Energy Systems at Portsmouth

A Monthly Newspaper for Portsmouth Gaseous Diffusion Plant Employees of Martin Marietta Energy Systems, Inc.

Volume 4 Piketon, Ohio September-October 1989 Number 9

Photograph entry deadline Nov. 30

Get out your cameras and enter the Fifth Portsmouth Plant Employee Photo Contest! It's OPEN category (life in Southern Ohio), with a deadline for entries of Thursday, November 30.

Judging will be conducted by a panel of experts.

Awards for entries are a \$100 Savings Bond for first place, a \$75 Savings Bond for second place, and a \$50 Savings Bond for the third place entry.

Subjects must relate to life in Southern Ohio (historic sites, landmarks, wildlife, wild animals, birds and domestic pets, etc.).

Those eligible include Portsmouth plant employees and retirees.

Entrants must submit a 35mm or larger color negative, accompanied by the photograph, or a 35mm or larger slide.

Entries are to be submitted to Cathy Williams, Public Relations, MS 1118-A, X-100 Building. The entrant's name, department number, telephone extension, mail stop and a description of the photograph must accompany each entry. Only five entries per employee/retiree will be accepted.

Approximately 15 entries will be selected (including first, second, and third place) for enlargement and later added to the gallery of existing photographs in conference rooms and hallways throughout plantsite.



Portsmouth plant employees enthusiastically supported "Clean Up!" day activities Sept. 8 by identifying and disposing of more than 475 tons of trash and excess items in the plant's sanitary landfill, storage yards and other appropriate areas. This 32-hour massive effort began at 12:01 a.m. Sept. 8, focusing employee attention to the re-

quirement of good housekeeping along with overall general cleaning of the facility. During the day plus eight hours, the pile of trash above accumulated for disposition outside the X-720 Building. Engineering division personnel in the X-100 Building (lower left) dropped excess items down the trash chute near the service elevator.

Workforce participates in 32-hour "Clean Up!" Day to identify and dispose of wastes and scrap materials

Truck after truck carrying more than 475 tons of trash and excess items traveled the roads to the sanitary landfill, storage yards and other appropriate areas.

Normal operations at the Portsmouth Plant had ceased at 12:01 a.m., Friday, Sept. 8, and for the next 32 hours the work force participated in a massive campaign to identify and dispose of both sanitary wastes and contaminated scrap materials.

The intent of the plant-wide effort was to focus employee attention to the requirement of housekeeping along with overall general cleaning of the facility.

No process cell work, onstream or offstream, or other production activities were scheduled.

"Clean Up!" Day demonstrated the commitment of plant employees to house-keeping and maintaining a safe environment, and was endorsed by John Shoemaker, Director Site Operations; Tom Douglas, President UPGWA Local 66; and John Knauff, President OCAW Local 3-689 through a memorandum to all employees.

"It was a tremendous success and accomplished without incident or personal injury," stated Ralph Nolfi, Superintendent, Maintenance Engineering & Services, at a "lessons learned" activity in the cafeteria Sept. 21.

Plant employees were asked to take the time to straighten their respective areas (even if it meant an entire shift would be dedicated to cleanup activities) without imposing upon other job classifications.

Work areas included the space in and around assigned equipment, locker rooms,

and restrooms, office areas, walkways, parking lots and other company property.

"We were willing to shut down for a period of time and it paid off, said Ralph Donnelly, Plant Manager.

"Everyone worked together for a common goal,"

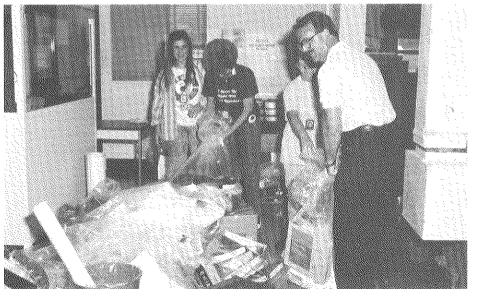
Because time, circumstances, and rules have changed the way the nuclear industry is perceived, and housekeeping is the most controllable and visible way in which the Portsmouth plant conveys to the community and visitors that it cares, Donnelly stressed housekeeping to employees at the most recent Plant Manager's "Update" Sessions.

You are encouraged to practice excellence in housekeeping by:

- keeping your area clean and orderly
- correcting unsightly/unsafe conditions
- informing supervision if special effort is needed to correct an existing condition.

HOTLINE

To report fraud, waste or abuse, unethical activities, or concerns about security, quality, environmental, safety or health hazards, call the PORTS Energy Systems Internal Audit Hotline 24 hours a day on extension 2401.



Various methods and practices initiated

Uranium cylinder lift heights continue to be lowered

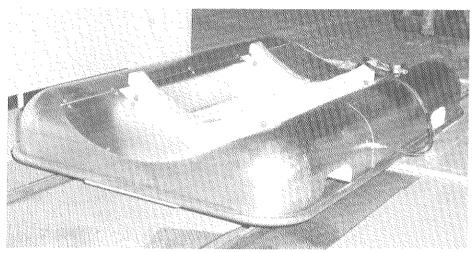
By Harold Kneeland

Improvements continue to be made to further enhance employee safety and to minimize the potential hazards associated with moving cylinders containing uranium hexafluoride (UF6) particularly when in a liquid state.

Safety enhancement actions that have taken place include the evaluation by

MMES personnel and consultants of operating practices, equipment and facilities with respect to UF6 cylinder handling, the completion of additions and modifications to existing equipment and facilities, and the initiation of engineering projects to enhance UF6 cylinder handling safety.

The primary focus of the initial cylinder lift height activities was on the X-344 facil-



A prototype low-profile air cart capable of moving 14-ton cylinders at a height of only 18 inches is undergoing testing at Portsmouth and Paducah as a replacement for existing cylinder carts. Improvements continue to minimize the potential hazards associated with moving cylinders containing liquid uranium hexafluoride (UF6).

ity due to the physical arrangement of the UF6 cylinder heating autoclaves in this facility. Modifications were made to the existing cranes including a more reliable radio control system, a redesigned cylinder lifting fixture and increased redundancy features to the lifting system which help insure the safe operation of the cranes. The sampling of full UF6 product cylinders was relocated to the X-343 facility where the cylinder lift heights are considerably less than those at the X-344 facility. A project was initiated to provide for more liquid UF6 cylinder storage space by constructing a cylinder staging or storage area on the west side of the facility. The existing crane rails will be lengthened to access this storage area. With the addition of this storage space, clear paths for liquid UF6 cylinder movements can be maintained.

Among the more exotic items to be completed is the final check out of a prototype low profile aircart (see photo). The sleek, streamlined aircart is capable of moving 14 ton cylinders at a height of only 18 inches above the floor level. The air powered cart has undergone testing and final check

out at PORTS and is currently undergoing testing at Paducah where it will also be used as a replacement for existing cylinder carts.

Modified Paducah cylinder chocks will be used for cylinders containing liquid UF6. These new cylinder chocks are designed to help absorb the force of a dropped cylinder by the manner in which they collapse on cylinder impact.

A feasibility study by Lockwood Green engineering consultants to determine the best alternative to establish a constant UF6 cylinder lift height at the X-330 Tails Facility has been completed and submitted to DOE for approval. This study explores the various options available to improve the handling of liquid UF6 cylinders at the U-330 Tails Facility. The action to be taken is to be determined by DOE.

With the improvements noted above and improvements to the crane radio control systems at the X-343 Feed Vaporization Facility and X-333 Law Facility, the potential for an incident involving a liquid UF6 cylinder has been substantially reduced at PORTS.

Energy Systems Values-

(Editor's Note: The following is the fifth in a series of articles defining the content and intent of the Energy Systems Missions and Values Statement, composed in 1988. Energy Systems President Clyde Hopkins solicits input from employees who wish to add their comments to his own. Comments may be addressed to Charlie Emery, deputy director of Personnel and Organizational Development, at M/S 8015, Building 9704-2, at the Y-12 Plant. Some commentary may be exerpted for publication in Energy Systems at Portsmouth.)

Working Together

 Be good neighbors and participate in improving the quality of life in the communities around us.

Energy Systems facilities at Piketon, Paducah and Oak Ridge are important members of the corporate community in that each is a principal employer in its area. Indeed, the city of Oak Ridge did not exist until the World War II Manhattan Project brought it to life.

Consequently, we feel a strong commitment to support educational, humanitarian and cultural endeavors in our communities and to contribute to the overall well-being of our "neighborhood" in the same way that we as individuals might do on the streets where our homes are located.

Visible signs of our support for the community include educational programs such as partnerships with local school systems, our speakers' bureau, scholarship programs, summer seminars for students and educators, and internships for college students.

We conduct an active and effective United Way campaign each year with outstanding results in contributions to community aid programs. Pledges for the drives now total more than \$1 million annually at all five sites.

Our two-for-one matching gifts program enables our employees to support the educational and cultural institutions they value at higher levels than they as individuals would find possible, and the corporate gifts and grants program provides short-term and long-term support for other worthy community activities, agencies and organizations.

In addition to providing financial assistance, Energy Systems participates in community endeavors by recruiting from among its employees volunteers to provide time and services in the interest of community needs. Hundreds of our employees hold leadership positions in service and professional organizations that have far-reaching effects on the surrounding areas, and each year we recognize these accomplishments in presenting awards for community service to outstanding civic-minded employees.

As members of the business community, our need for goods and services outside the realm of what we produce provides opportunities for smaller companies to work with us through research and development, construction and other procurement programs.

Procurement dollars spent by all five Energy Systems facilities in 1988 were about \$517 million. Much of this was for goods and services from companies in the immediate Oak Ridge, Paducah and Portsmouth areas.

Through our award-winning Socioeconomic Programs we also seek opportunities to work with small companies and businesses owned by minorities and women.

These are not passive efforts. We do truly seek, in all of our outreach programs, to find ways to become better and better neighbors in the communities where



Clyde Hopkins

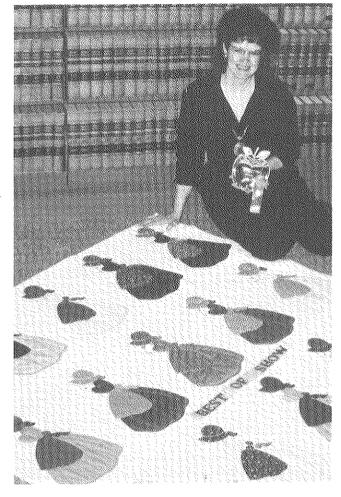
we operate. In this commitment we are not just paying lip service to the concept of community involvement, we are contributing tangibly to the world around us.

Why focus so much effort outside the company? The nature of our work is such that we attract a very high calibre of employee. Our research, technical and manufacturing endeavors require that we employ highly skilled and well-educated individuals who expect to be able to find the best for themselves and their families in the communities where they live.

Thus, everything we do to improve the quality of life in our neighborhood is of benefit both to our friends and neighbors and to our own families. I think that is a noble goal and a high purpose for any company to have, and it is certainly an important element in our values.

Penn submits local festival's "Best of Show"

Donna Penn's "Colonial Girls" applique quilt took "Best of Show" honors at the Jackson County Apple Festival Quilt, Colonial Needle Art and Floral Exhibit Sept. 20-23. Her quilt was deemed "the best" by a panel of independent judges from Pomeroy.



Progressions & Promotions

William C. Masters, from Maintenance Coordinator (D-701) to Technologist Technical Division, Sr. (D-552).

Randall W. Smith, from Locksmith (D-901) to Technical Assistant II (D-910).

Tina M. Schuller, from Clerk II (D-332) to Word Processor II (D-451).

Myrtle L. Workman, from Mail Clerk to Document Control Clerk II (D-451).

Dorothy K. Davis, from Stenographer II (D-321) to Secretary II (D-510).

Karen L. Hollback, from Secretary II (D-510) to Administrative Aide I (D-102).

Jerri L. Nelson, from Maintenance Clerk II (D-726) to Maintenance Planner

Karin N. Foster, from Technical Assistant III to Technologist Technical Division, Staff (D-511).

Virginia L. Casteel, from Clerk II (D-932) to Accounting Clerk II (D-477).

Alan L. Shultz, from Technical Assistant III to Technician Specialist I (D-512).

Paul T. Davis, from Designer to Engineering Technologist, STaff (D-741).

Mary M. Homerosky, from Programmer, Staff, to Programmer, Sr. (D-447).

Stephen D. Wamsley, from Technician Specialist II (D-532) to Technologist, Technical Division, Staff (D-522).

Roger L. Stephenson, from Industrial Hygienist I to Industrial Hygienist II (D-102).

Harris C. Cooke, from Instrument Mechanic 1/C (D-712) to Operations Systems Technologist, Staff (D-832).

Gary D. Coriell, from Chemical Operator to Operations Systems Technologist, Staff (D-823).

Gerald D. Quillen, from Production Process Operator to Operations Systems Technologist, Staff (D-812).

Jack R. Hughes, from Security Inspector (D-911) to Operations Systems Technologist, Staff (D-829).

Gregory E. Barch, from Designer (D-612) to Operations Systems Technologist, Staff (D-829).

Janet E. Sword, from Secretary II (D-440) to EDP Procedures Analyst

Retirees

SEPTEMBER

Owen H. Thompson, Otway, Janitor (D-025), after almost 14 years.

John T. Wolford, Lucasville, Police Captain (D-025), after more than 35 years.

OCTOBER

William E. Collins, West Portsmouth, Foreman, Maintenance (D-726), after 36

William E. Linville, Lucasville, Superintendent, Process Engineering (D-530), after more than 36 years.

Donald R. Mullens, Minford, Janitor (D-025), after almost 16 years.

Boyd W. Shugert, Portsmouth, Engineer Principal (D-530), after more than 35 years.

For Operations Engineering

Netzer becomes superintendent

David Netzer has been named Superintendent, Operations Engineering, formerly Process Engineering and Materials Technology (D-530). He reports to Jack Crawford, Manager, Quality & Technical Services

Reporting to Netzer are Systems Analysis (D-531), Nuclear Criticality Safety (D-532), Process Equipment Technology (D-533), Enrichment Planning and Analysis (D-534), and Production Engineering (D-535).

Netzer came to the Portsmouth plant in August 1969 as an engineer in the Processing Engineering Department and subsequently became engineer, staff, in December 1972. He was promoted to Supervisor, Environmental Control, in February 1975, and served as acting superintendent, General Safety and Environment Management, from January 1979 to January 1980. He subsequently served as Supervisor, Diffusion Plant Project Management, beginning in January 1980, and Supervisor, Nuclear Criticality Safety, beginning in April 1987.

David was graduated from Case Institute of Technology in 1969 with a bachelor's degree, and from Ohio University in 1977 with a master's degree, both in chemical engineering.

He and his wife, Nora, have one son, Daniel, and five near Lucasville.





Spetnagel was graduated from The Ohio

State University with a bachelor of science

degree in chemistry in 1969. From New

Mexico State University, he received mas-

ter's and doctorate degrees in chemistry in

1971 and 1973, respectively. Spetnagel

also has completed postdoctoral work at

He and his wife, Patricia, have two chil-

Spetnagel

Netzer

Northwestern University.

dren and live near Chillicothe.

Spetnagel named superintendent

Wayne Spetnagel has been named Superintendent, Laboratory Services and Safety Analysis (D-540). He reports to Jack Crawford, Manager, Quality & Technical Services.

Reporting to Spetnagel are Laboratory Services (D-541), Technical Review (D-542), Laboratory Controls and Standards (D-543), and Safety Analysis (D-544).

Spetnagel came to the Portsmouth plant in June 1978 as a Senior Chemist. He was named Section Head, Process Engineering, in February 1980, and served as Supervisor, Life Cycle Analysis, in the Gas Centrifuge Enrichment Plant's Technical Services Division beginning in March 1983.

He was transferred to the GDP Technical Services Division as Section Head, Scientific, in July 1985, following cancellation of GCEP and became Supervisor, Instrumentation Technology, in May 1988.

Energy Systems at Portsmouth

NASTIN MARISTIA

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Obituaries

William H. Taylor, 84, Waverly, July 18. Taylor was a Scientific Specialist (D-501) at the time of his retirement in December 1969. He is survived by his wife, Louise.

Aliene Clarke, 85, Sept. 1. Mother of E. V. Clarke (D-829).







Hurtt

Augustine

Pending Hurtt's retirement

Martin Marietta promotes Young

Martin Marietta Corporation promoted A. Thomas Young to executive vice president effective Aug. 14 in anticipation of his becoming president and chief operating officer at the end of the year upon the planned retirement of Caleb B. Hurtt.

Young has been a senior vice president of the corporation and president of its Electronics & Missiles Group at Orlando, Florida. Initially, in his new position, Young has undertaken a special assignment refining the long-range plan for the strategic direction of the corporation.

Hurtt has been president and chief operating officer and a director of the corporation since December 1987. He has served

more than 33 years with Martin Marietta in a progression of senior engineering and management positions. He will continue to serve on the board of directors.

Young joined Martin Marietta in 1982 as vice president of Aerospace Research and Engineering and was vice president and general manager of Martin Marietta Aero & Naval Systems at Baltimore from 1983 until 1985, when he moved to Orlando. Prior to joining Martin Marietta, Young spent 21 years with the National Aeronautics and Space Administration (NASA) and was director of NASA's Goddard Space Flight Center at Greenbelt, Maryland, from 1980 to 1982.

Martin Marietta chief executive chosen director of ethics center

Norman R. Augustine, chairman and chief executive officer of Martin Marietta Corporation, was recently elected to the board of directors of the Washington-based Ethics Resource Center.

"Mr. Augustine's long-standing and deeply-held commitment to ethics and corporate accountability will contribute immeasurably to the Center's goals," said Gary Edwards, the Center's executive director. "We look forward to a rewarding and fruitful relationship."

Formerly under-secretary of the Army, Augustine has been with Martin Marietta for 12 years. He is active in civic and industry affairs and is on the scientific and technical boards of a number of universities and government groups.

Founded in 1977, the Ethics Resource Center is a nonprofit, nonpartisan, and nonsectarian organization working to strengthen the ethical foundations of our society. The Center serves education, business and government by providing the resources and assistance necessary for these institutions to foster integrity, encourage ethical conduct, and support basic values. The Center develops training and curricular materials, conducts research, sponsors conferences and advises organizations on ethics policy and program development.

NASA awards \$1.7 billion task for shuttle external fuel tanks

NASA's Marshall Space Flight Center awarded a \$1.797 billion contract modification to Martin Marietta Corporation Aug. 24 for the production of 60 additional space shuttle external tanks for delivery during the 1990s.

The award from the space flight center

in Huntsville, Alabama, to Martin Marietta in New Orleans, Louisiana, is the second portion of a procurement to obtain the tanks. The first portion (\$500 million), awarded to Martin Marietta in June 1988, was for the long-lead hardware (parts and materials) needed for manufacture of the

The tanks will be produced by Martin Marietta Manned Space Systems company at NASA's Michoud Assembly Facility near New Orleans.

The first tank to be built under the new contract is expected to be completed in late 1991 and the 60th in mid-1997. They are stated for use with shuttle missions STS-60 through STS-119. Under previous awards, 59 tanks have been contracted for to support shuttle operations, and 52 have been produced to date.

The external tank carries the shuttle's liquid hydrogen fuel and liquid oxygen oxidizer and supplies them under pressure to the orbiter during lift-off and ascent. The largest and heaviest shuttle element when loaded, the tank is the only major nonreusable element of the shuttle system.

Martian technology applied on Earth

Technology developed to analyze the soil on Mars in the mid-1970s is being applied to a problem on Earth today — detecting hazardous wastes in the soil and water.

As part of the National Aeronautics and Space Administration's technology transfer program, Martin Marietta Corporation has developed a portable hazardous waste analyzer that allows preliminary soil and water analysis to be conducted in the field.

Developed in conjunction with the U. S. Environmental Protection Agency, the analyzer uses technology developed by Martin Marietta for the twin Viking spacecraft which landed on Mars in 1976. On each robot lander vehicle was an instrument that analyzed the chemical composition of the Martian soil and sent back to Earth valuable scientific information from 1976 to 1982.

Dr. Benton Clark of Martin Marietta's Astronautics Group, who was the program manager for the Viking Soil analyzer, worked with Warren C. Kelliher at the NASA Langley Research Center on ideas for applying the related technology. One result is the portable hazardous waste analyzer delivered recently to the EPA's Environmental Monitoring Systems Laboratory at Las Vegas.

"The hazardous waste analyzer can detect about 50 different elements in virtually any type of soil or material," Dr. Clark

said. "Since it is easy to use and gives immediate readouts, it may prove to be very valuable for EPA field investigators seeking to identify areas contaminated with hazardous wastes."

The instrument is capable of detecting levels as low as 10 parts per million in soil samples and 50 parts per billion in water.

Dr. Clark said the analyzer consists of a detector unit, an X-ray source, a lap-top computer, and a filtration system. The instrument bombards a material with X-rays, causing a fluorescent emission from the material. This emission is measured and analyzed for the energy levels which distinguish each element.

"The idea was to have something that could perform real-time tests in the field," Dr. Clark explained. "Until now, there has been nothing this portable that analyzes for these particular elements." Dr. Clark said the analyzer has worked well in two field tests.

One potential use of the analyzer will be in connection with hazardous waste accidents, notes Martin Marietta engineer Mike Thornton, who designed and built the unit. Normally, samples taken at a site must be transported to a labortory, which can delay analysis. The analyzer can locate contaminants on the spot.

Dr. Clark said several major changes had to be made to the Viking soil analyzer

to make it suitable for hazardous waste analysis here on Earth, including the capability to analyze water, which it didn't do on Mars; a portable computer system to provide results on site; and increased instrument sensitivity to look for very low concentrations of pollutants.

EPA plans to evaluate and field-test the analyzer, then make it available to EPA regional offices across the county.

Browers meet Dan Quayle

Anita and Tom Brower spoke with Vice President Dan Quayle for a few moments after he arrived at the Columbus International Airport Sept. 8. The Browers were among 12 Ohioans selected to welcome the Vice President to Columbus for the dedication of the natural gas bus.



Report on Benefit Plans for 1989

The reports in this special section summarize the annual reports for the Martin Marietta Energy Systems, Inc., Portsmouth Plant Benefit Plans for 1988 and are written in a "language" specified under regulations prepared by the U.S. Department of Labor.

The complete annual reports for the

- Medical and Life Insurance Benefits Plan for Salaried Employees
- Medical and Life Insurance Benefits Plan for Hourly-Rated Employees
- Disability Income Program for Salaried Employees
- Savings Plan for Salaried Employees at the Portsmouth Uranium Enrichment Plant
- Savings Plan for Bargaining Unit Employees at the Portsmouth Uranium Enrichment Plant
- Retirement Plan for Salaried Employees at the Portsmouth Uranium Enrichment Plant
- Pension Plan for Hourly Employees at the Portsmouth Uranium Enrichment Plant

have been filed with the Internal Revenue Service as required under the Employee Retirement Income Secruity Act (ERISA) of 1974.

The Employer Identification number for the above plans is 52-1318516.

Summary Annual Report: 1988 Insurance Plans

This is a summary of the annual reports for the insurance plans listed below. The plans have contracts with the insurance carriers shown to pay all claims incurred under the terms of the plans. Because these plans are so-called "experience-rated" contracts, the premium costs are affected by, among other things, the number and size of claims.

Plan Name	Insurance Carrier	Premiums Paid for Plan Year Ending 12-31-88	Fotal Benefits Paid for Plan Year Ending 12-31-88
Medical and Life Insurance Benefits Plan for Salaried Employees	Actna Life & Casualty Insurance Company	\$4,579,682	\$4,664,819
Medical and Life Insurance Benefits Plan for Hourly- Rated Employees	Aetna Life & Casualty Insurance Company	\$6,127,734	\$6,452,206
Disability Income Program for Salaried Employees	Actna Life & Casualty Insurance Company	\$269,518	\$346,273

Your Rights to Additional Information

Participants in these insurance plans have the right to receive a copy of the full annual report, or any part of it, on request. Included in that report is insurance information.

The Savings Program for Employees of Martin Marietta Energy Systems, Inc., Portsmouth Plant

This is a summary of the annual reports of the savings plans for 1988 including basic financial statements.

Savings Plan for Salaried Employees at the Portsmouth Uranium Enrichment Plant

Benefits under the Savings Plan for Salaried Employees are provided from trust funds. Plan expenses were \$256,098 in benefits paid to participants and beneficiaries. A total of 1,062 persons were participants in or beneficiaries of the plan at the end of the plan year.

The value of plan assets, after subtracting liabilities of the plan, was \$12,210,705 as of December 31, 1988, compared to \$8,545,272 as of January 1, 1988. During the plan year, the plan experienced an increase in net assets of \$3,655,433. This included unrealized appreciation or depreciation in the value of the plan assets; that is, the difference between the value of the plan assets at the end of the year and the value of the assets at the beginning of the year or the cost of assets acquired during the year. The plan had total income of \$3,921,531 including employer contributions of \$449,403, employee contributions of \$2,445,149, and earnings from investments of \$1,026,979.

Savings Plan for Bargaining Unit Employees at the Portsmouth Uranium Enrichment Plant

Benefits under the Savings Plan for Bargaining Unit Employees are provided from trust funds. Plan expenses were \$8,685 in benefits paid to participants and beneficiaries. A total of 57 persons were participants in or beneficiaries of the plan at the end of the plan year.

The value of plan assets, after subtracting liabilities of the plan, was \$458,863 as of December 31, 1988, compared to \$255,181 as of January 1, 1988. During the plan year, the plan experienced an increase in net assets of \$203,682. This includes unrealized appreciation or depreciation in the value of the plan assets; that is, the difference between the value of the plan assets at the end of the year and the value of the assets at the beginning of the year or the cost of assets acquired during the year. The plan had total income of \$212,367 including employer contributions of \$26,332, employee contributions of \$149,359 and earnings from investments of \$36,676.

Your Rights to Additional Information

Participants have the right to receive a copy of the full annual report, or any part of it on request. Included in that report are:

- an accountant's report;
- 2. Financial Statements; and
- 3. assets held for investment.

Retirement Program for Employees of Martin Marietta Energy Systems, Inc., Portsmouth Plant

This is a summary of the annual reports for the Retirement Plan for Salaried Employees and the Pension Plan for Hourly Employees for 1988. These plans have a contract with the Prudential Insurance Company of America to allocate funds toward group annuities.

Basic Financial Statement for the Retirement Plan for Salaried Employees

Benefits under the plan are provided by Group Annuity Contracts. Plan expenses were \$2,544,707, which include \$2,441,914 paid to participants and beneficiaries of the plan and \$102,793 for administrative expenses. A total of 2,059 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets after subtracting liabilities of the plan, was \$83,274,908 as of December 31, 1988 compared to \$78,151,735 as of January 1, 1988. During the plan year, the plan experienced an increase in its net assets of \$5,123,173. The plan had total income of \$7,667,880, including employee contributions of \$343,842 and carning from investments of \$7,324,038.

Basic Financial Statement for the Pension Plan for Hourly Employees

Benefits under the plan are provided by Group Annuity Contracts. Plan expenses were \$1,928,896 which include \$1,850,465 for benefits paid to participants and beneficiaries and \$78,431 for administrative expenses. A total of 1,934 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan was \$54,228,099 as of December 31, 1988 compared to \$51,354,070 as of January 1, 1988. During the plan year the plan experienced an increase in its net assets of \$2,874,029. The plan had total income of \$4,802,925 derived entirely from investment earnings.

Minimum Funding Standards

An Actuary's statement shows that enough money was contributed to both plans to keep them funded in accordance with the minimum funding standards of ERISA.

Your Rights to Additional Information

Participants have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:

- 1. an accountant's report;
- 2. assets held for investment;
- transactions between the plan and parties in interest (that is, persons who have certain relationships with the plan);
- 4. actuarial information regarding the funding of the plan.

FOR MORE DETAILED INFORMATION

To obtain a copy of the full annual reports, or any part thereof, write or call the office of G.P. Zoellner, Superintendent, Personnel Services. The plan administrator is the Assistant Treasurer, Martin Marietta Energy Systems, Inc., P.O. Box 2003, Oak Ridge, TN 37831 (614) 574-9961. Copying costs are 25 cents per individual page; \$4.00 for the complete insurance plans annual report; \$5.00 for each savings plan annual report; and \$5.00 for each retirement program plan annual report.

Participants have the right to receive from the plan administrator, on request and at no charge, a statement of the assets and liabilities of the plan, or a statement of income and expenses of the plan. For participants requesting a copy of the full annual report from the plan administrator, these two statements will be included as part of that report. The charge to cover copying costs given above does not include a charge for the copying of these portions of the report because these portions are furnished without charge.

Participants also have the legally protected right to examine the annual report in the Cashiers Department of Martin Marietta Energy Systems, Inc., Portsmouth Plant and at the U.S. Department of Labor, Washington, DC, or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the Department should be addressed to: Public Disclosure Room, N4677, Pension and Welfare Benefit Programs, U.S. Department of Labor, 200 Constitution Avenue NW, Washington, DC 20216.

SERVICE MILESTONES

OCTOBER

John Brunner, Ray Dever, James Schneider and Doris Walters all reach the 35-year service milestone in October.

Ronald Buckle, Larry Compton, Roger Cosby, Lonnie Edwards, Richard Fox, Harold Pleasant, Kenneth Rider, Joseph Stockham, and Joseph Tanner began work at the plant 20 years ago, in October 1969.

There are 17 employees reaching the 15-year service milestone in October. They are William Adams, Dennis Albrecht, Dean Blakeman, Philip Bradshaw, Donna Christman, Scott Coffman, Lawrence Dickey, Karin Foster, William Meyers, William Minix, Leslie Munn, Lonnie Murray, Alan Odle, Sam Preston, Ronald Sharp, Curtis Sherman, and Jerry Tapp.

Cheryl Bauer, Pam Farrar, Lovell Godfrey, Nancy Smith, Anthony Sturgeon and Lora Trainer have 10 years of service in October.

Marty Kelley and Rebecca McGraw began work at the plant five years ago.

NOVEMBER

Barbara Cooley, Shirley Couser, William Justice and Charles Slater will reach the 35-year service milestone in November.

Robert Yarnell began work at the plant 30 years ago, in November 1959.

William Lynch and Gerald Nelson will have 20 years of service in November.

Thomas McCall, Ronald Schreick, Judy Mahoney and Randy Spradlin reach the 15-year service milestone in November.

Fran Cutler began work at the plant 10 years ago in November.

Paul Bazler, Randal Forbes, Paul Martin and Russell Yates all will have five years of service in November.

Be cautious near buses! ZONE AHEAD

(EDITOR'S NOTE: Employees are urged to be extremely cautious in coming to work each morning. Students wait on access roads into the plant for their buses, which soon stop for them. The requirement for caution in the mornings on the southbound lane of the North Access Road is particularly noteworthy. School buses also stop on the south and east access roads.)

By Jane Johnson

Recently I viewed a film (available through a local AAA office) entitled "Death Zones." The first few scenes were those of excited school-age children on their way home from school, but 21 minutes later I was convinced that it doesn't take much for tragedy to occur.

Even though school buses have warning flasher lights and stop signs, studies indicate that two-thirds of all pupil passenger fatalities occur outside the school bus.

Factors contributing to this include: 1) the danger zone immediately surrounding a school bus, 2) the school bus driver, 3) the child(ren), and 4) other motorists.

Ten feet surrounding any school bus constitutes a danger zone. Within those ten feet, far more dangerous zones exist. Blind spots prevent drivers from seeing children when they are right against the school bus.

School bus drivers must meet driver qualifications outlined in motor vehicle laws, but remember they are people too. They have homes, families, traffic problems, and distractions to contend with while driving.

Children come in all sizes, conditions, and from many environments. They are also excitable and don't always think.

"Death Zones" illustrated that a child's mind is elsewhere --perhaps on a valentine just made in art class or practical jokes.

Discuss the following tips with them to help ensure their safety on or near a school

- · Leave home early enough to arrive at the bus stop on time
- Wait for the bus in a safe place well off the roadway
- Follow the instructions of the school bus driver or bus patrol
- Remain quiet, orderly, and in your seat
- Keep your head and arms inside the
- Keep the aisles clear at all times
- · Be courteous to the bus driver and other passengers
- Be alert to traffic when leaving the bus. Motorists near a school bus present a large safety problem. To help keep the children safe, use extreme caution when driving near a bus.

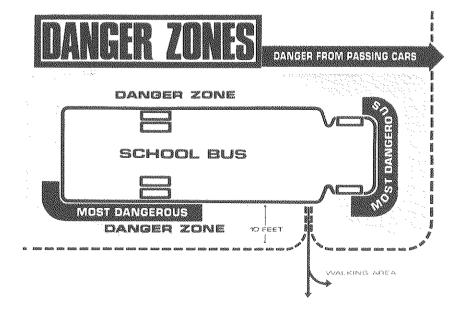
Traffic laws demand that motorists following a school bus signaling and stopping on the same side of a four-lane divided highway stop at least 10 feet from the rear of the bus (and out of the danger zone). Motorists on the opposite side of a fourlane highway are not required to stop.

However, on two-lane highways, traffic from either direction must stop for school buses with flashing lights.

As with the advice to children, leave home early enough to arrive at your destination on time. This will avoid the tendency to "hurry" around a bus, and possibly cause an accident.

When behind a school bus (especially while driving our plant access roads), apply the three "C's" for avoiding a right of way accident - correct, cautious and courteous.

Please protect our future by being particularly aware of traffic rules when you're around a school bus or driving through school zones, because a child's fragile body is no match for any type of vehicle.





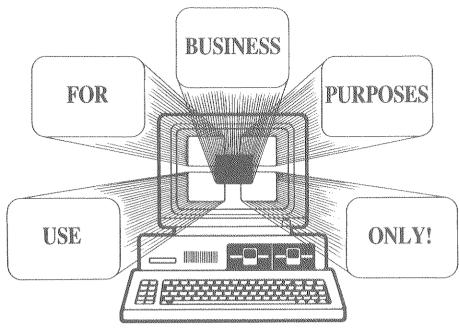
Clean-up proves massive mission

Janitor Services personnel retrieved trash dropped down the chute of the X-100 Building service elevator during the Sept. 8 'Clean Up!' Day at the Portsmouth Gaseous Diffusion Plant. This massive effort, enthusiastically supported by plant employees, resulted in the identification and disposal of more than 475 tons of trash and excess items.

ENERGY QUIZ

The United States has made considerable progress in using energy more efficiently. Test your knowledge on the questions below to see how we're doing and how we can continue to improve. Answers are elsewhere in the issue.

- 1. Air infiltration and leakage are responsible for much of the energy wasted in the home. The most cost-effective way to control this problem is _
 - a) adding attic insulation
 - b) adding storm windows
 - c) caulking and weatherstripping windows, doors and baseboards.
- 2. If you set your thermostat back 10 degree for an 8-hour period at night, you may reduce your heating bill by _
 - a) 5-10 percent
 - b) 10-15 percent
 - c) 20-25 percent.
- 3. Today, what percent of all energy consumed in the U.S. is wasted as heat loss through windows?
 - a) 2 percent
 - b) 5 percent
 - c) 10 percent.
- 4. How much of the energy for heating hot water can be saved by reducing the water temperature on the hot water heater from 140 degrees to 120 degrees?
 - a) 3-5 percent
 - b) 5-10 percent
 - c) 18 percent or more.
- 5. By driving in an energy-conserving manner (for example, making smooth starts and stops), the average auto driver can save _____ percent of the normal amount of gasoline used.
 - a) 2 percent
 - b) 5 percent
 - c) 10 percent.
- 6. It takes less gasoline to stop and restart your car than to let the motor idle for more than minute(s).
 - a) 1 minute
 - b) 3 minutes
 - c) 5 minutes.
- 7. The difference between inadequate and proper home insulation can be what percentage of your fuel bill?
 - a) 10 percent
 - b) 25 percent
 - c) 40 percent.
- 8. The average dishwasher uses 14 gallons of hot water per load. How much hot water does the optional "rinse hold" feature use?
 - a) 2 gallons
 - b) 3-7 gallons
 - c) 10 gallons.



The U. S. Government imposes severe penalties for the misuse of its property, equipment and materials. These penalties (which can include fines and imprisonment) are provided for in the United States Code, Title 18, Section 641.

Company policy also strictly prohibits the misuse of government property, as indicated on pages 37-39 of the employee handbook YOU AT MARTIN MARIETTA ENERGY SYSTEMS, INC.

Employees who have access to Martin Marietta Energy Systems computer facilities and equipment should understand that these are government-owned and are provided solely for use in carrying out work assignments. This applies to large multiuser computers as well as to small personal computers.

This equipment may not be used for nonwork-related activities such as games, hobbies or personal or non-work-related correspondence; for work related to political or outside business interests, social or civic clubs, church or any other personal use.

The Electronic Mail System, in particular, should be used only for work-related correspondence.

All of use are obligated to exert our best efforts to prevent any such misuses and, as established in our Energy Systems Mission and Values, to "be responsible stewards of all the resources entrusted to us."

Your cooperation and support of the company's efforts are required to ensure that the computer equipment and all other government-owned property entrusted to use are not used for improper purposes.

WORKING TOGETHER

Furniture moving crew completes effort to reduce backlog and arrange storage

By working together through a more coordinated effort this summer and directing special effort to work in waiting, the furniture moving laborers group was able to reduce the backlog of Maintenance Service Requests (MSRs) as well as achieve a number of other special surplus, reorganizing and other projects.

Josie Jordan, Supervisor, Maintenance Services (D-742), noted that these achievements were realized through the efforts of Keith Vanderpool, George Hay, Ray Fankell and the furniture moving crew of Joseph Anglemeyer, Clovis Journey and Charles Troncone.

In mid-June, coordination of the plant's furniture moving requirements was transferred to Maintenance Services with Vanderpool, Maintenance Central Planning, being appointed as coordinator.

At the beginning of the program, there were 344 MSRs in the backlog, with the oldest dating back to April 1987, Jordan said.

To date, 174 MSRs have been completed, depleting 13.8 weeks of backlog. The oldest request is now March 1989.

Other highlights of the group during this same period included the surplussing of 271 pieces of damaged furniture from Warehouse 18, reorganization of Warehouse 18, relocation of all new furniture from X-746 to Warehouse 18, assistance to Security

with removal and surplus of 53 non-certified DOE classified repositories, assistance with the opening of X-1000 Cafeteria, and assistance with the July Bloodmobile.

The achievements of this group have certainly improved customer satisfaction across the plant and instilled a sense of pride in the workers in this group, Jordan commented.

"It is definitely an outstanding example of what we can do when we work together as a team."

New Employees

August 16

Sandra K. Hampton, Technologist, Technical Division (D-552).

La'Ura S. Payton, Administrative Squadron Traince (D-312).

Betty G. Olson, Industrial Relations

Staff, Sr. (D-221).
Terry W. Barr, Technical Assistant II

(D-5II).
Violet R. Campbell, Medical Technician (D-110).

Linda L. Ciraso, Clerk III (D-321).

September 1

Deborah S. Kielmar and Teddy L. Lykins, IHHP Surveyor I (D-102).

Harold R. Hopkins II, Engineer, Staff (D-622).

Arnie L. Painter, Engineer I (D-6II). Timothy E. Shook, Scientist I (D-5I3). John J. Snyder, Foreman, Process Area (D-8I0).

September 11

Joseph N. Bloomfield, James R. Mossbarger, Richard E. Snyder, Ronald B. Schintzius and Douglas P. Pfeifer, Janitor (D-743).

Sandra L. Williams, Christine A. Smith, Patricia A. Foreman, Robert T. Schisler, Thomas H. Kiser and Gregory I. Sowards, Chemical Operator-in-Training (D-823).

Keith A. Roberts, Painter I/C (D-729).

September 18

Donald E. Dunford, Michael J. Gordon, Randy L. Pratt and Rickey R. Stanley, Security Inspector (D-9II).

James D. Litteral and Lisa D. Dryden, Technical Assistant II (D-512).

Deborah Y. Basye, Technical Assistant II (D-513).

Cheryl R. Whitt, Clerk II (D-621).

September 25

James Widdig, Safety Equipment Technician (D-101).

October 2

Susan E. Curley, Stenographer II (D-321).

Angela K. Parsley, Clerk II (D-452).

Jeanne Galford earns CPS designation

Jeanne Galford, a Clerk IV, Training Department, joined the ranks of those who have earned the Certified Professional Secretary (CPS) designation this year.

The honor was announced recently by the Institute for Certifying Secretaries, a department of Professional Secretaries International (PSI).

Jeanne joins 12 other Portsmouth plant employees who have earned the CPS designation. The others have been Connie Eckhart, Irma Blakeman, Delores Weber, Elaine Litten, Betty Schwamburger Bihl, Debbie Underwood, Romaine Newsome, Pauline Whisnant, Mabel Blair, Ruth Setzer, Mary Idzakovich and Teresa Osborne.

With the successful completion of the examination, Jeanne is now looking toward management and economic courses. She will be applying college credit hours for her CPS designation toward a a bachelors degree in business administration.

Because of her work schedule, Jeanne took the examination on two occasions and tested only once for each of the parts. She passed each of the parts on her first attempt.

"My kids almost had to pick me off the floor when I received the first set of results," she recalled.

The CPS rating is achieved by passing a two-day, six-part examination administered biannually in May and November by the Institute and by fulfilling work and educational requirements.

The recognized standard of measurement in secretarial proficiency, the CPS examination is conducted in May and November of each year in more than 250 examination



Jeanne Galford

centers. It includes six parts: behavioral science in business, business law, economics and management, accounting, office administration and communication, and office technology.

An eight-year employee, Jeanne first became aware of the CPS examination when she found an application in a desk drawer in April 1983, but followed through with the idea of sitting for the exam in November 1988. She studied for the examination using a series of Wiley Books (available in the plant Engineering Library), but believed previous office experience was the best reference tool she possessed.

Now, she encourages others to sit for the examination. "You learn a lot through experience, and you get a lot of satisfaction just being a good secretary," Jeanne said.

ANSWERS TO ENERGY QUIZ

1. c) caulking and weatherstripping windows, doors and baseboards. 2. b) 10-15 percent. 3. b) 5 percent. 4. c) 18 percent or more. 5. c) 10 percent. 6. a) 1 minute. 7. c) 40 percent. 8. b) 3-7 gallons.



The 1989 company softball champions, Chemical Operators, include (front row) Mike Hensley, P. D. Seaman, Conkel. Not pictures is Bob Bratchett. The team has won the championship seven times and has been runnerup three times since 1980.

Kevin Clausing, Jeff Woodard (coach), Rusty Cosby, Greg Johnson, Kevin Ragland, Bryant Lybrook, (back row) Gary Coriell, Ron Crabtree, Tony Timmons, Roger Cosby, Phil Moore, Steve Reinhardt and Mark

Chemical Operators prevail in softball

The "Chemical Operators" again have captured the company softball championship.

The 1989 tournament, sponsored by the Employee Activities Committee (EAC), took place at Jake's Park near Waverly Aug. 26 and 27

A total of 10 teams entered the tournament, three more than in 1988. The teams included Chemical Operators, The Hogs Boys, Department 829, Department 713, Scum Dogs, GCEP, Guards, Cascade, X-710 & Company and the A-Team.

"Although the Chemical Operators did

win the crown several times during the 1980s, this tournament victory certainly was no cakewalk," said Jim Whitt (D-334), tournament director. "They had several close games and in fact had to come from behind in a few games and lost one in the semi-final round. That indicates good competition.'

Finishing second was last year's winner, X-710 & Company. Terry Nickel was the team captain.

Members of the championship squad, who will participate in the Recognition Banquet on Nov. 6 are Coach Jeff Woodard (D-823), Greg Johnson (D-823), Phil

Moore (D-102), Steve Reinhardt (D-823), Kevin Clausing (D-823), Bryant Lybrook (D-453), Roger Cosby (D-744), Rusty Cosby (D-724), Mark Conkel (D-829), Gary Coriell (D-823), Bob Bratchett (D-831), Mike Hensley (D-333), Kevin Ragland (D-812), Paul Seaman (D-911), Tony Timmons (D-823) and Ron Crabtree (D-822).

"Although the weatherman provided dry fields this year, we sure baked in the hot and humid weather," Jim Whitt summarized. "Yet, when you see good, friendly competition, you can't ask for much more."

Family

BATTLE

Stephanie Battle, 17, daughter of Steve Battle, was chosen as "Miss River Days" at the annual Portsmouth River Days

FOUT

Matthew Fout, son of Greg Fout, won first place in Nutrition at the Pike County Fair and was named "Most Promising Young Chef." This entitled Matthew to compete at the Ohio State Fair.

MARKET TO

Erika Fout, daughter of Jeannette Wiley, had the Grand Champion market pig at the Pike County Fair. Wesley, Jeannette's son, placed sixth overall with his entry in the market pig competition.

RAGLAND

Chad Ragland, 12, son of Phyllis Ragland, was unanimously named Most Valuable Player in the 15th annual Hillsboro Little League Tournament.

STURGEON

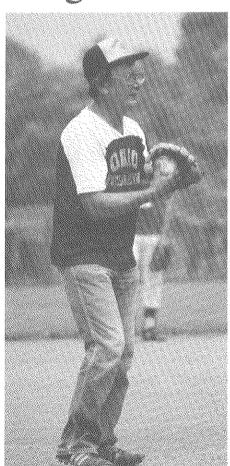
Aaron and Richard Sturgeon, sons of Tony Sturgeon, received first and second place, respectively, for patio tomatoes at the Scioto County Fair.

WHITT

Troy Whitt, son of Jim Whitt, won first place with his pencil drawing "Grandpa's Life" and with his color pencil drawing "Boy On A Fence" at the Scioto County

Being a spectator not in his game plan

Vulgamore looking ahead to 52nd season



Norb Vulgamore

By John Gedeon

At a time of life when most people have surely put their baseball glove away or have at least retired to coaching, Norb Vulgamore is still going strong on the softball field.

Participating in our recently completed Softball Tournament, the "dean of area softball" marked his 51st year of participation in the game!

Vulgamore reminesces, "I started playing softball in the first grade. That was

To this day he remains active as a pitcher, coach, and overall softball enthusiast.

Vulgamore even played during the war years although travel was limited because of gas rationing. After the war players had to pool their money to buy enough gas. Areas to which he travelled to competition in those days included Idaho, Camp Creek, Bear Creek and even a softball field as far away as Lucasville!

His early softball experiences included fast pitch competition "under the lights" in Piketon and Waverly. During the "boom" years of the early '50s, the company had its own fast pitch leagues. Fast pitch softball continued in this area until about 10 years ago. Softball fields with lights are now long gone in Pike County.

Did he suffer any injuries during this envious career?

"I was playing third base in Piketon many years ago when I got knocked out by a line drive," he remembered. "Fortunately, the doctor was right across the street and I was carried to his office."

What was the cure then? "He used the old remedy of laying a couple of strips of bacon across the injury," he laughed. "I still was black and blue for months."

Vulgamore also started a women's fast pitch team in Pike County around 1960.

Norb, or "Jasper Jack" as he is referred to by many of his friends, began work at the Portsmouth plant on July 6, 1953, as a Process Operator. He then worked as a Cascade Coordinator until he became a plant Shift Superintendent II years ago.

Norb has lived in the Jasper area for the past 35 years, the basis of his nickname. He and his wife, Deanie, have reared five daughters and now have three grand-

During the recent softball tournament, Norb and his "A-Team" played very competitively. In fact, they were leading the champions at one point during the game.

Would he be content now to be a softball spectator?

"No, not by a long shot."

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