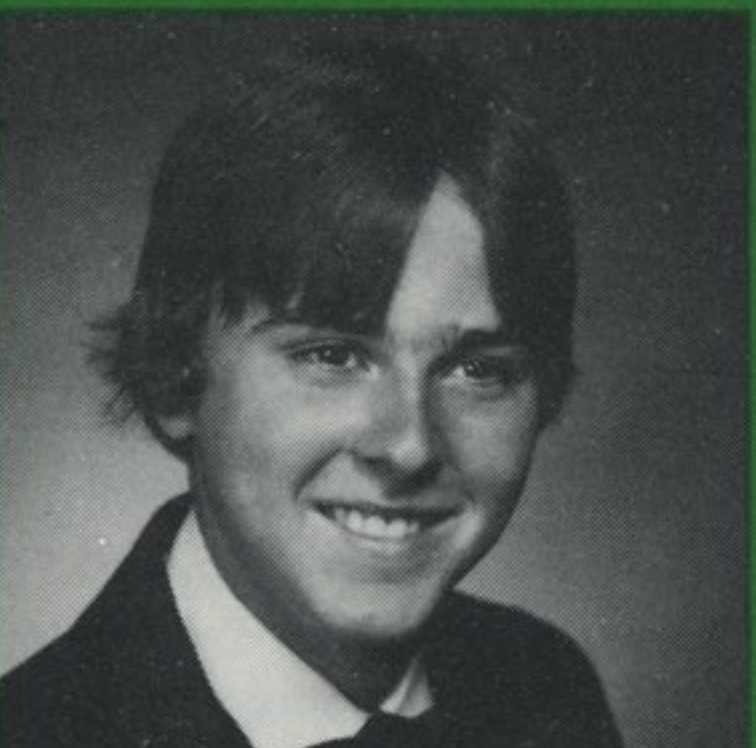
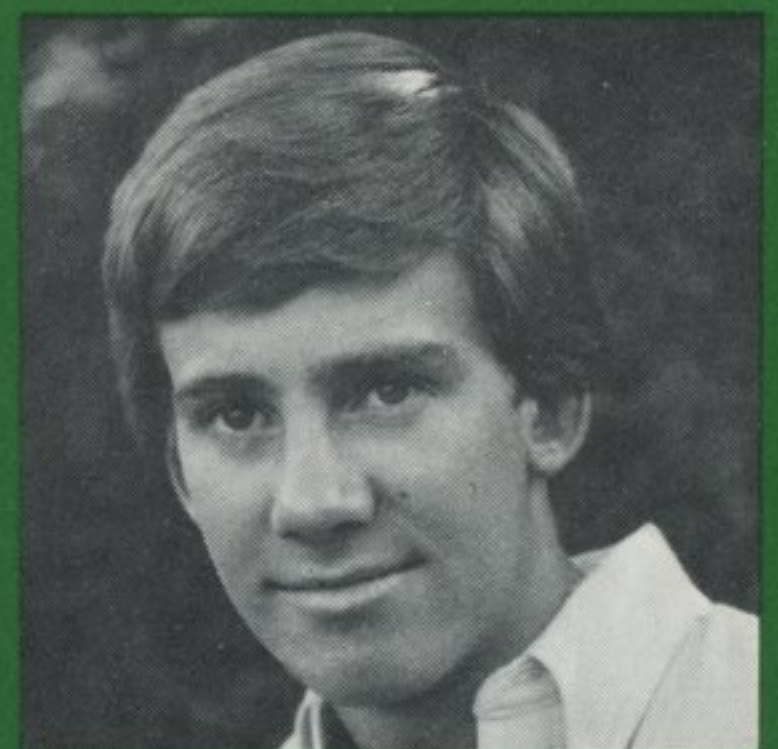
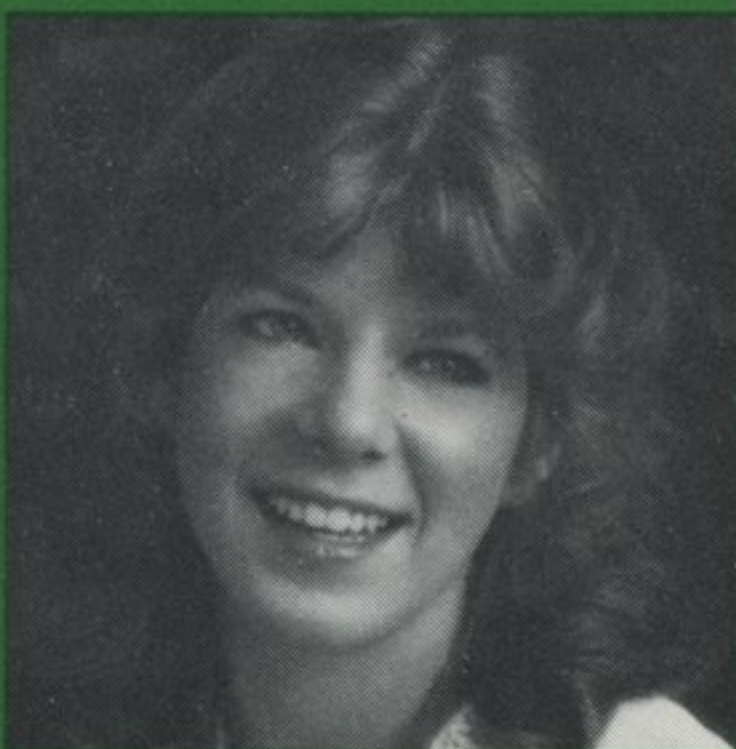
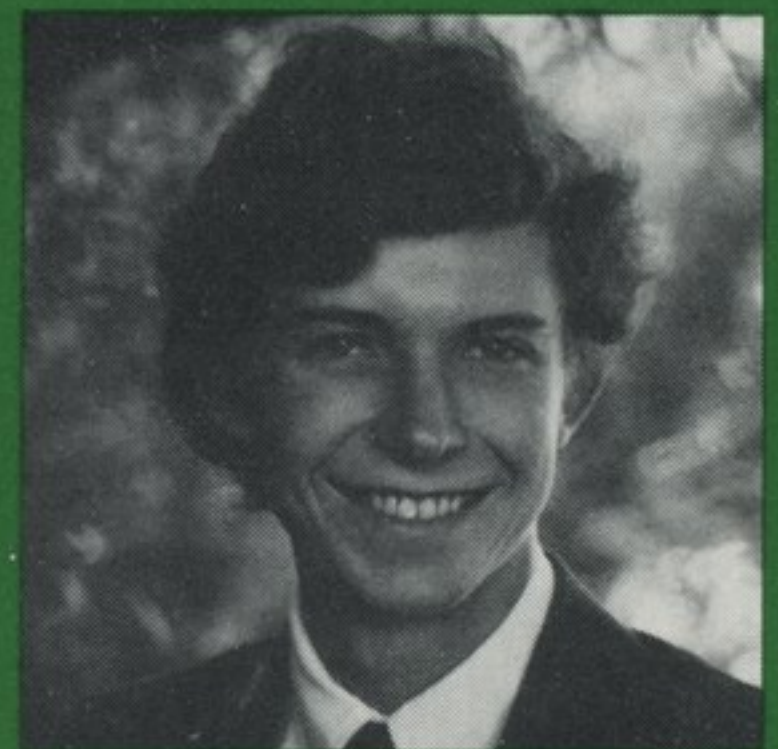
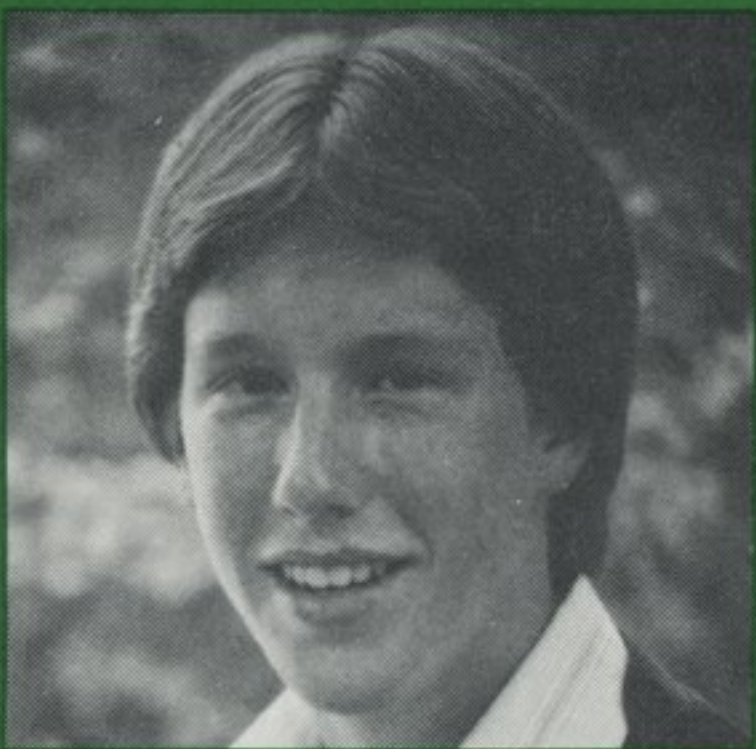
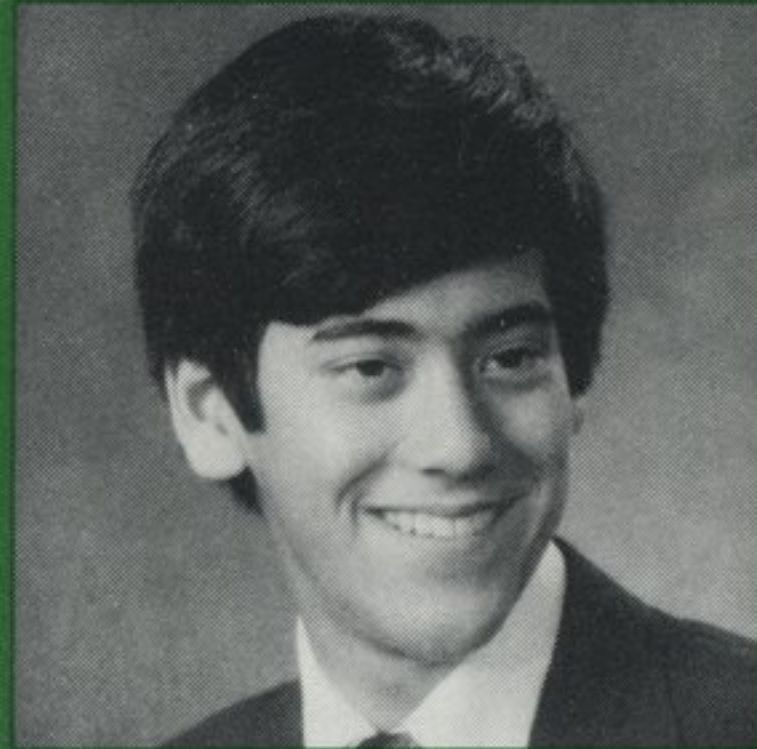


NUMBER 7/1982



These 13 recipients of Martin Marietta Foundation scholarships for the 1982-83 academic year are sons and daughters of Denver Aerospace and Data Systems employees.

They are, left to right, top row, Carl Eugene Dautenhahn, Phillip Thomas Fujiyoshi, Jon Willard Haas, Cynthia Jill Hopko; second row, Gregory Alan Howard, Timothy Nicholas Kooney, Susan Jean Larison, David Kevin Luhman; third row, Patrice Marie Mich, Richard Paul Michel, Michele Ann Mlady, James Jay Tutchton, and left, David Franklin Webb.

MX missile moving toward first test launch in January

"We are moving along at a good pace to meet our commitment to launch the initial M-X test missile in January of 1983," according to Howard F. Keyser, vice president and general manager, strategic systems division.

Five years of extensive effort will come to fruition with the first of 11 test launches from Vandenberg Air Force Base in California, early next year.

"Today we're involved in missile modal vibration testing in Denver," Keyser added, "We are also engaged in the design, fabrication and test here of the missile's transportation system and the instrumentation and flight support system. Construction of test facilities at Vandenberg is nearing completion, and installation of the electronic equipment vital to the start of the flight test program has begun.

"As is the case with any highly sophisticated program like this, we've experienced the usual technical and developmental difficulties," Keyser said. "However, thanks to a great effort by our people, things are now looking good, and all our contract activity is on track."

He pointed out that funding for the M-X programs for which the company is currently under contract is secure, and that work under way will continue.

Although the company's current involvement is assured, recent Senate Armed Services Committee decisions deferring \$2 billion in production and deployment funds have resulted in some confusion concerning the program.

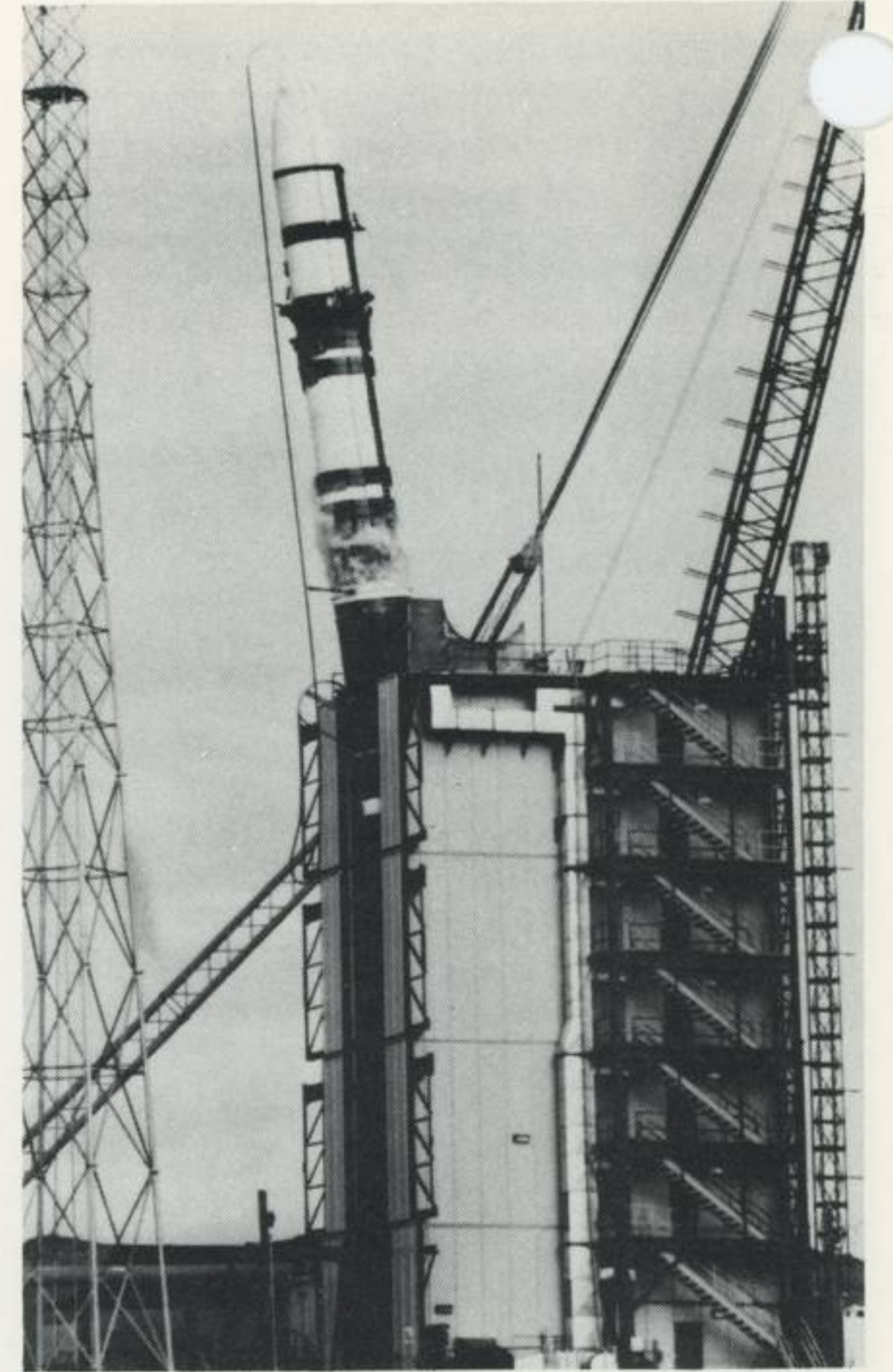
Part of the confusion has arisen from the terms "development" and "deployment." The contracts under which the company is now working are for the development of Missile-X and its test flight program.

The deferred funding was for the temporary deployment, or basing, of the missile in existing silos.

The committee's move was made to force the administration to develop a permanent and survivable basing system for M-X by December 1982, rather than by July 1983.

The administration had requested a total of \$4.5 billion for the development of the missile and its test flight program as well as for the temporary basing of M-X. The committee action put a hold on that portion of the total to be used for deployment, but left intact funding for missile development and test flight programs.

The committee's move appears to be the first in a continuing series of Congressional examinations of the M-X program.



Recent canister launch system test in California desert is one of the company's involvements in the development phase for the MX missile.

Thermal mapping program tested on third shuttle

An important, but little known computer program used to predict thermal influences on the orbiting Space Shuttle was tested extensively on the Shuttle's third flight.

The thermal radiation analysis systems (TRASYS) is a computer program developed by Denver Aerospace for NASA's Johnson Space Center. Carl Jensen is the TRASYS project manager.

Developed over an eight-year period, the program was designed to predict and map the temperatures of parts of the orbiter under specific orbit conditions. The information is used to build a thermal model of the spacecraft.

Unlike the thermal heat with which the Shuttle orbiter's ceramic tiles contend on re-entry, the TRASYS system produces forecasts of how hot or cold the orbiter itself or its payload bay cargo will get while in space with its cargo bay doors open.

Tests conducted during the flight were intended to verify TRASYS and other parts of the software package that were used to establish design of the orbiter. Data from these experiments should provide information useful in improving the Shuttle's performance.

A main use for the computer program at this time is the design and integration of the Shuttle's payloads.



Getting last minute instructions, Dennis L. Rushing, left, prepares to take over the job his mother, Evelyn Rushing, is leaving.

Mother retires, son carries on

When Evelyn L. Rushing retired last week, her work never left the family.

Her son, Dennis L. Rushing, joined the company last month, and will soon take over the same work his mother did, building MX cables for inflight safety systems.

Mrs. Rushing began work here in November 1959. She has worked on independent research and development, space launch systems, in electronic manufacturing, and inflight safety systems.

Counseling sessions planned for April 13

Representatives from many of the Denver metropolitan area colleges and universities will be here Tuesday, April 13, to advise prospective students on eligibility, admissions requirements, curricula, and policies for undergraduate and graduate study at the institutions.

The representatives also will be available to answer questions of those already enrolled.

The counseling session will be held in the second floor cafeteria in the engineering building from 2:00 to 4:00 pm. No appointment is necessary.

Represented will be the University of Colorado (Boulder and Denver campuses), University of Denver, Community College of Denver, Metropolitan State College, Arapahoe Community College, Regis College, Colorado State University, Colorado School of Mines, Loretto Heights College, and the State of Colorado Professional Engineers Board.

Payload integration earns award fee

An excellent rating and an award fee of 91 percent has been earned by the payload integration contract group for the final award fee period of the contract.

During the four years of the contract, the rating has been excellent in each of the award fee periods.

Martin Marietta scholarships awarded students

Thirteen college-bound children of Denver Aerospace and Data Systems employees in Denver, Kennedy Space Center, Michoud, and Vandenberg have been selected to receive Martin Marietta Foundation scholarships for the 1982-83 academic year.

Those chosen from Denver are Jon W. Haas, Gregory A. Howard, Susan J. Larison, David K. Luhman, Patrice M. Mich, Richard P. Michel, Michele A. Mlady, and James J. Tuthton.

The KSC winner is David Franklin Webb. Winners at Michoud are Carl E. Dautenhahn and Timothy M. Kooney. The Vandenberg scholar is Phillip T. Fujiyoshi.

The Denver Data Systems pick is Cynthia J. Hopko.

The scholarships, initially for one year and renewable for three additional years based on academic achievement, are for \$3,000 each year.

The committee selecting the scholarship winners was headed by Joshua R. Wheeler, former superintendent of the Baltimore County schools. Serving with him were Dr. Donald Maley, chairman of the department of industrial education at the University of Maryland, and Howard Staley, recently retired from Exxon Corporation.

Carl Eugene Dautenhahn is the son of Mr. and Mrs. Timothy G. Dautenhahn. He will graduate from Slidell High School this year and plans to attend Louisiana State University. He expects to major in chemical-petroleum engineering. He has participated in sports and musical groups in high school. His father is a mechanical engineer at the Michoud division.

Phillip Thomas Fujiyoshi will graduate this spring from Ernest Rishetti High School in Santa Marie, CA. He is the son of Mr. and Mrs. Thomas S. Fujiyoshi. His father is a director at Vandenberg operations. The scholarship winner expects to major in biochemistry at Stanford University. He has been active in musical groups, playing the trumpet and piano, and in the theater. He is also a swimmer.

Jon Willard Haas expects to major in engineering at the University of Minnesota after graduation from Heritage High School. He is the son of Dr. and Mrs. Willard R. Haas. His father is a staff chemical engineer. He has been an assistant softball and basketball coach as well as a member of student council. He participated in an honors engineering seminar and lists programming his calculator as a hobby.

Cynthia Jill Hopko is a senior at George Washington High School. She is the daughter of Mr. and Mrs. John Hopko. She plans to major in either physiology or medicine at the University of California at Los Angeles. She is a member of the National Honor Society, is a cheerleader, plays the piano, and has done volunteer work. Her father is an engineer with Data Systems.

Gregory Alan Howard is the son of Mr. and Mrs. Duane A. Howard. His father is an aeronautical engineer. He plans to major in information sciences at the University of Denver when he

completes his high school work this year at Columbine High School. He has completed many computer projects and is a stamp and coin collector.

Timothy Nicholas Kooney graduates this year from Slidell High School. He plans to attend Tulane University to major in microbiology. The young man is the son of Mr. and Mrs. Nicholas Kooney. Science projects, computer programming, electronics, and astronomy are among his outside interests. He has also appeared in theatrical productions, including the lead in M*A*S*H. His father is a Michoud division engineer.

Susan Jean Larison expects to attend the University of Utah to major in computer science. She will graduate from Abraham Lincoln High School. She is the daughter of Mr. and Mrs. Vito R. Larison. He is a purchasing supervisor. Miss Larison has held several positions on the school newspaper staff, including editor-in-chief, and is a member of Quill and Scroll, the honorary writing society. She has held class offices and is a member of the National Honor Society.

David Kevin Luhman, the son of Mr. and Mrs. Frederick A. Luhman, is a senior at Bear Creek High School. He expects to attend the University of Colorado to major in aerospace engineering. His father is an administrator for contract technical requirements. He is a member of the National Honor Society and has attended a math-science seminar. He is active in the Boy Scouts and combines computer programming, stamp collecting, and photography as his hobbies.

Patrice Marie Mich, who will graduate from John F. Kennedy High School, is the daughter of Mr. and Mrs. Richard J. Mich. Her father is a computer technician. She plans to attend Colorado State University to major in biology or veterinary medicine. She has been a member of

a veterinary Scout Explorer Post, has worked on a farm, and enjoys horse-back riding. She builds models, collects miniatures, and is active in sports.

Richard Paul Michel, whose father is an aeronautical engineer, plans to major in either mechanical or aerospace engineering and business at the University of Colorado. He is the son of Mr. and Mrs. Frederick C. Michel and is a senior at Columbine High School. He has played lead saxophone in the jazz band for three years and travelled in Germany as part of the German-American exchange program.

Michele Ann Mlady is the daughter of Mr. and Mrs. Delos W. Mlady. She has been copy editor and feature editor of the newspaper and art editor of the yearbook at Columbine High School where she is a senior. She has also been active in the school's senate, serving as chairman of the homecoming committee, the graduation announcement committee, and the Las Vegas Night committee. She plans to major in psychology at Colorado College. Her father is an electrical engineer.

James Jay Tuthton, who attends Cherry Creek High School, is the son of Mr. and Mrs. James W. Tuthton. His father is mission success manager. He plans to attend Notre Dame University as an engineering major. He has been active in competitive sports, plays the piano, and collects classic works of literature. He has been a volunteer for Amigos de las Americas.

David Franklin Webb plans to major in computer sciences at Georgia Tech when he completes his work at Astronaut High School in Titusville, FL. He is the son of Mr. and Mrs. Kenneth Webb. His father is in the external operations at KSC. He has been active in musical organizations, is interested in hunting and fishing, and in science fiction games.

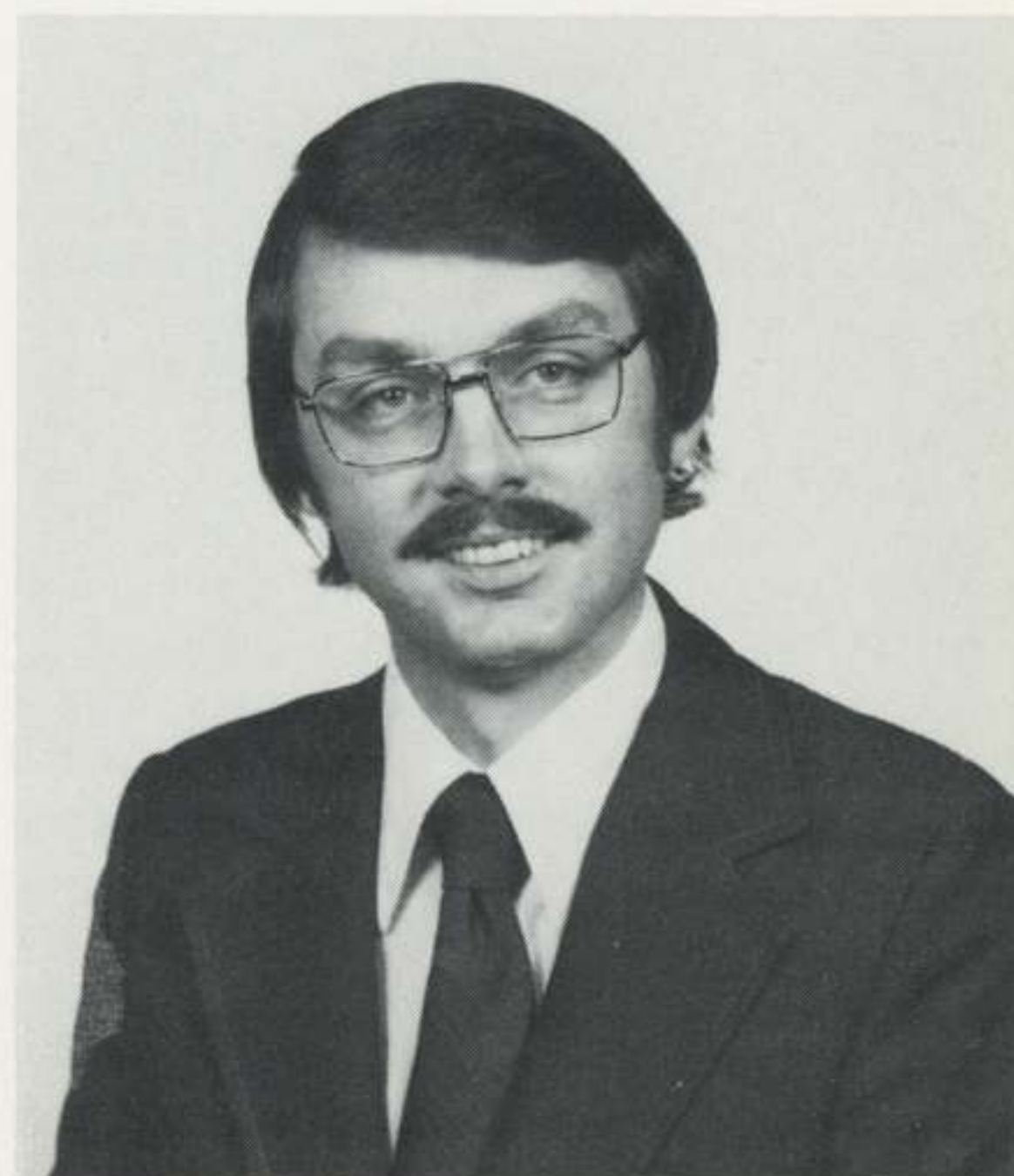
Engineer named Sloan fellow

Claude W. McAnally, a senior group engineer in special programs, has been named an Alfred P. Sloan Fellow at the Massachusetts Institute of Technology.

In the 1982-83 program, McAnally will follow a 12-month course leading to a master of science degree in management of MIT's Alfred P. Sloan School of Management. The Sloan Fellows program, started in 1931, is the oldest executive development program in the nation. It was initiated by the late Alfred P. Sloan, former chairman of the board of the General Motors Corporation.

McAnally, a Denver Aerospace employee since 1967, has bachelor degrees in business administration and electrical engineering from the University of Colorado, and has completed course work for a master's degree in electrical engineering.

He has worked on several majors programs, including Titan, Skylab, and Viking. He currently



Claude W. McAnally

has lead responsibility for design, manufacture, and test of a flight data acquisition and command distribution system and for the development of a distributed microprocessor flight data processing system.

Tethered satellite proposal is under way

A team to prepare a double proposal for the tethered satellite is being organized by Donald S. Crouch, proposal manager.

The request for proposal was received from Marshall Space Center in late March with the proposal due May 17. The work is to include an advance development phase and a flight hardware phase.

Flight of the first tethered satellite, expected to be a joint project by NASA and the Italian Council of National Research, is planned for the first quarter of 1987.

Selection of the contractor in the competition is expected in mid-1982 with work to start in September 1982.

Denver Aerospace completed a concept definition contract for the satellite in 1980.

In operation, the satellite is moved a safe distance from the Space Shuttle orbiter by an extendable boom. When in position, the satellite, attached to a flexible or synthetic line, is released. By a combination of velocity, gravity, and atmospheric drag, the satellite is deployed into an orbit different than that of the Shuttle.

The system permits the satellite to perform a variety of long-duration observations and scientific measurements in orbits of 75 to 90 miles above the Earth. These orbits are beyond the range of winged aircraft and balloons; rocket launched satellites placed in these low orbits have short lives; and sounding rockets have even shorter times in which to conduct observations or experiments in the 75 to 90-mile belt.

In the first flight, the satellite will be provided by the Italian partner with the U.S. contractor providing the system interface and the control hardware. The U.S. contractor will be the system integrator and will provide launch and mission operations support.

Teams forming for Denver Corporate games

The second annual Denver Corporate Games, an amateur athletic competition between teams from 20 area corporations, will be held June 5 this year. Proceeds go to the Colorado Special Olympics, an athletic program for disabled adults and children.

Denver Aerospace teams won the corporate title last year. Competition in all 14 events promises to be keen this year, with men's and women's events in racquetball, volleyball, track, bowling, golf, swimming, and tennis.

To qualify, participants must be full-time regular employees for at least 30 days prior to the games, 18 years old, and must not have played professionally in the event entered. First priority will go to those active in company-sponsored league activities.

Running events for men and women are: 10K, 1500 meters, 100 meters, and co-ed 400 and 800 meter relays. Swimming events for men and women are: 50 yard freestyle, 50 yard



Dr. Leonard R. Kowalski

Physician named to head medical department

Dr. Leonard R. Kowalski, a member of the emergency department staff at Aurora Presbyterian Medical Center, has been named to head the medical department. He replaces Dr. David Ashmun, who has gone on medical leave.

The new department head has been the regional flight surgeon for the Federal Aviation Administration and division chief for clinical, administrative, and occupational health matters for the Rocky Mountain FAA region.

Dr. Kowalski is a graduate of the University of Pennsylvania School of Medicine. He has a master of public health degree from the Harvard School of Public Health. He served his internship at Walter Reed General Hospital and a residency in aerospace medicine at the U.S. Air Force School of Aerospace Medicine in San Antonio.

He has served in the U.S. Army as division surgeon of the 82nd Airborne Division and as branch chief of environmental medicine at the Army's Aeromedical Research Laboratory.

Dr. Kowalski is a Fellow of the American College of Preventive Medicine and an Associate Fellow in the Aerospace Medical Association. He holds membership in the American College of Physicians, the Massachusetts Medical Society, Colorado Medical Society, American Occupational Medical Association, American College of Emergency Physicians, American Society of Bariatric Physicians, and the Society for Clinical Ecology.

backstroke, 200 yard freestyle relay, and co-ed 200 yard medley relay. Tennis for men and women includes, singles, doubles, and mixed doubles. Racquetball, volleyball, and golf will feature separate events for men and women, while bowling will be co-ed.

Register at the recreation office, Eng. 124, or submit in writing to the recreation office, mail number 1321, name, age, badge number, mail number, phone extension, event desired, and past performance in that event as substantiated by average times, or scores. No telephone registrations will be accepted. Sign-up deadline is April 16.

Correct, complete data speeds insurance payment

Employees can speed medical insurance claim payments by understanding the claims procedure and providing complete and correct claim forms to employee benefits, says Mrs. C.K. Duncan, assistant benefits administrator.

To submit an insurance claim, the employee needs to pick up an insurance form from employee benefits, fill out the front page with family and employee information, such as employee name, social security number, patient name, and attending physician, and take it to the doctor. The back side of the form is either filled out by the physician or he may attach his own form, indicating treatment, diagnosis or diagnosis code, and charges. Comprecare or dental claims are sent directly to the insurance companies by the doctor's office.

Employees with Connecticut General medical policies, should pay the physician themselves or authorize reimbursement directly to the doctor, then return the claim form to the employee benefits office for reimbursement.

"It takes about a week for us to process the form, checking all information and verifying the type of coverage for each employee. We receive about 250 to 300 claims each day, so it really helps us if employees and physicians have given us complete, correct information," Mrs. Duncan said.

Separate claim forms should be carefully completed for each family member's office calls services performed, and prescriptions. The physician can then attach to the claim form an itemized bill showing the diagnosis or complete the back side of the form.

With Comprecare, referral to specialists is done by the employee's primary-care physician. Without referral, specialist charges may not be paid by Comprecare.

"Most employees are not aware of processing time for Comprecare claims because payment is direct to the physician, but with Connecticut General, many physicians require full payment from the patient on the day of treatment. Connecticut General takes about 10 days to process a claim, then issues checks from Hartford, CT, so time must be allowed for the mails. Dental claims are paid directly to the dentist, with notification of payment going to the employee.

"We hope employees can appreciate the time they can save us and themselves by submitting claims correctly the first time," says Mrs. Duncan.

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