Energy Systems at Portsmouth

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

October 1991 Volume 6 Piketon, Ohio Number 8



Former Major League Baseball star Al Oliver was the keynote speaker at the Sept. 16 kickoff of this year's United Way campaign. Oliver is now coach of the newly formed Shawnee State University baseball team and director of "The Al Oliver Foundation." More than \$100,000 went to United Way this year

Cooling towers converted: more environmentally sound

Conversion of the plant's chromatebased cooling water treatment system to a phosphate-based system has been completed.

The final step of the conversion began on June 26. This was the climax of a six-year program which involved the systematic alteration of three cooling water treatment

By substituting phosphate for chromate as a corrosion inhibitor, Martin Marietta Energy Systems is utilizing a more environmentally acceptable means of retarding corrosion in plant process cooling water systems. Elimination of the chromates from the Recirculating Cooling Water system

Record broken for shipping

Uranium Materials Handling personnel of the Portsmouth Gaseous Diffusion Plant continue to establish new records for the transfer and shipment of enriched uranium to U. S. Department of Energy customers.

In July, uranium materials handlers set a new Portsmouth plant record for transfer of toll enrichment material by processing 100 parent cylinders to fill 300 customerowned 2 1/2-ton cylinders. This compared to the previous record, set in June 1990. when 264 cylinders were filled from 80 parent cylinders.

In September, the handlers shipped 294 cylinders of enriched uranium product to DOE customers. This compares to 225 cylinders shipped in March 1987.

will significantly reduce the generation of low level wastes at the plant.

In mid-1984, Energy Systems began evaluating non-chromate based corrosion inhibitors from a cost reduction standpoint and as a response to more stringent environmental control. Since the introduction of phosphate into the system, the concentration of chromate has been reduced from its normal control level of 18-24 parts per million to less than one part per million.

The X-616 treatment facility will stay operative until residual chromium is eliminated. Then, after approval by the Ohio Environmental Protection Agency, it will be taken out of service.

Changing plume

The plant's cooling water treatment system has converted to using phosphate-based corrosion inhibitors and is phasing out the chromate-based system. By substituting phosphate for chromate, Martin Marietta Energy Systems is utilizing a more environmentally acceptable means of retarding corrosion

Breaks seven-year-old record Employees raise top dollars in United Way 1991 campaign

area citizens during the recent campaign for United Way by Martin Marietta Energy

A corporate gift of \$21,000 was added to employee pledges of \$79,532 for a total distribution of \$100,532 as follows: Jackson County, \$9,109; Pike County, \$24,006; Ross County, \$25,632; Scioto County, \$36,678; and other counties,

The plant exceeded its goal of collecting \$62,000 in employee cash and pledges by 28 percent. The \$79,532 collected from employees was the highest total for personnel contributions since 1984.

The theme for this year's campaign was "We Believe in the United Way." Gary Hairston, Police Operations, was the general chairperson. Also serving on the steering committee were Kristy Landman, United Plant Guard Workers of America Local 66 representative and co-chairperson; Rusty Yates, assistant general chairperson; Vicki Richard, finance systems; Vanessa Burkitt, office manager; and Jane Johnson, campaign coordinator.

Christy Burkitt, Pat Cramer, Debbie Detillion, Anita Dever, Jack Lang, Elaine Litten, Don Rockhold, Willie Walker, Debbie Young, Joyce Hopper and Julie Quesenberry served as divisional representatives.

The campaign began with a "kick-off" coffee activity on Sept. 16. Former Major League Baseball star Al Oliver was the keynote speaker. Oliver is now the coach

More than \$100,000 was raised to benefit for the newly-formed Shawnee University baseball team and director of "The Al Oliver Foundation.'

> The plant activity concluded Oct. 11 with allocation of funds to local United Way representatives and recognition of staff, division representatives and solicitors at a special site luncheon.

> Winners were drawn for \$100 Savings Bonds for participation in the 1991 United Way campaign: Carla Buckler, John Aeh, Randy Ruffin, Bill Justice, Debbie Brown, Ray Mullins, Ralph Beabout, Jerry Jackson, Sue Williams and Dan Ruggles.

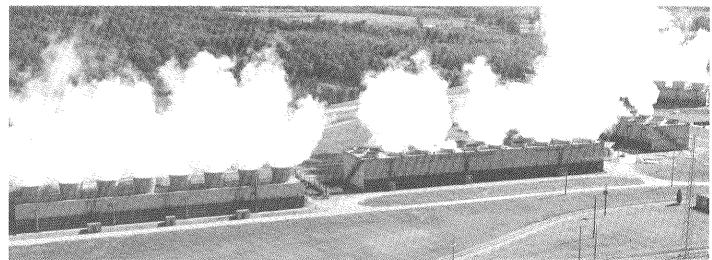
> More than \$2.1 million has been contributed to United Way by employees and management contractors of the Portsmouth Gaseous Diffusion Plant since 1953.

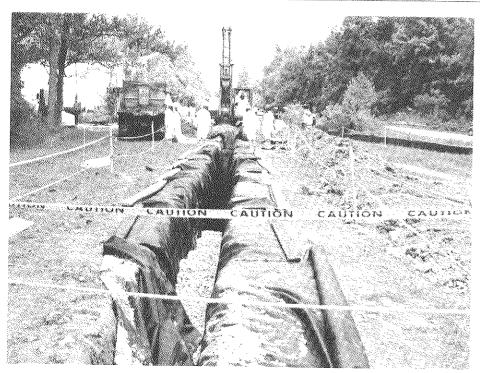
U-AVLIS makes new milestone

A major milestone has been achieved in the Uranium Atomic Vapor Laser Isotope Separation (U-AVLIS) program at Lawrence Livermore National Laboratory in California.

The U-AVLIS program mission is to develop, demonstrate and facilitate deployment of a process to enrich uranium for use as a fuel in commercial light-water power reactors. One of the program's key activities is to integrate the separator and laser systems for a preliminary photoionization

(Continued on Page 2)





Workers have completed a trench system to capture contaminated ground water that might otherwise have reached Little Beaver Creek. The 655-foot long, nine-foot deep trench collects water for treatment before it is discharged to the sewage treatment plant.

From Martin Marietta Foundation Grant goes to employee's son

Jason Bean is attending college this fall courtesy of the Martin Marietta Corporation Foundation. Bean is now an honors student at The Ohio State University majoring in biochemistry.

A Lucasville resident and graduate of Valley High School, Bean received one of the scholarships awarded by Martin Marietta in 1991. The corporate awards 50 each year; Energy Systems receives 10 of these.

His father, Leon, is a Principal Technologist in Maintenance Services and Management Systems (D-742).

Bean is the third representative of the Portsmouth plant to be awarded one of the Energy Systems allotted scholarships.

Bean ranked second in the Valley High School graduating class of 1991. He participated in the National Merit Scholar program qualifying first as a semi-finalist, then as a finalist.

Bean was a member of his high school scholarship team, chess club, French Club, Business Club and a 4-H member for six years. He was also on the National Honor Society and a member of Mensa.

Throughout his years in school, he participated in the gifted programs of winter

Ethics Hotline

To report possible wrongdoing or to obtain clarification on ethical matters, contract your Ethics Representative at extension 2554 or call the Corporate Ethics Office at (407) 356-9400.

In addition, the Martin Marietta Corporate Ethics Office has a 24-hour toll-free number: 1-800-3-ETHICS (1-800-338-4427). enrichment and summer enrichment at Shawnee State University, Purdue University, and The Ohio State University.

In addition to the Martin Marietta scholarship, Bean received the Ohio State Distinguished Scholarship for National Merit and the Ohio Academic Scholarship.



Jason Bean

U-AVLIS

(Continued from Page 1)

The first enrichment run in the Uranium Demonstration System, which was completed Sept. 30, successfully demonstrated first photoionization and met all other run objectives in the new full-scale demonstration equipment.

All of the prioritized objectives of the run—to demonstrate initial separator, laser, diagnostic and control-system integration; assess enrichment potential by conducting performance and scaling tests; and demonstrate several hours of controlled source operation at greater than 75 percent plant rate—were completed. More than 26 hours of integrated system operation were demonstrated.

Energy Systems staff at Livermore played key roles in operation of the laser separator, operations, and controls subsystems, and in the data analysis.

New trench now intercepting ground water for processing

A new trench system at the Portsmouth Gaseous Diffusion Plant that will capture and treat ground water contaminated with solvents before it reaches Little Beaver Creek was made operational on Oct. 1.

Contractors began the project in July to construct a trench 655 feet long, 10 inches wide and nine feet deep in order to capture ground water contaminated with trichloroethylene (TCE) before it reaches the creek. The system was designed by Martin Marietta Energy System engineers and approved by the Ohio Environmental Protection Agency (OEPA) earlier this year.

No TCE contamination has been found outside the facility boundaries. TCE is a degreasing solvent commonly used for metal cleaning operations. The plant has not used TCE for any purpose since the mid-1980s.

The project is part of a comprehensive environmental restoration program performed in accordance with the Resource Conservation and Recovery Act (RCRA) Corrective Action Process, which includes a facility assessment, a detailed site investigation, a corrective measures study, and then corrective measures implementation. The process is designed to find, analyze, and correct contamination problems at the plant as effectively and quickly as possible. All environmental investigations and cleanup activities in the program are designed to meet federal and state requirements and guidelines.

During a preliminary study prior to a formal facility assessment, plant officials detected TCE in the ground water contained in the shallow aquifer underlying the X-701B Holding Pond.

Those contaminants have moved down through the soil and entered the shallow ground water. To prevent contaminants from entering the Little Beaver Creek, Martin Marietta and DOE took immediate action to intercept the source of ground water contamination.

Inside the trench, contaminated water is collected in two wells. From there, the water is pumped to a treatment system, consisting of charcoal filters, where contaminants are removed. Once it passes through the treatment system, the water is discharged to the plant's sewer system for further treatment under a state permit. The system was completed Oct. 1 and is now in full operation under the direction of plant personnel.

A second and similar trench and treatment system is being constructed at the holding pond also to intercept water that may be contaminated. The second trench is scheduled to be completed by the end of this year.

Retirees

John W. Taylor, Mt. Sterling, Maintenance Mechanic 1/C (D-714), more than 16 years.

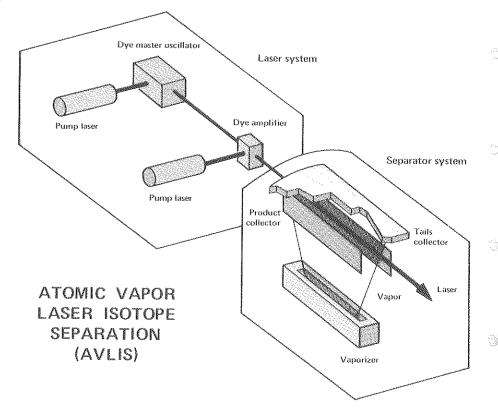
New Arrivals

Son, Brian Christopher, July 2, to Bonnie and Ken (D-413) Bowsher.

Daughter, Whitney Nicole, October 4, to Robert and Christy (D-106) Anderson.

Son, Tyler Christian, Oct. 12, to Richard (D-911) and LaDonna (D-027) Coriell.

Son, Gabriel Joel, October 29, to Delbert and Angie (D-072) Duduit.



James Ebeling, an aquaculture engineer, throws a net into one of the dozen fish ponds recently built at the newly-opened Piketon Research and Extension Center on Shyville Road. Ebeling is studying what fish could best be used on Ohio fish farms. Part of Ebeling's research includes convincing farmers that fish are a viable farm product, ranking second on the list of nanmanufactured imports, behind only oil. (Photograph couriesy of A. J. Wolfe of The Chillicothe Gazette).



Research center opens in Piketon

Officials from around the state were drawn to Piketon earlier this month to officially open the \$4.1 million Piketon Research and Extension Center on Shyville Road just north of the Portsmouth Gaseous Diffusion Plant.

E. Gordon Gee, president of The Ohio State University, offered congratulations to the university's Agricultural Research and Development Center and Extension Service personnel for their efforts.

Bobby Moser, recently named president of Agriculture and dean for OSU's College of Agriculture, introduced the speakers and those involved in the concept and completion of the center.

Moser said the center is the first of its kind in Ohio. There are 13 other Ohio agricultural research farms. However, Moser said, the Piketon center is the first OSU facility to combine outreach and research into one. Many of the programs are geared to serving Ohio's 10 south-central counties.

Moser, who held the title of Director for the Ohio Cooperative Extension Service, said combining the programs is very important. "Because in the research programs, the new technology is developed, and then the extension service and their educational programs will take that information out to the people."

Dr. Robert Rades will be the project manager at the research center. He has outlined six significant goals to be realized by the center. They include aquifer and water quality, alternative agronomy crops, economic development, horticulture and water management, forestry, and aquaculture (more commonly known as fish farming).

Rades said the aquaculture research will include the commercial fishing aspect of fishing as well as recreational fishing. "We will be looking at fish from all kinds of di-

mensions, not just the commercial largescale, but also how to help the farm pond produce something more useful, more valuable."

"We'll be looking at horticulture with a local committee to help steer us," he said. Rades noted two missions of the horticulture program how to help the very small entrepreneur make more money with what little he's working with, and how to expand into a larger scale operation.

"Is there a chance of attracting a larger greenhouse industry in this part of the state, or a major field vegetable industry?" he questioned.

Horticulture work will be supervised by Carl Cantaluppi of Illinois.

Peter Griessmann of Jackson will oversee developing new products and markets for forestry emphasizing available resources.

Dave Henderson, who came from the U.S. Department of Agriculture in Washington, D.C., will oversee economic development. Henderson is already working with the Pike County Chamber of Commerce Tourism Committee developing a market research questionnaire. He will be assisted by Shawa Zhang of Beijing.

The center will also research alternate crops, such as cannulae and spelt; and land-scaping. It will focus on current farming practices and research, adding one more crop to the local farm market — fish.

"Very seldom will you catch us looking only one direction," Rades emphasized.

Gee, who was former president of the University of Colorado before coming to OSU 13 months ago, called the facility a center of pride for the university. "The center represents the very nature of Ohio State," he said. "It brings together teaching and research and service in a most vital way."

"What really makes the Piketon center

unique is that it brings together two of Ohio State's beautiful programs," Gee said.

The 160-acre site contains areas to be used for the research projects. There is also a 26,000 square-foot main administration building complete with a greenhouse, offices and laboratories, along with a cooler/freezer for storage of delicate plant tissue and a special room for grinding soil.

A 4.7-acre reservoir was created and designed for irrigation, fire protection and fish research. There are 12 quarter-acre earthen ponds for research and two large, one-acre ponds for commercial demonstrations.

The aquaculture component has a 3,600-square-foot building for hatching and development of larvae and for study of artificial diets, options for feeding and pond culture

New Employees

October 1

Shawn A. Lafontaine, Computing Systems & Data Services (D-346).

Paula A. Downey, Radiochemistry (D-553).

Jason E. Bolling, Production Services (D-803).

Angela D. Wiget, Accounts Payable (D-375).

Daniel P. Stout, Cascade Operations (D-811).

Charles D. Goddard, Health Physics (D-102).

October 7

John E. Christian, Public Affairs (D-022).

October 21

Barbara A. Stout, Process Services (D-514).

October 28

Patrick A. Hutchins, Organic Analytical Services (D-554).

MARTIN MARIETTA

Energy Systems at Portsmouth

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OSU also studying ground water

Another nearby project of the university will study the effects of agricultural chemicals and wastes on ground and surface water. David Rausch, facilities engineer, will oversee the facility when it is completed. Rausch currently works out of an office in the new Piketon Research and Extension Center.

The project, known as a Management Systems Evaluation Area (MSEA), is located just south of Piketon.

One of five MSEAs in the country, the Piketon facility will put \$6 million into Ohio's economy over the next five years. Research there will involve comparing three farming systems with varying degrees of chemical use, monitoring an extensive network of ground water wells, and evaluating new and improved farming system components.

The project, the only one of its kind in Ohio, is located on a 650-acre farm owned by John Vanmeter. Officials chose the site for several reasons. The aquifer has a supply potential of 1.5 billion gallons per day and is typical of aquifers in Ohio and the Midwest, the majority of the land over the aquifer is in corn and soybean production, and surface and groundwater systems in the region have been impacted by agriculture. In addition, similar buried valley aquifers in the Midwest show relatively high frequencies of nitrate contamination, and there is extensive hydrological and management information available on the site and the surrounding area.

The MSEA is already being used by researchers who have spent many of the days with good weather creating the test wells that will be used for monitoring.

Environmental report offered

Speaker gives current figures

The sixth annual briefing of the Environmental Monitoring Report for the Portsmouth Gaseous Diffusion Plant was completed for area news media Oct. 11 in the X-1000 building.

Local reporters were told that of 100,000 measurements taken, airborne radiation doses to the public resulting from operations at the Portsmouth site were 0.06 mrem per person per year (six-tenths of a percent of EPA limits). Waterborne radiation doses measured .002 mrem per person per year (This is .002 percent of DOE limit. There is no EPA limit).

The Site Manager for the U.S. Department of Energy, Gene Gillespie told reporters, "The results show an overall improvement over 1989. And we're feeling we're moving in the right direction as far as running this facility in an environmentally sound manner."

Gillespie's comments were supported by the document reviewed with the news media by Greg Goslow of the Environmental Control Department. "Really, we did very little, in terms of radiation emissions," Goslow said.

In 1986 and 1987 airborne radionuclides were recorded at 0.03 mrem per person per year. They peaked at 0.07 mrem in 1989. "In 1990 the emissions are back to what we consider normal," Goslow said.

Total radionuclides emissions to air at Portsmouth, measured in curies, declined from 1989. Impurities such as technetium and uranium daughters went from 0.096 in 1989 to 0.049 in 1990.

Goslow also told the media about an unplanned release into surface water which occurred in June 1990. "Fluorides accumulated in one of the systems we use to recover uranium from equipment and eventually corroded through the tubes on a heat exchanger," he explained.

This allowed its release to the environment through a discharge point where it was detected. The total release over two weeks was eight kilograms, approximately 16 pounds of uranium.

With the exception of that one incident, weekly samples taken at Little Beaver Creek complied with the proposed National Drinking Water Standards for uranium and with the existing and proposed National Drinking Water Standards for gross alpha, excluding uranium, and with existing National Drinking Water Standards for all other radionuclides at all times.

Little Beaver Creek at its junction with Big Beaver Creek complied with National Drinking Water Standards at all times. Big Beaver Creek complied with National Drinking Water Standards at all times with no significant difference between upstream and downstream average concentrations.

Samples of residential drinking water were collected on a voluntary basis from

private and public drinking water systems and analyzed for radionuclides and certain organics. No evidence of radionuclide contamination was found in any drinking water. No evidence of organic contamination was found except routine byproducts of water chlorination in sanitary water systems.

The objectives of the annual reports are to provide environmental monitoring data for the previous year along with a wide range of other information, including assumptions used in calculations and trend analyses. Reports are distributed each year to local news media, area libraries, federal and state agencies, members of Congress and local elected officials.

The goals of the annual news media briefings are to help clarify technical information and answer news media questions.

New and prior reports are available for employee review in the X-710 Technical Library and the X-100 Engineering Library.

Transfer event shown on video

Energy Systems Technology Transfer activities are featured on the fourth quarterly edition of **Insight**, the employee information videotape produced by Martin Marietta Corporation.

A copy of the tape is available from the Organization Development and Employee Services Department, extension 4545.

Employees who have comments or suggestions may direct them to Norman R. Augustine, c/o Insight Video Report, Martin Marietta Corporation, 6801 Rockledge Drive, Bethesda, MD 20817.

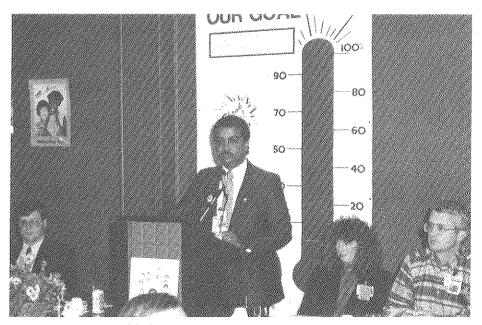
A new segment called "Ask Augustine" will be featured with the next "Insight" video. Employees will have the opportunity to ask Norm Augustine, Martin Marietta chairman and chief executive officer, to answer questions on job-related issues or on the state of the corporation.

Employees may fax their questions to Wendy Morrison, director of Communication in Bethesda, at (301) 897-6252.

At times in the future, should the "Insight" crew come to the Portsmouth plant, site employees would also have an opportunity to appear on camera and ask a question.

All questions are asked — whether on tape or by fax — by an employee who is identified by name, location and mail stop, will be answered in future editions of "Insight" or by mail. Any employee who is used in an "Insight" video edition will receive a T-shirt.

Questions may also be submitted anonymously.



United Way campaign concludes

Gary Hairston, Police Operations, was the general chairperson for this year's United Way campaign. Hairston is flanked by Rusty Yates, assistant general chairperson (left), and Kristi Landman, United Plant Guard Workers of America Local 66 representative and co-chairperson, and Assistant Plant Manager John Shoemaker (right). The activity concluded on Oct. 11 with allocation of funds to local United Way representatives.

Area students participate in Math Science Academy

As part of the U.S. Department of Energy's (DOE) effort to increase high school students' literacy and interest in math and science, a second DOE and Martin Marietta Energy Systems Math Science Academy was conducted at Shawnee State University Sept. 21 through Oct. 26.

The first academy was conducted on six Saturdays in May and June. It included 80 high school sophomores and juniors from an eight-county area of southern Ohio and northern Kentucky near the Portsmouth plant. The September and October session enrolled 98 students and included 26 high schools.

The program is a six-week, two credithour, hands-on learning experience in biological science, engineering technologies, mathematics and physical science. Its purpose is to create excitement and enthusiasm for the study of the sciences, while exposing the students to professionals in those areas in a college setting.

Materials and information presented in each workshop offered the students insight into the interdisciplinary nature of problem solving and issues resolution in technical and scientific workplaces. Students who completed the academy were awarded two undergraduate credits in science. According to the university, the program has attracted many students who otherwise may not have the courage to attempt a college class. Several have attended from the local joint vocational schools, expressing an interest afterward in continuing studies in science and technical areas.

Entitled "A New Look at Reasoning," the program focuses on approaches to inductive and deductive reasoning in the various subjects. The materials and information presented in each workshop offers the students insight as to the interdisciplinary nature of problem solving and issue resolution in technical and scientific workplaces. The instructors or workshop presenters are drawn from a network of math, science and engineering experts from Shawnee State University and Martin Marietta Energy Systems.

Students were placed in groups of 20 to 24 and circulated through the series of workshops with that same group. The instructors or workshop presenters prepared and taught a three-hour workshop which was presented four times during the academy.

Students who completed the academy were given diplomas at special graduation ceremonies.

SERVICE MILESTONES

NOVEMBER 1991

35 years — James H. Creech and Jack Lang.

15 years — Roger L. Hall, Larry D. Reese, James D. Snodgrass, Gary L. Simmons Sr., Roy L. Stevens, Jeffery B. Walburn, Robert R. Konanz, Brian N. Barnes and Janet E. Sword

10 years — Mark A. Saltzman, Dorothy K. Davis, Dorthy Valentine and Terry L. Duncan.



Jim Hicks, Nuclear Material Engineering, was honored Oct. 30 at a special luncheon. Hicks was recently named Employee of the Year by the Scioto County Accent on Ability Committee. He is shown with Plant Manager Ralph Donnelly.



Pam Farrar and Beth Keener (standing) organized the huncheon to honor Energy System's employee Jim Hicks on Oct. 30. Pat Cramer, Ron Mount and La'ura Payton participated in a sensitivities study that morning to make coworkers aware of the need to stress "abilities awareness."

Warning: Ethics code prohibits gratuities during the holidays

The special season that begins with Thanksgiving and runs into the new year is a time when suppliers — and even customers — want to show their appreciation for doing business with them.

"But Martin Marietta employees should be extremely careful," said George Sammet, vice president of the corporate Ethics Office. "You may have to politely decline that appreciation if it comes in the way of a gift, entertainment or gratuity of some kind."

Martin Marietta must always be able to make procurements or sell products on a completely impartial and objective basis, free from any outside influence, Sammet added.

"We don't want the perception that favorable treatment was given or received, or that we owe someone something because gifts, favors or hospitality was received or given," he continued. "Persons with any doubts about this policy should refer to the guidelines established in the Martin Marietta Code of Ethics and Standards of Conduct before committing themselves to any generous or unusual invitation," Sammet said.

The code prohibits gifts valued at \$10 or more to be received from any person or entity with which the Corporation does business.

However, Sammet pointed out, the code does permit acceptance of meals, refreshments or entertainment, as long as it is of nominal value and connected with business discussions.

The Portsmouth plant's Ethics representative and the corporate Ethics Officer are available to answer questions about the Code of Ethics. The plant Ethics representative can be reached at extension 2554, while the corporate Ethics Office number is 1-800-3-ETHICS (1-800-338-4427).

Jim Hicks honored

Efforts to promote abilities are recognized at luncheons

From Abraham Maslow's hierarchy of human needs to modern times, man has seen an increasing need to accentuate the positive. Recently, the exhortation of human values was embodied in Jim Hicks when he was named "Employee of the Year" by the Scioto County Accent on Ability Committee.

Hicks, an engineer in Nuclear Materials Accounting, was presented with the award Oct. 18 at Shawnee State University.

Energy Systems conducted a special luncheon for Hicks Oct. 30.

Hicks is one of 16 people appointed to serve on the Board of Governors of the Mid-Ohio Chapter of the National Multiple Sclerosis Society.

The Mid-Ohio Chapter is a subsection of the national organization. It provides support to the estimated 1,800 Ohio residents afflicted with multiple sclerosis (MS) within a 29-county chapter region.

Hicks, who is in his 36th year with the company, began his employment as an electronics technician in the development laboratory.

He transferred to the Nuclear Materials Control Department in 1978 and is a member of Institute of International Nuclear Materials Management. Despite his ongoing battle with MS, Hicks has remained active as chairman of the Greater Portsmouth Abilities Awareness Committee. In May, Hicks oganized an awareness exposition that included a celebrity speaker and a wheelchair basketball game.

Hicks said at the luncheon that what he's done hasn't been for the sake of reward. Last year he turned down accepting the same award. Hicks is more interested in developing the program than personal recognition, he said. He never misses the opportunity to recognize the personal sacrifices of his wife. "You don't know what it's like to live with a person like me," he said, describing some of the constant attention he needs in coping with MS.

Hicks said the abilities' group focuses on the total image of a person. "We don't care what kind of a disability a person's got, he's got a lot of abilities left."

Dale Mullins, of the Southern Ohio Medical Center, spoke about the background of the Accent on Ability Committee. Mullins prefaced his comments noting that personal perceptions are integral to dealing with a person's abilities, or disabilities, as the case may be.

Mulfins said disabilities are meaningless. "It's the handicap they present—the thing that we can't do that we want to do— is the handicap." Mulfins said people can eliminate those handicaps through pro-

grams. However, he added, "The thing that's the hardest thing to eliminate is the attitudes, misconceptions, what the disabled can't do."

Several employees of Energy Systems participated in a sensitivity exercise that included being wheelchair-bound during the morning before the Oct. 30 luncheon. One employee explained the exercise made her more aware of the obstacles people face in a wheelchair. "I had to go to my office on the second floor," Pat Cramer said. "I had to take the freight elevator.

Cramer described her ordeal when she decided to use the handicapped-accessible restroom. "It was on the complete opposite side of where I was. It took me ten minutes to get there. There was a chair in my way." Describing the stall for handicapped accessibility, she said, "It was really tight to get in there. Then, I couldn't get back out."

Energy Systems has been active in supporting abilities' awareness. Jeanette Langford, Abilities Awareness Program Manager at the Portsmouth plant, said the important thing is to recognize the obstacles and to correct them to make the facility even more accessible.

Hicks and his wife, Dolly, live in Portsmouth and have six children.

Obituaries

Margaret Evelyn Etling, 63, Chillicothe, July 20. Survivors include her husband, Robert L. Etling, who retired as a chemical operator (D-823) in March 1987; and two sons, Robert L. Etling (D-352) and Doug L. Etling (D-351).

Earl Colegrove, 86, Lucasville, Sept. 24. Survivors include his grandson, Rusty Yates (D-377).

Andrew Emin (Andy) Blake, 13, Lucas-ville, Sept. 28. Survivors include his father, Richard Blake (D-103).

Charles E. Bowman, 74, Jackson, Oct. 4. Bowman was a Technical Mechanic (D-561) at the time of his retirement in November 1981. Survivors include his wife, Ruth.

Mary C. Wamsley, 76, Piketon, Oct. 17. Survivors include her son, Stephen Wamsley (D-451).

Lawrence Greathouse, 64, Wellston, Oct. 20. Greathouse was a Maintenance Supervisor (D-721) at the time of his retirement in June 1990. Survivors include his wife, Patsy.

Loretta Browning, 48, West Portsmouth, Oct. 22. Survivors include a sister, Jean Johnson (D-352), and a sister-in-law, Eileen Slaughter (D-752).



LifeFlight visits Fire Department Open House

The Fire Department conducted "Open House" Oct. 11 to observe National Fire Prevention Week. This annual event features displays and demonstrations in the Fire Station, including fire pumper operations, alarm displays, fire extinguisher displays and extrication equipment demonstrations. Fire Prevention information and tips, for both home and work, were distributed to the people who visited the Fire Station. Visitors to the Fire Station that day were given a chance to see the LifeFlight helicopter. During the Open House, the plant Fire Department made a donation "boot" available for employees to contribute to the Fireflighters Annual "Give a Hoor... Fill a Boot" Fund Raising Drive to benefit the Burn/Trauma Unit at Children's Hospital in Columbus. Children's Hospital has been functioning for some time as a regional trauma center, treating the most severally injured victims of accidents. Soon, the hospital expects to be certified as a Level 1 Trauma Center, the very first pediatric regional trauma center in Ohio. Plant employees contributed \$450.

It's time to toss in those items you want to recycle

It's been around for 20 to 30 years, but it never really caught on — until now. Recycling just seemed to be another subcategory for ecologists, another pain for trash collectors. And it used to be a messy business.

Now, it's big business for some and the idea is snowballing into a major success. Martin Marietta Energy Systems recently joined in the recycling effort, beginning with soft drink cans. More than 8,000 cans of soft drinks are sold to plant people each week.

The company's new program also includes other recyclables, including cardboard, which takes up more than 60 percent of landfill space at the plant.

Waste Management has begun the interim stages of recycling cardboard. Phase I of the program has been named the "Crusade on Cardboard." For the past three months, Waste Management personnel have been collecting and bailing cardboard from non-radiological buildings. On Oct. 9 and 10, the first shipment was sent to the Pike County Recycling Center. The total volume was 66 bails weighing 7.2 tons.

This is an estimated reduction of 110 cubic yards in volume which had been destined for the plant landfill.

The company's plan is to distribute money collected from recycling efforts and distribute them to local charities. Each month the Values Council will ensure fair distribution of funds in \$100 increments based on the following guidelines:

- Letters of recommendation or nomination must be submitted by plant employees, addressed to a respective Values representative, by the fifth day of the month. The letter should include any supporting documentation and justification for the cause.
- The charity must be non-profit individuals, groups and organizations. The charity cannot be currently affiliated with

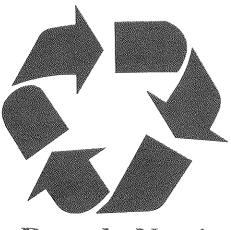
the United Way. All "causes" or charities under consideration must be consistent with our theme of Corporate Values.

• Only one contribution per charity each calendar year will be allowed.

Values Representatives include Beth Keener (Safeguards & Security), Sandy Fout (Engineering), Karen Hollback (ES&H), Jim Mossbarger (Business Services), Elaine Litten (Maintenance), Janice Stanley (Technical Services), Keith Vanderpool (Production), Jane Johnson (Human Resources), Josie Blackmon (Waste Management), Steve Pullins (Plant Manager's area) and Don Rockhold (Quality Programs). Melonie Valentine is the Values Plant Coordinator.

Points to ponder:

- According to the U.S. Environmental Protection Agency (EPA), Americans generate about 160 million tons of solid waste per year about four pounds per person per year.
- We already recycle 13 percent of our trash. With little effort that figure could raise to 45 percent.



Recycle Now!

New England Journal reports VDT side effects are inconclusive

The New England Journal of Medicine recently published a study entitled "Video Display Terminals and the Risk of Spontaneous Abortion," conducted by the National Institute for Occupational Safety and Health (NIOSH).

Concern about the health effects of occupational exposure to video display terminals (VDTs) was first raised in 1980 when adverse pregnancy outcomes were reported among working women who used VDTs. These women held jobs as computer attendants at a telephone company, airline reservationists, and toll operators.

Subsequent studies showed inconclusive results found no effect. These studies raised concerns regarding exposure to electromagnetic fields (EMFs) produced from the VDTs.

EMFs are created by the flow of electrical charges in an alternating current and are generated by anything powered by electricity. Hair dryers, kitchen appliances, and

Energy Systems goes smoke free!

Most of Martin Marietta Energy Systems went smoke-free on Oct. 1. Smoking is not permitted indoors at Oak Ridge and Paducah facilities.

The change reflects Energy Systems' commitment to providing a safe and comfortable working environment and is made in response to clear and convincing medical evidence reported by national health organizations that both smoking and exposure to secondary smoke can be harmful to your health.

Stop-smoking programs have been made available to employees in both cities.

The new policy arises from efforts under way since July 1988 to achieve a smoke-free workplace. The company's smoking policy has been under review since mid-1990 by site committee whose members represent a cross-section of Energy Systems employees, including members of the various unions and both smokers and non-smokers.

The revised Energy Systems policy now in place for Oak Ridge and Paducah retains the requirement that smoking be prohibited in vehicles if any of the occupants is a non-smoker. The term "facilities" is interpreted as any structure (as opposed to out-door areas such as parking lots and grassy areas).

If there are violations of the policy at Oak Ridge and Paducah, it is the responsibility of supervision there to seek a commitment from the individuals involved not to violate the policy again. Subsequent violations are handled as are other violations of company rules and regulations, through application of the Positive Discipline process.

electric blankets are examples of everyday sources of EMFs. In the earlier studies, EMF exposure was determined by interviewing study subjects or by examining data on job titles, rather than by measuring EMFs produced by the VDTs. The NIOSH study is the first study to actually measure the level of EMFs produced by the VDTs.

The NIOSH study compared female directory assistance operators with telephone operators at two companies in the South-eastern States. The two groups of women were very similar with regard to age, race, education, number of pregnancies, and number of years employed by the telephone companies; however, only the directory assistance operators used VDTs in their jobs. Among 2,430 women who were interviewed, 730 had one or more pregnancies that were included in the study.

The rate of live births, miscarriages, and stillbirths did not differ between the directory assistance and general operators. The overall rates of miscarriage were 14.8 percent among VDT users and 15.9 percent among those that did not use VDTs. These percentages are well within the range reported as normal in the medical literature (11 to 20 percent). The rates of miscarriage did not increase with the number of hours of exposure to VDTs. NIOSH found that levels of EMF exposure due to VDTs did not differ from the levels of EMF exposure the directory assistance operators were exposed to at home.

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