. Fields, director of Canaveral Operations, said the arrival of Commercial Titan shows the commercial program is real, and is healthy and well. "This is really a team affair. I expect the excellent relationship with the Air Force and Cape Canaveral to continue," he said.

Company awarded NASA contract

Space Systems company has won a National Aeronautics and Space Administration (NASA) contract to design and build the Flight Telerobotic Servicer, a space robot that will help assemble the Space Station Freedom in the mid-1990s.

The NASA Goddard Space Flight Center, Greenbelt, Md., awarded Space Systems a nine-year contract worth approximately \$303 million for the servicer.

"We're excited to be a part of the Flight Telerobotic Servicer team," Stephen J. Ducsay, Martin Marietta vice president for the project, said. "The servicer is a key part of NASA's Space Station Freedom. We expect it to advance U.S. robotics technologies not only in space but on Earth."

The contract, expected to be effective on July 1, will consist of the delivery of flight hardware and software for three missions. These consist of two demonstration test flights (DTF) aboard the Space Shuttle and an operational system for Space Station Freedom, which is scheduled to be deployed in the mid-1990s.

In addition, the contract will contain an option for engineering support during the life of the contract.

Space Systems will provide the design, development, test, integration, launch support, training and ground support systems, mission operations, support, and sustaining engineering of all hardware and software required for the FTS program mission. ■

Skipton commends Astronautics Group

A letter recently sent to Astronautics Group President Peter B. Teets by Maj. Gen. Charles P. Skipton, commander of the Air Force Contract Management Division, said the Astronautics Group Contractor Operations Review (COR) team is to be commended for the effort that produced "satisfactory" ratings in each of the eight rated functions.

Skipton said few contractors can boast of such an achievement and the Astronautics Group should be justifiably proud.

He mentioned only one concern with the review. That was the defect rate documented in electronics hardware. Skipton said improvement in product quality will further validate the satisfactory rating the company received. ■

On the cover

Martin Marietta's first Commercial Titan is shown rolling out of the Waterton factory on April 7 (top) and rolling into Cape Canaveral Air Force Station, Fla., on April 14. Commercial Titan is a version of the Titan III that has been used by the Air Force and NASA for more than 20 years.

PSP, SIP open enrollment scheduled for May

During the month of May, employees may enroll in or modify their investments in the Performance Sharing Plan (PSP) for salaried employees and the Savings and Investment Plan (SIP) for hourly employees.

Employees may change the percentage of payroll they want deducted, and also may change their tax mix (before or after tax contributions), during this period. These enrollments and changes become effective the first full pay period in July.

Elections in both plans, such as investment option changes for future contributions or transfer of funds from one account to another, may be made twice a year at any time. These changes become effective at the end of the month in which the request is processed.

Any salaried employee with at least six months of service is eligible to enroll in the PSP, while any hourly employee with at least 12 months of service by July 1, 1989, can enroll in the SIP.

Employees who withdraw or suspend contributions, and have satisfied their waiting period,

are required to fill out an enrollment form to resume contributions.

Forms are available at the following locations:

- Deer Creek facility, Benefits office, third floor, near south lobby
- Electronic Manufacturing, lunchroom entrance
- Greenwood Commons, Personnel, building 6020
- Littleton Systems Center, room 201
- Viewpoint I, Benefits office, suite 206
- Waterton, Orb (building that connects the Administration and Engineering buildings), second floor
- Space Support building, room 607
- SouthPark West, room 106f

Send completed forms to the Employee Benefits office, Deer Creek Facility, Room 3b409, Mail Stop DC1343. Enrollment forms can not be accepted after May 31. ■

“Lunch and Learn” seminars scheduled

The Employee Services and Recreation office is sponsoring the second series of “Lunch and Learn Seminars,” next week. Susan Stevens, director of nutrition for HealthMark, will discuss “Cholesterol—Myths and Facts,” Tuesday, April 25, in the Engineering Building presentation room; and Thursday, April 27, in the auditorium at the Deer Creek Facility. Robert Gleser, M.D., founder and medical director of HealthMark, will discuss “Life, Oh How You’ll Miss It When It’s Gone,” Wednesday, April 26, at the Space Support Building, sixth floor presentation room; and Friday, April 28, at Littleton Systems Center in Room 107. The seminars are from 11-11:45 a.m., and noon-12:45 p.m. Fresh fruit will be provided for dessert.

Employee services/recreation

Fitness Classes Starting—Openings are available for morning sessions and some afternoon classes that begin April 24 and 25 at the Deer Creek fitness center. Fees are \$22 for classes that meet Monday, Wednesday and Friday; and \$15 for Tuesday and Thursday classes. Employees must register at the Employee Services office, Room 3B314 at the Deer Creek Facility, before class times. For information, call Ext. 7-6605 or 7-6750.

Colorado Corporate Games—Martin Marietta team members will compete in the ninth Annual Colorado Corporate Games on June 9-10. The competition includes more than 30 corporations and is a fund-raising event for the Colorado Special Olympics. Female and male employees still are needed in track, swimming, bicycling, 5k run and the 5k racewalk. Employees and non-employees can volunteer to assist the various events. Potential participants and volunteers should immediately call the Employee Services office, Ext. 7-6605, to register.

Blood Pressure and Cholesterol—Free blood pressure checks are available between 11 a.m. and 5 p.m., Monday through Friday, at the Deer Creek Facility fitness center. Employees may schedule an appointment to have their cholesterol level checked for \$2. Appointments also are taken for free fitness consultations with HealthMark exercise physiologists. Contact the fitness center staff, Ext. 7-7576, between 11 a.m. and 5 p.m.

Golf tournament—The Martin Marietta partner (twosome scramble) golf tournament will be Saturday, May 20, at Raccoon Creek golf course. Shotgun start times are at 7 a.m. and 1:30 p.m. The tournament is open only to employees and retirees of the Astronautics Group, I&CS, and Data Sys-

tems. Registration forms and \$45 entry fees are due at the Deer Creek Recreation and Employee Services office by May 5. Early registration is advised, as the tournament usually reaches capacity before deadline. Entry forms are in the recreation racks.

Racquetball Tournament—Employees and employee spouses may participate in a racquetball tournament May 19-21 at Highline Athletic Club. The registration fee is \$10, which must be submitted with the entry form to the Deer Creek Facility Employee Services office by Friday, May 5. Men and women will compete in A, B, C and D divisions. The top male and female employees from the A division will represent Martin Marietta at the Colorado Corporate Games. Entry forms may be picked up from the Employee Services and Recreation racks.

Photography Club—Platte Canyon Photography Club members will meet at 7 p.m. Monday, April 24, at the Public Service building, 10001 W. Hampden Ave. Club member Bob Gonzales will present a workshop on portrait photography, which includes lighting techniques. Members are encouraged to bring their cameras for this hands-on experience. Members interested in participating in the cafeteria project should bring slides and prints for preliminary screening. Prospective members are welcome. For more information, contact Bill Privratsky, Ext. 7-4969.

Mile High L5 Space Society—The group meets at 7 p.m., Monday, May 1, at the Public Service building, 10001 W. Hampden Ave. For information, contact Barry Tuell at Ext. 7-9018.

Saddle Club—Ridgeriders Club members meet at 7 p.m. Tuesday, May 2, in the clubhouse at the recreation area. For more infor-

mation, contact Mary Smith, Ext. 1-8154, or Joe Carroll, Ext. 1-7800.

Aerorider Motorcycle Club—The group meets at 5 p.m. Thursday, May 4, in the clubhouse at the recreation area. For additional information, contact Paul Betthausser at Ext. 1-5574.

Running Club—The race series continues April 27, May 11 and 25, in Waterton Canyon. All races start between 4:45 and 5 p.m. For more information, contact Brad Eckhoff, Ext. 7-7102 or 7-1496.

Chess Club—For the third time in four years the Martin Marietta team won the league championship at the Denver Chess League competition. Team members this year were Sam Quintanar, Scott Lett, Robert Zubrin, Roy Cornwell, Don Jones, and Bruce Markielewski. For club information, contact Markielewski at Ext. 7-4904.

Swimming—Dennis Casey won the 50-yard butterfly for the third year in a row at the Rocky Mountain Masters Regional Championship swim meet on April 2. Casey also has won the 50-meter butterfly event in the Colorado Corporate Games two of the past three years, and will compete in this year’s games. Employees interested in trying out for the Corporate Games swim team should call Terry Heggy, Ext. 7-7498.

MARTIN MARIETTA NEWS
Published by Public Relations
MARTIN MARIETTA
R. Christopher Talley Editor

Call Ext. 7-5364 with information for articles.
Prepared and produced by the publications department.
ASTRONAUTICS GROUP
P.O. BOX 179—Denver, CO
April 21, 1989