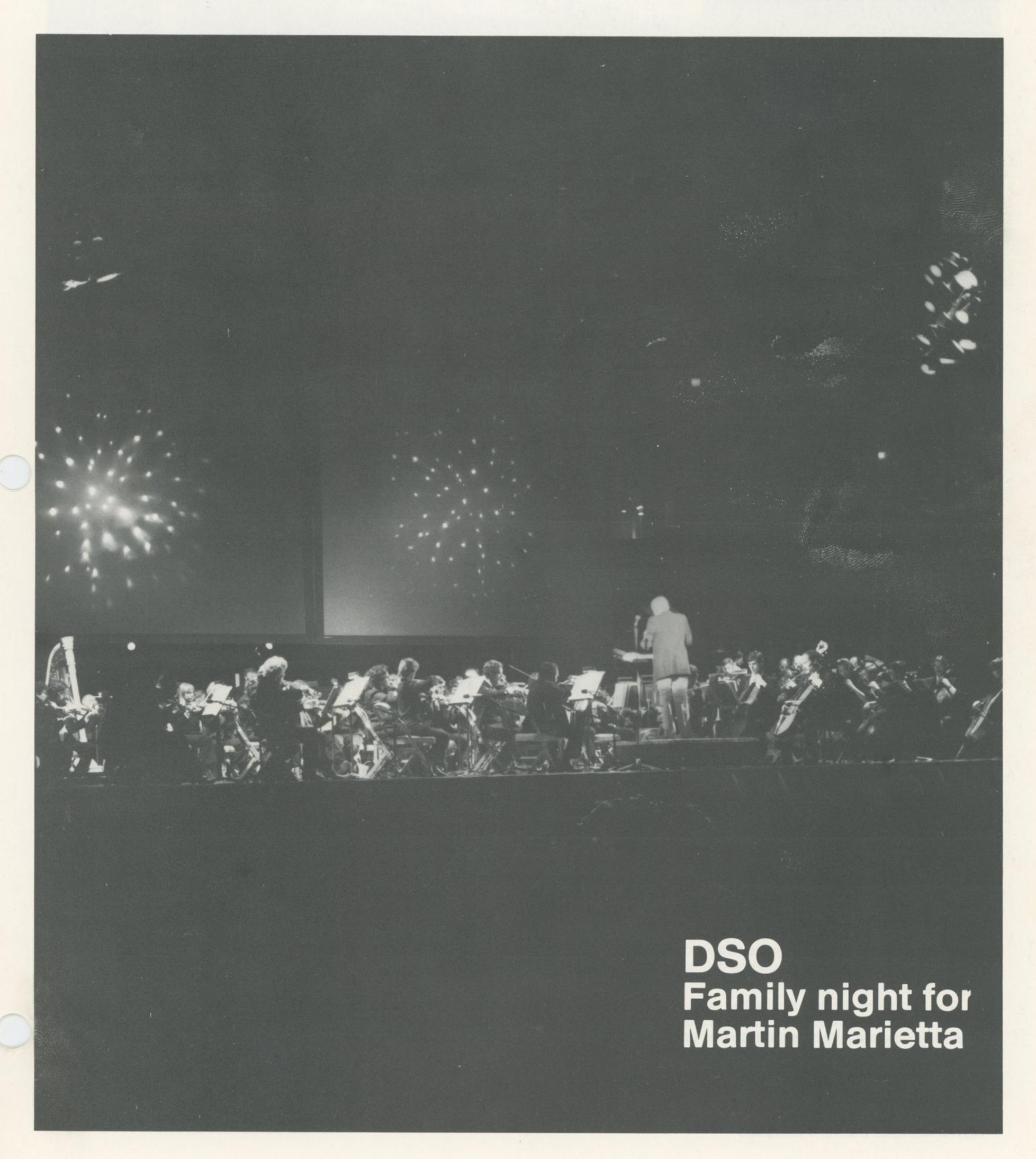
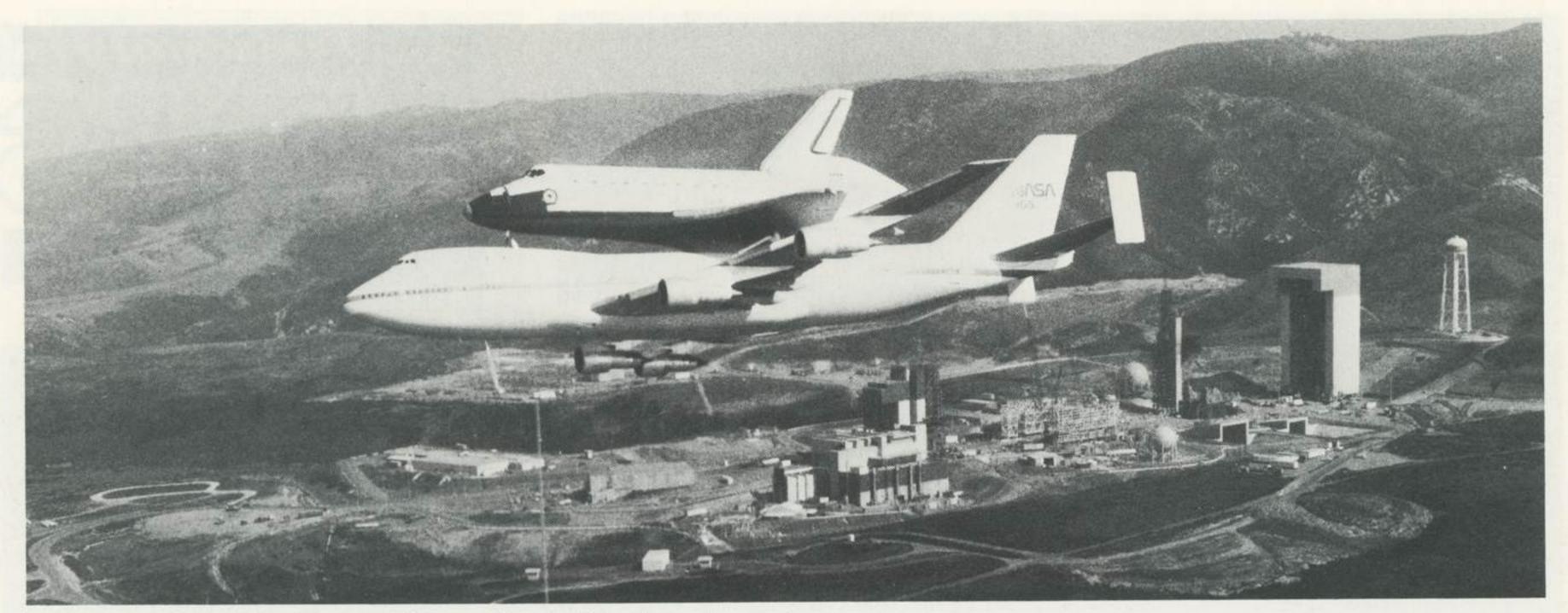
Number 21/1984

MARTIN MARIETTA

DENVER AEROSPACE





Space shuttle piggybacking on 747 over Vandenberg launch complex.

Shuttle allegations at Vandenberg 'not valid,' without 'substance'

Allegations poor quality control and defective construction could cause a major disaster at California's Vandenberg Air Force Base space shuttle launch complex have been termed "not valid" and have "no substance."

Those quotes are from the Air Force Inspector General's report issued this month and from a statement late last month by Air Force Undersecretary "Pete" Aldridge, respectively, following their individual reviews. Those high-level reviews were prompted by an NBC television evening news broadcast Aug. 20 which alleged there were major concerns about safety, quality assurance and technical issues at the launch site.

Denver Aerospace is the integrating contractor for the Defense Department's space transportation system (STS) ground support systems (GSS) at Vandenberg. As such, the company is responsible for design procurement, installation and checkout of the ground system that supports space shuttle processing and launch from Vandenberg, through initial launch/recovery operations. The company's role also includes planning and processing of payloads for shuttle missions launched from Vandenberg.

The Air Force report said, in part, the "team found that safety is a paramount concern at the Vandenberg launch site and that the safety allegations were not valid. System safety design procedures and practices based on proven Kennedy Space Center (Florida) experiences are in place and being followed." The report noted further that problems "impacting quality

were being detected and effective corrective action was being taken," as were the alleged technical issues.

In his statement, Aldridge said "... there is no substance to the allegations that the launch pad will blow up when the shuttle is launched from Vandenberg next year. While we have identified deficiencies in the construction that could, if not corrected, cause significant safety problems, there is no fundamental problem of safety or quality assurance at the Vandenberg launch and landing site (VLS) which would prohibit us from successfully and safely launching the shuttle.

According to all reports, deficiencies mentioned in the NBC broadcast had been identified already either by the contractor or by government personnel on the site, and corrective actions were in full swing. "Such problems are not unexpected in a project as complex as the VLS and are consistent with NASA's experience at the Kennedy Space Center," Aldridge continued. "We will continue to identify and solve problems as we get closer to October 1985.

"There will be numerous tests performed on all systems before we are prepared for launch. No launch will occur until all individuals and organizations are convinced that we can launch the shuttle safely and successfully. We will never compromise personnel safety or mission success to maintain schedule," assured Aldridge. "My review did uncover some concerns that need to be resolved at the VLS. Those included the number of quality assurance (QA) personnel on site and communications between our QA personnel and site activation managers. We are taking steps to solve these problems."

In a joint statement soon after that NBC news report, Norman R. Augustine, president of Denver Aerospace, and Peter B. Teets, vice president and general manager of the company's strategic and launch systems division, said: "We have the utmost confidence in the management team and work force currently in place to complete this job successfully. We maintain and reemphasize our longstanding commitment to 100 percent mission success."

Counsel's Corner

In fraud cases: corporations pay fines, but people go to jail

(Editor's note — The following is the second in a series of columns scheduled to be published in the Martin Marietta News at the end of each month.)

The government's highly publicized campaign against fraud, waste and abuse has resulted in the imposition of severe penalties against several defense contractors during the past few months. Penalties have included fines, disallowance of costs, and debarment from receiving further government contracts. There also have been several cases of fines and jail sentences imposed on contractor employees. In one instance, an employee has been prohibited for life from working on government contracts —with any contractor!

Charges against the various contractors included obtaining competitor's proposal data from government employees, falsely certified test data on computer chips, failure to furnish complete pricing information during contract negotiations, taking kickbacks from a subcontractor, and fraudulent pricing of spare parts.

The important thing to remember is: corporations pay fines, but it is *people* who go to jail. No job or program is so critical or important that its success should depend on one's departing from established policies and procedures regarding contract performance.

Jacques H. Croom Aerospace General Counsel

Michael A. Steuer Chief Counsel Martin Marietta Denver Aerospace

Marcall long-distance telephone system for efficiency, economy

Martin Marietta has two objectives in operating the Marcall long-distance telephone system. One is efficiency. The other is economy.

Both ends are achieved when the system is used responsibly in the conduct of business. Neither purpose is served when the system is misused for personal calls, unnecessary calls, or calls that are needlessly long.

Martin Marietta pays for every call on the Marcall system. Marcall utilizes a large number of WATS lines, which at one time were rented for a set charge regardless of traffic volume. Today, that is no longer the case. Martin Marietta is billed for every call just as you, as an individual, are billed for calls on your telephone at home. Even directory assistance calls are billed.

Key employees, based on job requirements, are issued Marcall authorization numbers. Each authorized employee is responsible for the proper use of that number in the conduct of business. Equally important, each employee is responsible for maintaining the confidentiality of the assigned number to prevent unauthorized use of the system.

Failure of an employee to carry out these responsibilities by making personal calls or permitting others to use the assigned number is a serious violation of corporate policy regarding the use of corporate assets. Such a violation is grounds for disciplinary action including termination. Under certain circumstances, the violation could also lead to civil and criminal action.

The Corporation encourages use of Marcall, from any location, in the efficient discharge of company business. Misuse of the system, however, is costly, unproductive, and must be avoided.









United Way campaign kicks off Monday

The 1984 Mile High United Way campaign, which gets underway officially Oct. 1, "is the only time we approach all of our employees for a charitable cause — a cause that provides help and support to many members of the Martin Marietta family," Norman R. Augustine, Denver Aerospace president, said in a recent memo to department heads.

"I am personally committed to the United Way concept of providing vital community services," he added, noting this year's effort within the company include such innovations as group meetings to inform employees of United Way's accomplishments and needs.

James W. McAnally, vice president of defense systems, will be the company's campaign drive chairman. The drive will end Nov. 8.

Mile High United Way's goal this year is \$23,260,000, a 17 percent increase over last year, but Augustine believes "this five-county community human needs goal is challenging, yet attainable, However, its success, to a very large extent, depends on the contributions from employees in companies such as ours."

Applications available for new marketing intern program

The marketing department at Aerospace headquarters has announced a new intern program, similar to the existing one in technical operations, starting January 1985. The selected candidate will be announced Dec. 1.

Purpose of the program "is to identify and train promising qualified employees to take on significant future responsibilities throughout Martin Marietta Aerospace in the marketing area. The program will provide the intern with a wide exposure to activities at the senior management level, both inside and outside the company and in the Washington, DC environment..., while contributing to the accomplishment of tasks important to Martin Marietta Aerospace."

The successful applicant, with at least three years experience as a Martin Marietta Aerospace employee, will report to Joseph N. Kremonas, vice president/marketing for Aerospace headquarters and will be located at Bethesda corporate headquarters for one year.

Forms and information on the marketing intern program are available from R.W. "Mike" Walker, ext 3395, Engineering Bldg. module 209A. Completed applications with a director's or vice president's approval are due to Richard E. Brackeen, Denver Aerospace vice president for business development, by Oct. 15.



During a recent awards ceremony, Titan programs recognized the outstanding efforts of John Gerecht, Whitey Brenner and Bob Bassett (second, third and fourth from left, respectively) in meeting critical detail part schedules for ongoing Titan production. Making the awards were Robert Johns, director of Titan programs (far right) and Nolan Pass, manager/detail manufacturing (far left).

Summer hours at 'The Gallery' end

A sure sign winter is just behind the hogback: "The Gallery," showplace of Denver Aerospace exhibits and models, has ceased its summer visiting hour for employees at Waterton until next year.

Tours for business-related groups and certain others, however, still can be made by special arrangement through the public relations department, ext 5364.

Last day to register to vote is October 5; locations listed

County clerks in Adams, Arapahoe, Boulder, Denver, Douglas and Jefferson counties have announced temporary locations for voter registration between now and Oct. 5. That is the last day eligible voters may register to vote in the Nov. 6 general election.

In addition to the temporary locations, each county maintains several permanent registration locations, and most will have mobile registration sites. For that and other information contact the number for your county: Adams, 659-2120; Arapahoe, 795-4511; Boulder, 441-3516; Clear Creek, 534-5777; Denver, 575-2351; Douglas 688-5778; El Paso, 471-5521; Gilpin, 572-0567; and Jefferson, 277-8806.

Registration sites include:

ADAMS COUNTY

M-F, 12-8 p.m.; Sat, 10 a.m.-6 p.m. Aurora: King Soopers, 15109 E. Colfax Ave. and Safeway, 10777 E. Colfax Ave.

Brighton: Safeway, 1605 Bridge St. (Fri-Sat)
Broomfield: King Soopers, 5105 W. 120th St.
Commerce City: King Soopers, 6040 E. 64th St. and

Safeway, 7400 Highway 2

Federal Heights: King Soopers, 1575 W. 84th Ave. Northglenn: Safeway, 650 Malley Dr.

Thornton: King Soopers, 750 E. 104th Ave., and E. 120th and Colorado Blvd., and Safeway, 9131 Washington St. **Westminster:** Safeway, 8430 Federal Blvd., and King Soopers, 7301 Federal Blvd.

ARAPAHOE COUNTY

M-F 4-8 p.m., Sat 10 a.m.-4 p.m.

Littleton and Englewood: Safeway, 125 E. Hampden Ave.; Centennial King Soopers, 5050 S. Federal Blvd.; Southglenn Mall, 6911 S. University Blvd.; Foxridge King Soopers, 8200 S. Holly St.; Heritage Place Safeway, 7375 E. Arapahoe Rd.; King Soopers, 4910 S. Yosemite St.; Broadridge Safeway, 199 W. Ridge Rd.

Aurora: Hoffman Heights King Soopers, 655 Peoria St.; Aurora Mall, 14200 E. Alameda Ave.; Aurora Highlands Safeway, 1730 S. Buckley Rd.; Summer Valley Safeway, 16921 E. Quincy Ave.; Albertson's, 16801 E. Iliff Ave.; East Bank Albertson's, 4100 S. Parker Rd.; Buckingham King Soopers, 1155 S. Havana St.

BOULDER COUNTY

M-F 4-8 p.m., Sat 10 a.m.-4 p.m.

Broomfield: Safeway, 1st Ave. and Nickel

Boulder: Thunderbird Safeway, 4700 Baseline Rd.;

Arapahoe Village Safeway, 2798 Arapahoe Rd.; U.M.C.,

Broadway at Euclid (9 a.m.-4 p.m.)

Want to make your vote count?

FIRST

USU MUST regimer,

Longmont: South Safeway, Burlington Sq.; Centennial Safeway, Hover Rd. at 17th; Central Safeway, 750 9th Ave. Louisville: 707 S. Boulder Rd.

DENVER COUNTY

M-S 11 a.m.-7 p.m.

King Soopers at: 890 S. Monaco Pkwy; 755 S. Colorado Blvd; Hampden and Monaco; Monaco and Evans; 14th and Speer; 9th and Corona; 14th and Krameria; 2200 W. Alameda; Bear Valley; and Florida and Sheridan; Safeways at: 20th and Washington; Quincy and Tamarac; Yale and Monaco; 2880 S. Colorado Blvd.; Colorado Blvd. and Mexico; 14th and Krameria; 44th and Lowell; Colfax and Josephine; 1st and Steele; 5515 W. Warren; 48th and Chambers Rd.; Federal and Louisiana (Fri/Sat); 46th and Pecos (Fri/Sat); Alameda and Logan (except Wed/Thurs); Avondale (Fri/Sat); 26th and Federal (Fri/Sat); 920 S. Monaco (Fri/Sat); 6th and Corona (Fri/Sat); Evans and Downing

F.B.C. International: 900 E. 11th Ave.

Econo Drug: 3360 Downing (Fri/Sat)

Junior's Food Store: 5538 E. 33rd Ave. (Mon/Tues)

DOUGLAS COUNTY

Thurs-Fri, 4-7 p.m.; Sat. 10 a.m.-7 p.m.

Castle Rock: Safeway (Thurs/Sat)

JEFFERSON COUNTY

M-F 4-8 p.m., Sat 10 a.m.-4 p.m.

King Soopers at: 100th and Wadsworth Blvd.; 64th and Ward Rd.; 80th and Wadsworth; 32nd and Youngfield; 20th and Depew; Robb and Colfax; Kipling and Florida; Green Mountain, Alameda Ave.; Belleview and Kipling; Coal Mine Rd. and S. Pierce St.; and Bergen Park Safeways at: W. Colfax and Garrison; Green Mountain, Alameda Ave.; Harlan and Alameda Ave., Ken Caryl and S. Pierce St.; Golden, 17th and Jackson; Evergreen; and Conifer

Albertson's: Times Square, 4262 Wadsworth Blvd; and Garrison and Ken Caryl;

Westland Shopping Center: Colfax and Miller Southwest Plaza: Kipling and Bowles Lakewood Library, 20th and Miller (regular hours)

Villa Italia Mall: Alameda and Wadsworth



Dennis Cook (center), director of personnel for Denver Aerospace recently presented a check for \$9200 to Phillip Ritter (left), vice president for public affairs at Lutheran Medical Center. The donation is part of Martin Marietta's continuing program of grants and awards to Colorado agencies and community organizations.

On the cover

Ticket distribution to employees for last week's Martin Marietta family night with the Denver Symphony Orchestra (DSO) totaled 21,000. The pops concert featured guest conductor Lionel Newman, noted film and television music director and senior vice president of 20th Century-Fox film Corporation. Newman has been nominated 11 times for Academy Awards, receiving his first for Hello, Dolly!

Assisting the DSO with projection designs to compliment the spaceage flavored concert were Ned Stephenson, Pat Corkery and Mike Phillips of Denver Aerospace's film services.

Each year the company hosts similar events in appreciation of employees' "dedication and many contributions to the success of Denver Aerospace," said Norman R. Augustine, president, underscoring "the important role families play in our employees' personal and professional well-being."

Crime watch on at DSC

Employees at Denver Aerospace's Denver Systems Center (DSC) are urged to become active participants in "DSC Crime Watch" after the recent rash of motor vehicle break-ins in that area.

DSC guards are now making checks in Martin Marietta parking lots at irregular intervals and Lakewood police have announced increased vehicle patrols. Employees can help by immediately reporting to security guards at DSC any suspicious activity in the parking lots, by obtaining a description of that individual and, if applicable, the automobile license number and description. Employees are cautioned against leaving valuables and equipment in plain sight inside their own vehicles.

Security also advises employees not to attempt to apprehend anyone. Instead, contact DSC guards who, in turn, will contact Lakewood police.

Published by Public Relations MARTIN MARIETTA AEROSPACE

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

Floyd R. Teiffel jr. 6872 Technical Operations: Steven L Cohen 3369 Production Operations: E. W. Andrews 4619 Business Development: Space & Electronics Systems Division: Robert I. Curts 3639 Space Launch Systems Division: John H. Pond 9165 Daphne R. Gillison 3155 **Business Management:** Personnel/Recreation: Leroy Hollins 6750 Lori A. Sharp 6605 Evan D. McCollum 3788 Michoud Division:

Vandenberg Operations: Richard L Kline 2202
Canaveral Operations: Robert V. Gordon 9108

Photography by: Pat Corkery

DENVER AEROSPACE P.O. Box 179—Denver, CO 80201

September 28, 1984

FILE set to fly Oct. 5 shuttle mission

A feature identification and location experiment (FILE), built by Denver Aerospace will be flown on the next space shuttle mission as part of the instrument package on an Office of Space Technology and Applications (OSTA) instrument pallet.

First flown on STS-2 during November 1981, FILE is scheduled for reflight with additional equipment on STS-41G, currently set for launch on October 5. It was designed, built, and tested by Denver Aerospace under contract to NASA's Langley Research Center.

FILE provides a means of reducing the enormous amount of data sent back to Earth by Earth resources satellites. It allows the relatively small amount of valuable information needed for a certain purpose to be extracted from large quantities of data collected.

FILE is an autonomous feature recognition system with the capability to recognize surface features on Earth in four categories. Used in conjunction with data gathering systems on board a satellite, the space shuttle, or a space station, it could direct those systems to collect data only when certain features are present.

For example, a satellite designed to gather information about wheat crops could use

FILE to tell it when it was over areas of the Earth containing vegetation, allowing it to gather data only over those areas that might contain wheat.

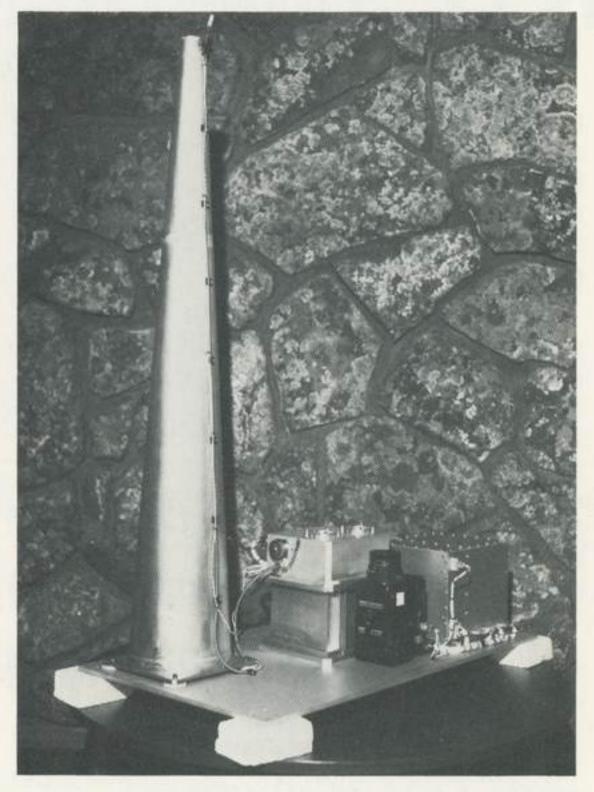
In addition to vegetation, FILE can identify bare land, clouds and snow, and water. It uses two solid-state television cameras equipped with narrow-band filters, which operate at 0.65 and 0.85 microns, to measure radiance values of various surface features on Earth.

Images recorded by the television cameras are processed electronically to determine what percentage of the view is occupied by each of the four categories, then are stored on magnetic tape.

For purposes of the STS-41G experiment, FILE also will carry two film cameras to take photographs of the same areas being viewed by the television cameras. The photographs will be used for postflight comparison with the image analyses done by the instrument.

Unlike other feature-recognition systems that collect data continuously and often unnecessarily, FILE automatically gathers information selectively and only in the amount required.

Possible uses for FILE include water pol- coastal change measurement.



Early version of FILE

lution detection, smokestack effluent monitoring, snowcover mapping, cloud cover mapping, flood disaster assessment, and coastal change measurement.

Procedures for publications clearances

Administration of technical papers, important both to the authors and to the company's technical reputation, is a function of the public relations department.

All Martin Marietta-generated publications (articles, brochures, papers, pamphlets, etc.) intended for public release must be cleared and approved before such release. Standard Procedure 6.1 delineates an employee's responsibility for publication clearance action. The United States government, through the State and Commerce Departments, has tightened controls over the release of unclassified technical data to foreign nationals and foreign governments.

A review of the approval/clearance operation indicates there are many

occasions in which procedures and guidelines have not been followed. Errors are often due to authors and managers not being aware of the published procedures, or their own responsibilities.

Among the major discrepancies are:

—Incomplete information on the publications clearance form (i.e., omission of submission date, and contract number);

 Failure to obtain program or department approval at the manager level or above;
 Insufficient number of copies of the paper submitted. That information is on the

back of the clearance form;

—Insufficient time to permit local processing of the paper and customer clearance. Materials generated in support of a government contract or study and intended for public release must be approved by the public affiars office of the government activity involved. Those approvals require six to eight weeks. The legal, security, contracts, and public relations departments are available to assist employees in the timely review and submission of material intended for public release;

-Forwarding of manuscripts/abstracts by the author(s) to the customer or agency responsible for granting clearance;

 Request for telephone calls or special correspondence to the customer to expedite clearance;

—Little or no understanding of the requirement for State Department approval for presentation of manuscripts outside of the continental U.S.:

—Program managers not screening abstracts/manuscripts administratively to eliminate discrepancies noted above. Following necessary company and customer procedures will ensure both the author's and the company's best interests are served. Questions on technical papers and articles should be directed to the public relations department, ext. 5364.

FIRE/SAFETY TIP:

Does anyone in your family have a speech or hearing impairment? T.T.Y. users have access to our communication center by dialing the regular emergency number on their T.T.Y.

"LITTLETON FIREFIGHTERS CARE" For information call 795-3701

August PSP values set

Unit values for the Performance Sharing Plan (PSP) as of August 31, 1984 (with July's figures in parentheses for comparison) were:

-FUND A (indexed equity) 2.3867578850 (2.1437691159);

-FUND B (fixed income)

1.9633488251 (1.9450113454);

-FUND C (Martin Marietta stock fund)

2.5711698493 (2.3148952243);

-FUND D (TRASOP)

1.0138633549 (0.9142652905).

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 that office and the department's information racks throughout the company.)

ALPINE — The Rocky Mountain Alpine Club's fall picnic and general membership meeting will begin at noon, Saturday, Sept., 29 in the South Turkey Creek picnic area (Barb Converse, ext 4748). Other upcoming events include: a ski equipment seminar, Friday, Oct. 5 and a preview of the club's 1984-85 slope activities (Gordon Voss, ext8109); and a guided trip through the scenic Roxborough State Park (Dan Hawkins 3518).

HUNTING/FISHING— Prospective members are welcome to attend the general meeting of the Skyline Hunting and Fishing Club in the Martin Marietta recreation area, beginning at 5 p.m., Monday, Oct. 8. The club also will be offering hunter education classes from 7-9:30 p.m. Oct. 9, 11, 16, 18, 23 and 25 at Denver Systems Center(DSC) (Dick Benson, ext 6209 or 985-3728, and recreation).

KARATE — All levels of Shotokanstyle karate instruction and development are offered by the Japan Karate Club of Littleton from 5-6 p.m. Wednesdays and Fridays at the Chatfield YMCA in the shopping center at the northeast corner of Ken Caryl and Pierce. Dues are \$30 a month (Allan Foster, ext 8458, and Bev Castro, ext 5055).

RADIO — The Waterton Amateur Radio Society's monthly meeting, beginning at 5 p.m., Tuesday, Oct. 2, is open to prospective members. The group will meet in the radio shack in the company's recreation area (Tom Fulton, ext 2888).

SKIING — The Satellite Ski Club's monthly meeting will begin at 6:30 p.m., Wednesday, Oct. 10 at the Gart Brothers Sports Castle, located on the corner of Broadway and 10th Avenue just off downtown Denver. There will be a ski clinic on what to look for in skis and boots, a ski machine demonstration and signups for various ski outings during December and January (Ski Phone, ext 3477).

TENNIS — The third annual "Weakend Hackers" tennis tournament will be held during two consecutive weekends — Oct. 13-14 and 20-21 at Arapahoe Community College. All entries must be in to the recreation department by Monday, Oct. 1.



The Sudsbusters are the 1984 champions of the Denver Aerospace Wednesday night competitive softball league. They took the crown with a 42-31 win over Orange Flush. Pictured, front row left to right: Pete Hauck, Tom Sarafin, John Barnes, Jimmy Christensen, Russ McQuilliams and Dan Bell; back row left to right: Ed Battiger, Clark Lawrence. John Kirar, Rick Labonville, Larry Redd and Terry Small. Rick Marlette and Bill Kiester were unavailable for the team picture.

Gourmets Choice offers 2 for 1 deal

Gourmets Choice, the dining program is offering a two-for-one membership deal and a discounted price to Martin Marietta employees.

The current year's program — valid through November 1985 — offers literally hundreds of free dinners and substantial discounts at more than 125 area restaurants for \$23.50 instead of the regular \$33.90 price. With the purchase of one membership under the two-for-one program the buyer receives a second membership card which may be used by anyone.

Gourmets Choice memberships are available through the recreation department or from volunteer recreation representatives throughout Denver Aerospace and Data Systems.

Credit Union Share Drafts — an alternative to checking accounts

The Red Rocks Federal Credit Union will be making share drafts available to members, beginning Oct. 1, as a possible substitute for checking accounts.

The only requirement would be a \$100 minimum balance be maintained in the individual's regular share account. The account holder would earn a 5½ percent dividend on that person's low monthly balance, paid monthly. There would be no monthly service charge, the only cost being the account holder's checks. Automatic payroll deduction would be available, and overdraft protection would be offered, upon qualifications.

The Credit Union recommends those interested in opening a share draft account schedule appointments through ext 6000 to avoid long waiting lines.



FIRE/SAFETY TIP:

Do you cut your own fire wood? Chain saws kill and maim thousands of people every year. Buy the saw that fits the job, wear protective clothing, and read and follow directions thoroughly.

"LITTLETON FIREFIGHTERS CARE" For information call 795-3701

On-site help available for alcohol, substance abuse problems

Public service announcements and commercial advertisements by treatment centers run throughout prime time and other television viewing periods throughout each day as a reminder of how serious alcohol and other substance abuse problems are today in this country.

The two major points most of those spots make are that substance abuse problems will not disappear just by ignoring them, and a person has to start somewhere for help.

Aerospace's local chapter of Alcoholics Anonymous, meets twice a week from 11 a.m. to noon Monday and Fridays in the quality circle conference room above the medical department on the first floor factory level. Detailed information is available from medical at mail stop, 1324, ext 4676.