

Civil Space Systems company formed

A new Civil Space Systems company has been established with William F. Ballhaus as its president, Astronautics Group President Peter B. Teets announced Nov. 21.

Space Systems will be renamed Defense Space Systems, and NASA programs from Space Systems and Strategic Systems will now be managed by Civil Space Systems. The new company also will seek new business in other U.S. government and commercial and international arenas.

"The new Civil Space Systems company will enable us to aggressively seek new business opportunities in the growing civil space market," Teets said. "We feel this organizational change will enable us to focus our energies on

providing current and potential customers effective program management and strong technical expertise. The company will pursue new technology opportunities at each of the NASA centers to position us for major program wins."

G. Thomas Marsh has been named Civil Space Systems vice president and deputy for operations, reporting to Ballhaus. Joseph C. Spencer will serve as vice president of business development and will continue temporarily in his role as Astronautics Group business development vice president. Noel W. Hinners will serve as vice president and chief scientist and Albert R. Schallmuller will serve as vice president and chief engineer.

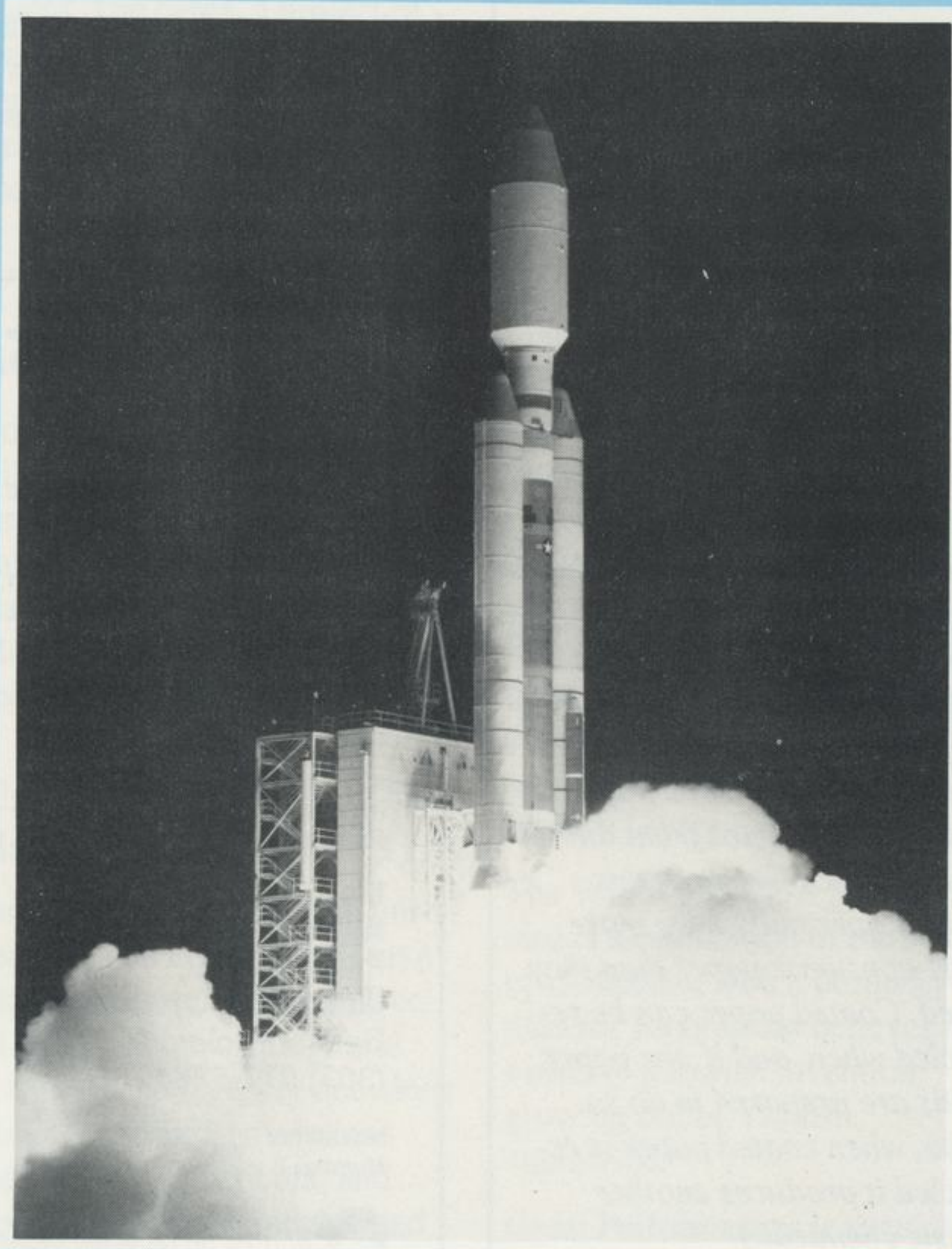
Thomas G. Reid will serve as general counsel for Civil Space Systems and Strategic Systems.

Other appointments include: John H. Bitzer, safety, reliability and quality assurance; Michael J. Davis, program control; Nancy L. Pendleton, human resources; James D. Porter, technical operations; Grant E. Williams, business management; and Alfred C. Wright, subcontract management and operations.

Program managers include: Theofanis G. Gavrilis for Flight Telerobotic Servicer; J. Franklin McKinney for Magellan; William E. Pipes for Transfer Orbit Stage; and Raymond F. Schwindt for Tethered Satellite System.

Other appointments will be announced later.

Titan continues success story



From 3 miles away at Cape Canaveral Air Force Station, Launch Complex 41 resembled a Christmas tree twinkling in the dark, starlit Florida night.

Anxious Martin Marietta employees, standing on water's edge, could barely hear the distant loudspeaker count down the final 10 seconds to launch. But once the rocket engines ignited, the Titan IV's flames illuminated the launch pad and the sky, revealing the enormity of the event. The roar, which followed seconds later, was no less impressive—sweeping through the night like a thousand locomotives.

Officially, the nation's largest, most powerful expendable launch vehicle, left the launch pad carrying a classified military payload at 5:37 p.m. MST on Nov. 12.

See Titan on page 2

Judge throws out Friendly Hills lawsuit

A lawsuit filed by some residents of the Friendly Hills subdivision against the Astronautics Group has been dismissed by a federal court judge who said the plaintiffs did not produce sufficient evidence to link their health problems to contamination from the main plant at Waterton.

"No reasonable juror could conclude that it was probable that plaintiffs were exposed to Waterton contaminants," said U.S. District Court Judge Zita Weinshienk in her ruling issued Nov. 9. Subject to an appeal, the ruling ends the nearly four-year-old suit, since the judge said it could not be refiled.

Bob McMullen, director of Environmental Management at Martin Marietta, told reporters at a news conference that while the company is "very sorry for

See Judge on page 4



Q: Why doesn't Martin Marietta provide day care assistance for its employees?

A: La Petite Academy offers a 10 percent discount to all Martin Marietta employees for pre-school and child care. The information racks contain a brochure with complete addresses and telephone numbers for La Petite Academy most convenient for you. Our Recreation Department has a pamphlet prepared by Arapahoe Community College, "Child Care Resource and Referral Network," that contains a rating chart to help determine the best day care facility for your child.

Q: Could Martin Marietta offer its employees the benefit of using pretax dollars for day care?

A: Benefits are centralized throughout the Corporation, so changes must go through the Executive Office. A feasibility study of a flexible benefits package was reviewed in the October 1990 Policy Board meeting. A decision was made not to implement day care at this time due to excessive costs to the Corporation and the probability of increased employee contributions. Corporate Compensation & Benefits will continue to study flexible benefits in 1991.

Q: Could Martin Marietta provide day care at or near the workplace?

A: Yes, the Astronautics Group could provide day care. However, current conditions at the three major work centers of the Astronautics Group and liabilities associated with day care centers do not allow implementation at this time.

Titan from page 1

It was the third Titan IV launched since June 1989, and the second this year. The Astronautics Group's Space Launch Systems is the U.S. Air Force's prime contractor and systems integrator for the Titan IV. The company builds the first and second stages of the vehicle and provides overall program management and launch services.

"This is another significant launch for America's space program," said Martin C. Faga, assistant secretary of the Air Force for Space. "The foundation of our mixed fleet space launch strategy strengthens with each successful launch.

"This is an exciting time for the national security space program. With our launch rate increasing, it won't be long before both East and West coast launch sites are busier than they've been in years," he said.

The upcoming year will bring more important milestones for

the Titan IV program, including the first launch from Vandenberg Air Force Base, Calif., the beginning of construction on a fourth Titan launch pad at Vandenberg, and the first Titan IV Centaur launch from Cape Canaveral.

From Cape Canaveral, a Titan IV is capable of placing about 40,000 pounds into low-Earth orbit or 10,000 pounds into geosynchronous orbit—22,300 miles above the Earth. From Vandenberg, a Titan IV can deliver up to 31,100 pounds into polar orbit.

The Titan IV launch system configurations include the Centaur Upper Stage, an Inertial Upper Stage, or no upper stage, depending on mission requirements. In 1992, upgraded three-segment solid rocket motors will increase the vehicle's payload capability by approximately 25 percent.

Initially conceived as a complement to the space shuttle, Titan IV received full development funding in the summer of 1985. Titan IV is now the nation's principal access to space for critical national security payloads. Major enhancements have been made to the initial Titan IV program to meet expanded user requirements.

LETTERS

WASHING OUR HANDS

All of the construction and remodeling at South Park is doing great things to improve our work environment. However, one thing is sure to be overlooked. Presently, we in South Park I must bring our own paper towels to clean up spills or to dust our desks. The Astronautics Group should be providing these for obvious reasons. Will the people in charge of this refurbishment wake up and provide paper towels and dispensers to help maintain our new office or should we resort to calling 7-HELP when we spill a cup of coffee?

Scott Campbell

(Editor's note: According to Penny Diebert, administrator,

Real Estate Management: "at present, there are no paper towel dispensers in either South Park West I or II. Electric hand dryers are in all restrooms and a supply of paper napkins are in each vending area. This is not a situation unique to the South Park buildings. Many Waterton buildings are equipped in the same manner. To ensure an adequate supply, paper products are available in all vending areas, (and) paper towel dispensers will be installed in each vending area.")

RECYCLING

The new Astronautics Group News looks good.

However, why is it published on glossy (i.e., non-recyclable paper)? Changing the paper to

plain white stock would allow all 19,500 copies to go into recycling bins instead of the trash.

Kathy Getz

(Editor's note: The glossy stock [also called coated or enameled paper] used for the newsletter is composed of 50 percent recycled paper, and right now is the only recycled paper available to the group. Post-consumer (inked paper) is not being collected from the Astronautics Group at this time. Paper mills have more post-consumer paper than they need. Coated paper can be recycled when, and if, the paper mills are prepared to do so. Also, when coated paper is recycled it produces another waste chemical.)

ASTRONAUTICS GROUP

NEWS

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Editor: Chris Chavez

Story ideas, letters to the editor, and questions are welcome and may be submitted to Public Relations.

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Spectrograph targets first celestial object

NASA's Hubble Space Telescope made its first observation Oct. 28 using the Faint Object Spectrograph (FOS) built by Space Systems.

The instrument, which analyzes the chemical composition of extremely distant celestial objects by capturing their visible and ultraviolet light rays, zeroed in on the quasar UM675, one of the oldest, most distant bodies in the universe. UM675 is billions of light years from our Milky Way and receding faster than eight-tenths of the speed of light.

Astronomer E. Margaret Burbidge, who led a team of University of California-San Diego astronomers in the investigation, said, "After the target acquisition was successfully carried out, and the first of the

three data sets appeared on the computer screen, the team and the control room personnel at Goddard (Space Flight Center) were all just ecstatic. We've waited a long time."

One of the astronomers' goals was to look for the spectral signature of helium in the far ultraviolet. Measurements in our Milky Way and other nearby galaxies show that helium is the second most abundant element in the universe. Yet, the amounts seem too great to be accounted for by nuclear fusion processes in stars, which transform hydrogen to helium. Scientists have postulated that most of the helium was made in the "big bang" that created the universe.

Burbidge said the strength of the helium signature in a far distant quasar such as UM675—the

light we see from it was emitted billions of years ago—will tell scientists about helium abundance in the early universe.

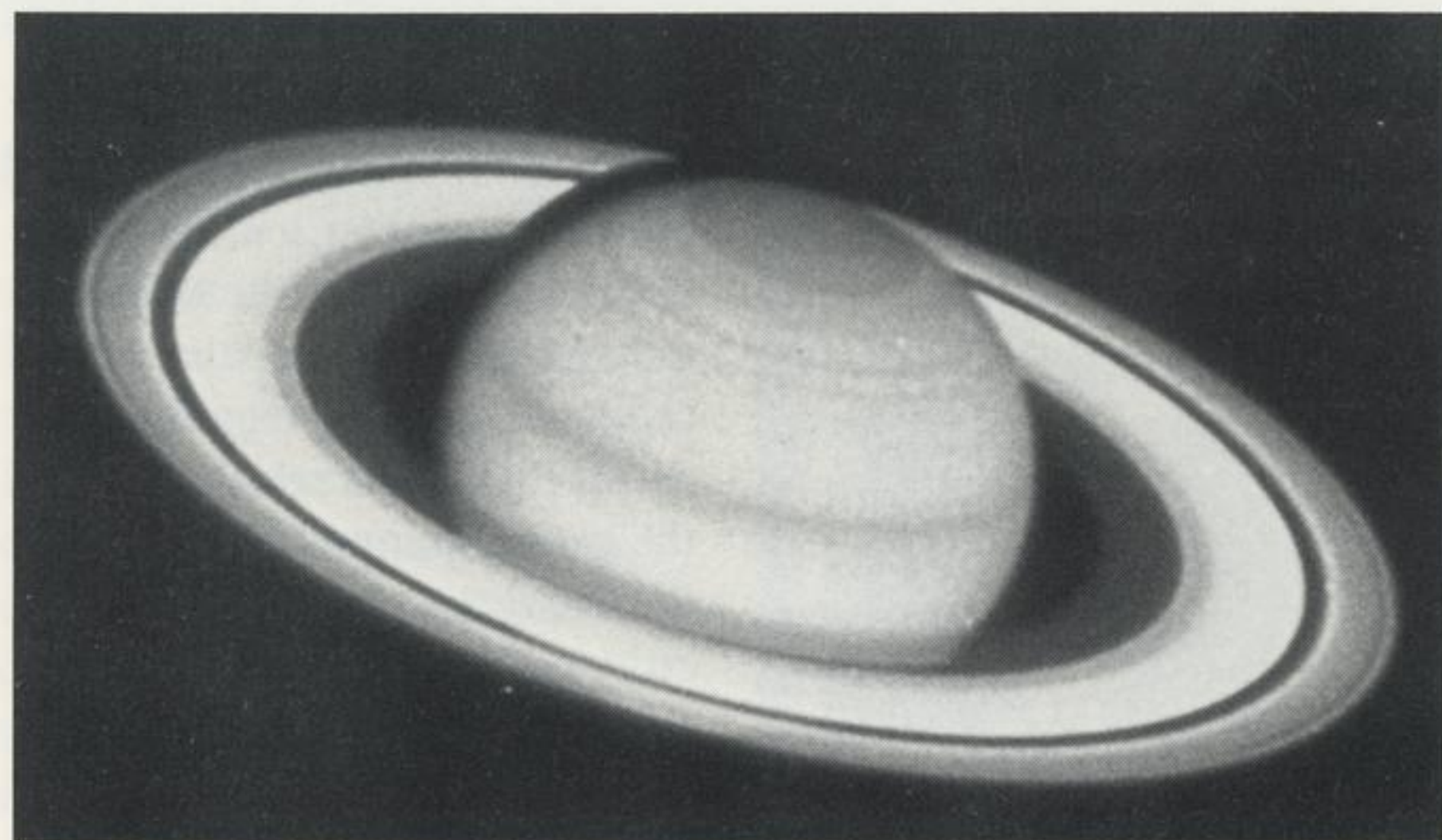
Quasars are enigmatic objects that pour out an intense energy, seemingly too bright to be produced from an object so compact. The physical processes that make this possible are still little understood nearly 30 years after the first quasars were discovered.

UM675 appears in visual light as a faint star-like object, some 6 million times fainter than the bright star Vega, which is visible to the naked eye. Because this quasar is moving away from Earth at enormous speed, its light—spread out into its component wavelengths by the spectrograph—is shifted far toward the red end of the spectrum. This

red shift is commonly attributed to the expansion of the universe.

This spectral shift allows the quasar's radiation in the near ultraviolet to be picked up by ground-based telescopes. However, the far ultraviolet radiation—which includes the main spectral lines produced by helium—can only be picked up by a large telescope operating above the Earth's atmospheric ozone, which obscures the ultraviolet.

Operational testing of the faint object spectrograph was completed in late October. The instrument's effectiveness is affected somewhat by Hubble's flawed mirror design, but its ability to capture and analyze ultraviolet light is expected to make it one of the workhorses of the telescope.



The Hubble Space Telescope's wide-field camera continues to snap photographs of Saturn with startling clarity. This photo was taken when the ringed planet was 860 million miles from Earth.

Hubble captures incredible photos of Saturn storm

The Hubble Space Telescope returned incredible pictures of a massive storm engulfing portions of Saturn with a great white cloud belt of frozen ammonia crystals billowing 150 miles high last week.

Saturn's "Great White Spot"—more than 10 times Earth's diameter—is racing eastward around the equator at 1,000 mph. Saturn's last storm

of this magnitude was spotted in 1933 and lasted 50 days.

Scientists are perplexed as to why the storms occur on Saturn, a caldron of liquid and gas with atmospheric pressures millions of times greater than Earth's. They do believe, however, that the current storm may be the largest atmospheric structure right now in the solar system outside of the sun.

Programs receive 100 percent award fees

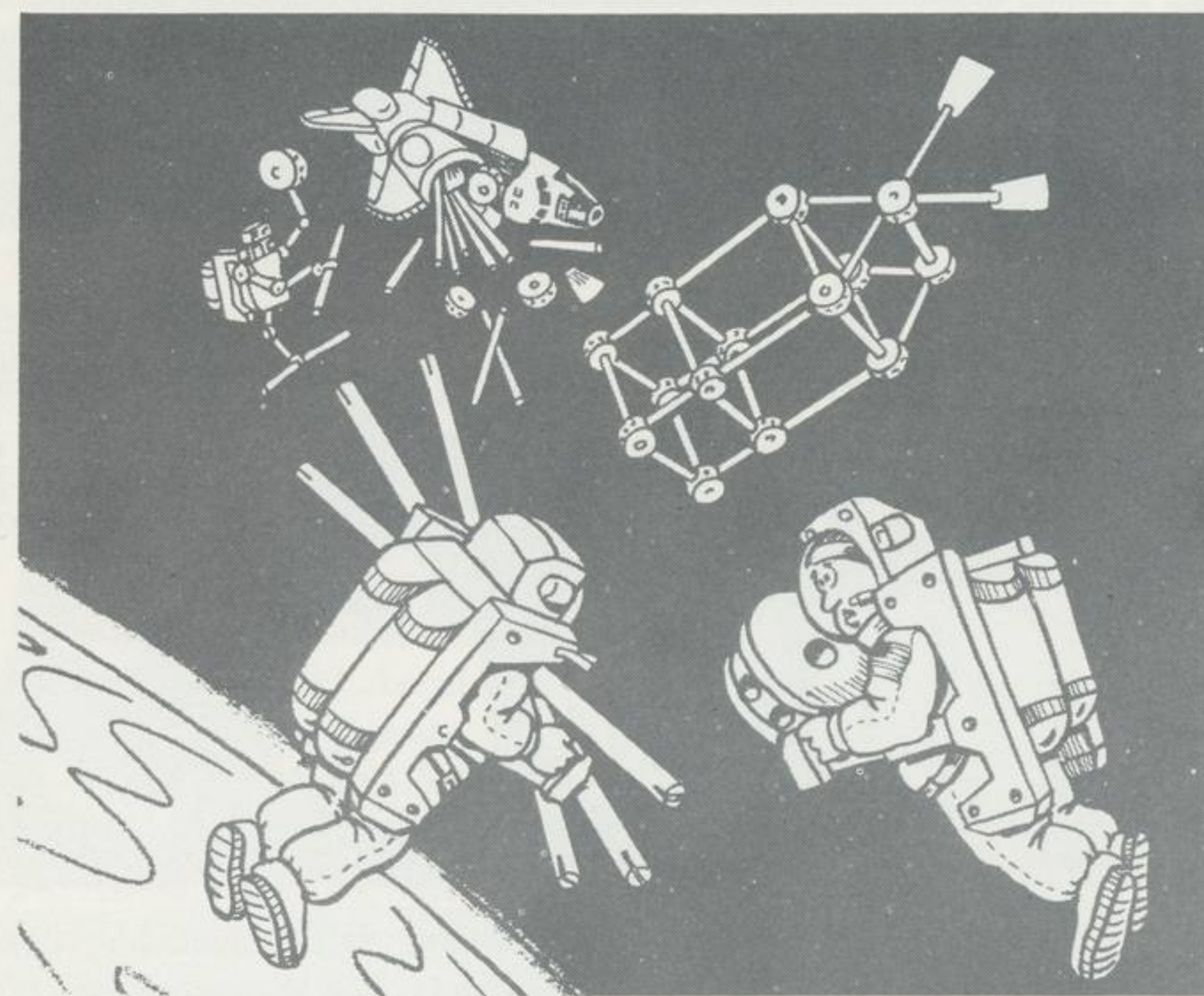
Two Astronautics Group companies scored 100 percent award fees for their programs.

Strategic Systems received a 100 percent award fee for its Peacekeeper launch support for the follow-on operation test and evaluation launches. Strategic Systems also achieved 100 per-

cent mission success on three Glory Trip launches while remaining ahead of schedule and under running its contract by \$900,000.

Space Systems also landed a 100 percent award fee for its space-based interceptor program.

Rocket Ranch



I think engineering schools are going too far with the "back to basics" thing!

United Auto Workers ratify new three-year contract

Judge from page 1

The United Auto Workers of America (UAW), which represents aerospace workers in Denver, Baltimore, and Orlando, approved a new three-year master agreement Nov. 11 with Martin Marietta.

The pact, which covers 1,175 hourly workers locally, received approval from 86.7 percent of union voters nationwide. Locally, the master agreement was approved by a vote of 616-150.

Astronautics Group President Peter B. Teets said, "I'm very pleased to see this contract ratified and happy that we can continue our important day-to-day jobs without interruption. Congratulations to everyone involved."

Under the new agreement, union workers in 1991 will receive a four percent average wage increase and a two percent lump sum payment for employees on

active payroll or approved leave of absence (\$500 minimum). Wages will increase an average of three percent the second year. A six-percent lump sum payment will be made in the final year of the plan.

In other provisions, the comprehensive indemnity medical program, which permits free choice of doctors, changed from a fully paid plan to a 20 percent copayment by employees on all covered costs. A Designated Provider Network, similar to the salaried plan, also has been added as an option for basic medical coverage.

Other major changes in the contract include:

- Each life insurance labor grade bracket will increase by \$2,000 (this includes cafeteria workers);
- Pensions will increase \$2 (per month, per year of serv-

ice) in each year of the contract;

- Holidays (38 days over the three-year contract) stay the same as under the previous contract;
- The maximum vacation bank was increased to 25 days.

Additionally, a Joint Employee Assistance program was agreed upon. The program will provide assistance to employees with alcohol and substance abuse problems.

On other issues, the local union and the Group agreed on combining 29 jobs into 12, which resulted in the upgrading of 68 employees. The total number of job classifications was reduced from 225 to 184. The major job combinations occurred in Machine Shop, Tooling, Maintenance/Material Moving, Quality Inspection, Transportation, and Reproduction.

anybody who suffers illness or disease . . . this ruling confirms what the company has maintained all along, that our activities have no connection with any of the illnesses in Friendly Hills, and there is no concern about chemicals from Martin Marietta in drinking water in Denver."

In reaching her opinion, the judge relied on reports from three independent experts appointed by the court. One of those experts said that conclusions reached by the plaintiffs' experts were not in accordance with good scientific practice and were unreliable because of the ". . . use of questionable assumptions that are not fully substantiated by fact; misrepresented facts; factual omissions; poor documentation; and flaws in methodology."

"...this ruling confirms what the company has maintained all along..."

—Bob McMullen

Another court-appointed expert said he found the opinion of Dr. Steven Piantadosi, a medical expert for the defense, to be quite impressive and "the most important study in regard to this case." Piantadosi concluded that the consumption of water from the Kassler water treatment facility did not show an increased risk of health problems, in accordance with accepted scientific methods of investigation.

McMullen said dismissal of the suit allows the company to devote its full attention to several proactive environmental initiatives currently underway, including waste minimization and conservation efforts, and to cleanup of contamination from past activities at the Main Plant.

McMullen emphasized that the company will continue to devote the resources and management attention necessary to ensure that it meets its responsibility, both to employees and the community at large, and to conduct business operations in a manner that protects and enhances the environment.



Employees honored for 30 years of service are, standing, left to right: Norm Chavez, James Josephson, Bob Moser, Cecil Shumacher, Neil Butterfield, Gus Perkins, and Jim Berry. Seated, left to right: Joe Wathen, Cliff Casey, Norma Emerson, Bob Laughead, and Bob Thompson.



Other employees honored include, standing, left to right: Lloyd Thayne, John Walker, Fuji Fujino, Keith Wanklyn, Gary Flora, Thomas Lyons, Bob Weaver, Rich Toland, and Ira Holton. Seated, left to right: Ed Phillips, Esther Castro, Lynn Collier, Stella Rivas, and Jane Childs.



Michael Campbell, left, explains the automatic welding system at the new Launch Systems Technology Test Bed Facility at Waterton to Joseph Marcus, center, Space Launch Systems director of Manufacturing, and General Donald Kutyna, right, commander in chief of the North American Air Defense Command, and the U.S. Space Command. Kutyna, along with Astronautics Group President Peter B. Teets, dedicated the \$12.3 million building, which will be used to develop new technologies for advanced and current launch systems.

"Martin has been the leader in launch vehicles ever since I've been in the business," Kutyna said during the ribbon cutting ceremony. "Had it not been for [Martin Marietta] we would not have the launch vehicles we have today. And I can see today that Martin Marietta is taking the lead with this new facility. I could not be prouder than to help you cut the ribbon today."

Corporation goes smoke-free Jan. 1

On Jan. 1, 1991, the Astronautics Group will join the rest of the Corporation in implementing a smoke-free workplace. Thereafter, no smoking will be permitted inside any Astronautics Group buildings or vehicles. Smoking will be permitted in designated, outside smoking areas established by the Facilities department.

The new policy will be enforced by Standard Procedure 2.7 under Employee Conduct. Employees who fail to abide by the policy will be subject to disciplinary action.

Smoking cessation classes will continue to be offered free-of-charge to employees and their dependents. Call Employee Services at Ext. 7-6605 for the schedule and location of these classes.

Also, visitors to Group facilities, customers, and suppliers, will be notified of the smoke-free policy when they receive their visitor badges.

SURGE/CATECS information day set for December 4

An information day for individuals interested in the Center for Advanced Training in Engineering and Computer Science (CATECS) and State University Resources in Graduate Education (SURGE) on-site master's degree programs will be held Dec. 4 at the Deer Creek auditorium (9:30-10:30 a.m.), Waterton Executive Dining Room (12:30-1:30 p.m.), and South Park West 3 MIC Room (2:30-3:30 p.m.).

Holiday closure announced

The Astronautics Group will be closed from December 22 through January 1, 1991 for the Christmas holidays.

Composites team reduces Titan costs, weight

An Independent Research and Development manufacturing and engineering team realized its goal of reducing Titan vehicle weight and manufacturing costs when the first full-scale composite skirt and payload adapter were removed from fabrication tooling this fall.

Since February 1988, the team has studied the feasibility of using composites on the Titan family of launch vehicles to reduce vehicle weight and manufacturing costs. Using

composites instead of conventional aluminum skin stringer construction has resulted in a 71 percent reduction in parts, a 23 percent reduction in weight, and a 37 percent reduction in cost, according to Ed Rodriguez, principal investigator for the IR&D team.

In a little over two years, the team designed and built a Titan II 2X/2A skirt and payload adapter as a first application of composites using IR&D resources. The structure is fabri-

cated out of graphite epoxy fibers for the inner and outer face sheets and with an aluminum honeycomb core.

The technology developed under this IR&D project has been transferred to the Titan IV program, where the new IUS adapter is being constructed with the same materials and processes. Future application of this technology is being investigated by the Titan II, Titan IV, and Advanced Launch Systems programs.

Command Media hosts first industrywide symposium

Representatives from more than 20 aerospace command media departments met at the Deer Creek Facility Nov. 7-9 for the first industrywide symposium to address issues of documenting company policies and procedures, as well as related government regulations.

The symposium, hosted by the Astronautics Group Command

Media department, included presentations on reducing and streamlining documentation, developing online documentation, using professional technical communicators to develop documentation, and establishing a command media committee within the industry to continue to address documentation issues. Other companies attending the

symposium included representatives from divisions of Hughes Aircraft, Northrop, Lockheed, Sunstrand, McDonnell Douglas, the Jet Propulsion Laboratory, Boeing, Rockwell, Loral, Motorola, Canadair, Aerojet, E&S Corporation, General Electric Aircraft Engines, and Anderson Consulting.

Reminder: Christmas is no exception to ethics code

Accepting gifts, invitations, or other gratuities from suppliers during the holiday season is against Corporation policy, according to George Sammet Jr., vice president, Corporate Ethics.

The Martin Marietta Code of Ethics and Standards of Conduct, states: "Martin Marietta personnel are not permitted to accept gifts from individuals, firms, or representatives of firms who have or seek business relationships with Martin Marietta."

"If the past is a good indicator, we can expect many invitations from suppliers to attend Christmas parties of various kinds," Sammet said "Our policy is to courteously decline to participate. This policy is for all employees, not just procurement."

The code also states that "federal, state, and local government departments and agencies have regulations concerning acceptance by their employees of entertainment, meals, and gifts from firms and persons with whom the departments and

agencies do business or over whom they have regulatory authority. Martin Marietta employees may not give, or offer to give, to such government employees any entertainment, meal, or gift regardless of value."

Both the Astronautics Group ethics office and the corporate ethics office are available to answer questions about the Code of Ethics. The Group's office may be reached at Ext. 7-4530, while the corporate office numbers are 1-800-338-4427 or MARCALL 356-9400.

PSP made more attractive with new features

New employees no longer have to wait until the January or July after completing six months of service to join the Performance Sharing Plan (PSP). That's just one of the improvements that will be made to the Plan on Dec. 1, 1990.

Besides reducing the waiting period for new participants, the Plan will expand in-service withdrawal provisions, add flexibility for retirees, and improve Plan administration and communications.

Letters explaining the new features already have been sent to employees and an updated summary plan description booklet will be available early next year.

Eligible employees are encouraged to join the Plan. Plan members can change their current contribution levels and investment choices.

Seminars show how to cope in smoke-free environment

Are you concerned about how you, as a smoker, will cope when the company becomes smoke-free on January 1st?

Attend a helpful, 50-minute seminar, and find out how employees who smoke, and work for companies such as Blue Cross/Blue Shield, U.S. West, and Manville Corp., have learned to adapt to a smoke-free worksite.

This seminar is not a stop-smoking class. *It is an opportunity for employees to develop effective strategies and prepare themselves mentally and physically for January 1, 1991, when Martin Marietta becomes smoke-free.*

Employees are encouraged to bring their lunch to any of the following places:

- Dec. 3, Deer Creek—Skylab Room, 12:00-12:50
- Dec. 4, LSC—Room 107, 12:00-12:50
- Dec. 5, Waterton—SSB—Sixth Fl., 11:00-11:50
- Dec. 5, Eng. Bldg.—CIC Room—First Fl., 12:00-12:50

Services and Recreation

Waterton Amateur Radio Society—All hams and those interested in learning more about amateur radio are invited to attend the meeting and end-of-year holiday party at 5 p.m. Tuesday, Dec. 4, in the recreation area's ham shack. For more information, call Tony Kehayas at Ext. 7-2013.

Hunting and Fishing—The group will meet at 5 p.m. Monday, Dec. 10, in the recreation area's clubhouse. Call Mel Smith at Ext. 1-8682 for more information.

Fathom Dive Club—Members and guests will meet at 6 p.m. for a potluck dinner followed by a meeting and program at 6:30 p.m. Monday,

Dec. 10, at Greenwood Point Clubhouse, 5324 S. Broadway Circle, Englewood. Christmas party plans and 1991 trip plans will be discussed. For more information, call Wayne Cox at Ext. 7-6800 or Kristy Allison at Ext. 1-2265. Scuba diving lessons are available at a discount to employees and their families by contacting Ms. Allison.

Commodore Users Group—Members and interested employees will meet at 5 p.m. Tuesday, Dec. 18, in the clubhouse on the west side of the recreation area. Meetings of the C-64/128 and Amiga SIGs will follow the group session. The MMCUG has a large

C-64/128 and Amiga software library and Commodore computer hardware available to club members. For more details, call Stan Lindholm at Ext. 7-3618 or Roy Kannady at Ext. 1-8569.



Satellite Ski Club—The group will meet at 7 p.m. Wednesday, Dec. 12. See the recreation racks for a flyer announcing the location. There will be sign-ups for Steamboat, Aspen,

Utah, and Jackson Hole trips. ASA cards are available through Roy Cornwell (Ext. 1-1247) and Gold C books can be obtained through Paula Pinkley (Ext. 7-7868). For more information, call Jim Harris at Ext. 1-9653 or Bob Foglia at Ext. 7-7122.

Red Rock Bowmen—Interested employees and club members will meet at 4:45 p.m. Tuesday, Dec. 11, in the clubhouse at the recreation area. Prospective members are encouraged to attend and join the club. For more information, call Dave Unruh at Ext. 7-0477 or Mark Lyons at Ext. 7-5722.

Around Astronautics



Engineers honored for technical insight

Two Canaveral Operations engineers were honored by Martin Marietta for uncovering a latent procedural error that could have caused a start-up failure of the Titan IV engines.

Gerald Moskovitz, a lead propulsion engineer, and Gerald Geeser, a flight safety lead systems engineer, uncovered the potential problem during prelaunch testing of the Titan IV engine procedures at Cape Canaveral Air Force Station. Moskovitz and Geeser took their concern to Titan IV managers who implemented the changes to correct the problem.

Cards sent overseas to Colorado Troops

Over 1,700 Seasons Greetings cards were mailed Nov. 20 to Colorado military units deployed for Operation Desert Shield. The cards, a project of the Security, Safety, and Health department, contained personalized notes written by employees and family members.

YES offers special holiday sales

Your Employee Store (YES) will host holiday vendor sales through the holiday season. Sales will feature jewelry, plants, toys, fine leather apparel, Monte Blanc and Parker pens, and novelty gifts.

University Visitation Day slated for December 11

Representatives from area universities and colleges will visit Martin Marietta Tuesday, Dec. 11, to distribute catalogs and schedules, and answer questions about eligibility, admissions requirements, curricula, and policies for undergraduate and graduate study.

Counselors will meet from 9-11:30 a.m. in the Deer Creek auditorium, and from 2-4 p.m. in the Engineering Building's second floor cafeteria.

Astronautics Group employees who are interested in continuing their education under company auspices or who are currently enrolled in a program are invited to attend.

For more information, call Patty Bairn at Ext. 7-3736, or Bette Wooster at Ext. 7-4050.



Joan Rivers

Billy Crystal, Joan Rivers headline next "Great Performances"

Billy Crystal, Milton Berle, and Joan Rivers headline "The World of Jewish Humor" tonight from 7-8:30 p.m. MST on Great Performances (check local PBS listings). Jackie Mason, Neil Simon, and Carl Reiner also will be on hand for Rex Bloomstein's performance-documentary tracing the evolution of the popular art form born in New York's turn-of-the-century Lower East Side.

The World of Jewish Humor also is a celebration of the stand-up comedian, which producer-director Bloomstein believes is virtually a Jewish invention, growing out of Yiddish vaudeville.

Great Performances is partially funded by Martin Marietta.

Nominations being accepted for Heart Mother of the Year

Nominations for the 1991 Heart Mother of the Year are now being accepted by the American Heart Association of Colorado, Inc. Candidates must have suffered from some form of cardiovascular disease, be a Colorado resident, and be active in her home and community since her recovery.



Nominations must be received by Priscilla Serafin, PR Director, American Heart Association (1280 South Parker Road, Denver, CO., 80231) by Dec. 15.

CMS moves to South Park

The Astronautics Group Classified Mail Service (CMS) has been relocated to South Park West I, Room 88B, to accommodate the large volume of internal and external classified transmissions for the Titan IV program.

Programs requiring delivery of classified materials will be provided classified courier services to the CMS by coordinating with their on-site mailroom personnel.

For more information, call Rich Sorensen at Ext. 7-0499.

Group donates honor scholarship to Indian engineering student

The Astronautics Group recently contributed \$1,000 to a University of Colorado-Boulder student in conjunction with the American Indian Science & Engineering Society scholarship program.

Clifford Canku, a junior with a double major in aerospace and

computer science engineering, will receive \$500 per semester.

Other outstanding American Indian students received scholarship awards Nov. 9 during the AISES annual conference in Buffalo, N.Y.

JAS information now available in new format

All Job Availability System (JAS) information and materials now can be found in a single package in JAS information racks at all facilities. Resource centers with notebooks no longer are being used.

The new packages include instructions about when and how to apply for an open job position, an application form and a complete job listing.

A revised handbook is available through Human Resources or by calling JAS Control at Ext. 7-1003.

Security begins X-raying all mail and packages

The Astronautics Group will begin x-raying all incoming mail and packages received through shipping by the end of the year.

One x-ray machine will be located at the LSC mail room, while another will be installed at Waterton's Shipping and Receiving Dock No. 5. Two other machines will be located at Vandenberg and Cape Canaveral.

Procedures are being established under which all incoming materials will be subject to opening and search.

The x-ray screening machines will be used to help ensure the safety and health of employees, resident subcontractors, and government personnel.

For more information, call Chester Kittrell at Ext. 1-4942.

...lawsuit built on fear, not science

US. District Judge Zita Weinshienk waited much too long, but arrived at the right decision last week in throwing out a suit filed by residents of the Friendly Hills subdivision against Martin Marietta and the Denver Water Board.

She would have done everyone a favor if she had acted earlier.

The only people who benefited from the delay were the lawyers who kept their fee meters running for almost four years.

The plaintiffs, despite being offered every opportunity to prove their allegations were worthy of being heard by a jury, in the end failed to do so.

The evidence was wispy from the beginning and was made to seem plausible only by press treatment that predictably focused on the sensational—allegations that four cancer cases in Friendly Hills children and assorted maladies and conditions affecting more than a half-dozen others—were somehow traceable to rocket fuel (hydrazine) waste that was discharged into a southwest Denver stream by Martin Marietta's Waterton Canyon plant.

In the wake of the judge's ruling, Adrienne Anderson, whose inflated title is western director of the National Toxics Campaign, issued a statement that predictably tried to keep the blame on Martin Marietta, which she accused of destroying evidence that otherwise would have won the case for the Friendly Hills neighbors. Anderson went on to suggest that the judge was unreasonably requiring the plaintiffs to do their own "public health investigation into dumping practices of companies."

This is merely the latest outrageous attempt by Anderson to divert the public's attention from where it ought to be: on the obvious flaws in the case, which led to its dismissal. She would prefer, naturally, to direct public attention to yet new possibilities that major corporations are out to poison the public, aided by inept agencies, which are nowhere as alert and skilled as, say for example, the National Toxics Campaign.

To judge from Anderson and other hysterics, the only safe haven from death-dealing corporations is indoors, breathing filtered air and living on bottled water.

The Martin case was only one of Anderson's projects. Alas, she will not now be idle, since she serves as self-appointed full-time adviser to the U.S. Army at the Rocky Mountain Arsenal, and also has done work stirring up fear over the Asarco Smelter in Globeville. At both locations,

she has had the same problem she had with the Martin case: There is no shortage of emotion and fear, but some paucity of demonstrated health threats. She and her organization will make them stretch.

But before the Martin case is put away forever, it is worth making just a couple of quick points that have become distorted during the long history of the court proceeding.

✓ The Kassler Water Treatment Plant of the Denver Water Board was closed at the end of 1985, but not because it had become contaminated by waste from the Martin plant. The larger Foothills treatment plant was in operation, and Kassler, one of the oldest city plants, no longer was needed.

Weinshienk herself contributed to the misinformation. Her dismissal order is plainly in error when she says, "In January, 1985, the Colorado Department of Health discovered TCE in water being treated at Kassler. Kassler was immediately closed due to toxic contamination and has not reopened." Wrong. A barely detectable amount of the industrial solvent was found as early as 1984 in a shallow well collection system that was a part of the Kassler plant, and the well system was immediately shut down. The main plant continued to operate and finally was closed for other reasons. There is no record that the output of the main plant was contaminated.

✓ The main intake to the Kassler plant was four miles upstream on the Platte River from Martin's discharges into Brush Creek, and it was unaffected by them. The judge has this point confused as well. She writes, Brush Creek "also was one of the primary sources from which Kassler obtained its water. A second primary source from which Kassler obtained its water was alluvial ground water, much of which either originated in or passed through the Waterton property." What utter nonsense! Brush Creek is a small stream and its total annual flow would have amounted to no more than a tiny fraction of plant's treated water volume. This water did not reach the plant.

As for the ground water that was captured by the shallow well system, much of it came from the plant's sand filtration system and was recaptured by the well system. The vast majority of the plant's water came from the water intakes upstream on the Platte River.

✓ Martin since has expanded its waste-treatment facilities and the unscheduled discharges caused by an overloaded treatment plant

no longer occur. Weinshienk's order talks of "massive contamination" on Martin's property, which is well-documented, but that should not be interpreted to mean the judge found "massive contamination" of the municipal water plant or its product. The issues are not interchangeable.

✓ Water Department records showed that even if the plaintiffs had proved contamination of the stream, and in turn contamination of the shallow well system, and in turn contamination of the larger volumes of water being treated from upstream at Kassler, they still had a problem. Friendly Hills families got very little of Kassler's water.

✓ A court-appointed expert found that the scientific models submitted by the plaintiffs designed to show how much hydrazine arrived at the shallow well system were unreliable.

The expert found, for example, that the plaintiffs had calculated the rate at which pollutants would travel underground based on the speed of the water in the creek. The expert found that instead of four hours travel time, the correct rate for ground water contamination was actually 16 years.

In another miscalculation, the plaintiffs failed to take into account the effect normal water treatment would have had on hydrazine, reducing it by over half.

✓ Evidence linking the cancers and other medical conditions of Friendly Hills residents to the water was initially almost laughably vague, and didn't improve much with age.

A court-appointed expert, evaluating the evidence, concluded, "it is unlikely that any of the diseases in these patients are related to exposure to hydrazine or its derivatives."

Essentially the expert found that such a wide variety of conditions couldn't be linked to a single cause.

It was these final two points that led the judge to dismiss the case. Plaintiffs simply were unable to show that there was a cause and effect relationship between the practices at Martin and the deaths and illnesses of Friendly Hills residents.

The threat to public health by corporate practices may in some cases be real.

But the history of the Martin case illustrates that the issues are almost always quite complex.

Unfortunately, that creates a rich opportunity for fear merchants, like Anderson, whose message is always quite simple but—as in this case—quite wrong.

This Denver Post editorial piece entitled, "Martin lawsuit built on fear, not science," by Al Knight, Post Perspective Editor, appeared Nov. 18, 1990, and is reprinted by permission.