

Energy Systems at Portsmouth

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

Volume 6 Piketon, Ohio November-December 1991 Number 9

HEU production to be suspended by fall of 1994

Secretary of Energy James D. Watkins announced Nov. 8 the decision to suspend production of highly enriched uranium (HEU) at the Portsmouth Gaseous Diffusion Plant. The decision was made following assessments of available surplus materials with consideration for planned reductions in the number of nuclear weapons in the country's defense stockpile, including those outlined in the Sept. 27 announcement made by President Bush.

The United States has not produced highly enriched uranium for nuclear weapons since 1964. Since that time, however, there has been continued production of HEU for naval nuclear propulsion, research reactors, medical radioisotopes, and nuclear research reactors. But, future requirements for HEU can now be met from existing DOE inventories and from uranium recovered through dismantling of nuclear weapons.

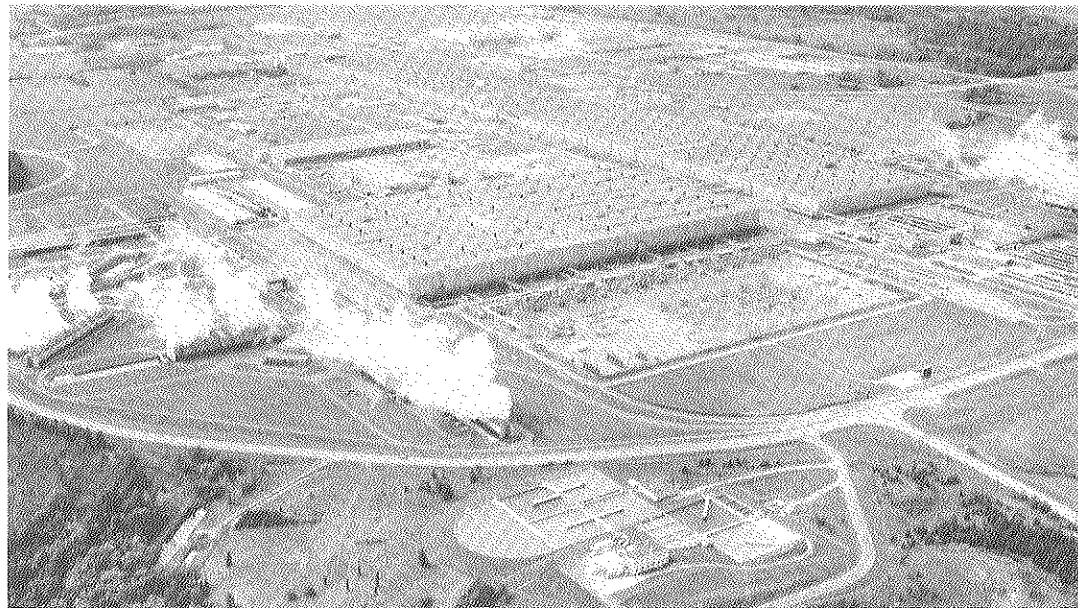
Watkins noted, "The Portsmouth Gaseous Diffusion Plant will continue its primary mission of producing low-enriched uranium for use by commercial nuclear power plants."

Plant Manager Ralph Donnelly further defined the future role of the Portsmouth plant and Martin Marietta Energy Systems. "Our mission is still to enrich uranium safely, in an environmentally sound manner, economically and efficiently on a 24-hour basis in accordance with DOE guidelines. We will continue to support this mission with a plan for unwavering excellence that ensures our being the world's best at producing low-enriched uranium for use by commercial nuclear plants."

"This means a commitment to making the necessary changes in as timely manner as possible and fully complying with all requirements pertinent to the Conduct of Operations. I am relying on each employee to share in this commitment to ensure our future in the Uranium Enrichment Enterprise."

In order to comply with safety rules and regulations, suspension of production requires an interim period of minimum rate production to ensure that the suspension can be carried out in a safe and environmentally sound manner.

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While production of highly enriched uranium will be suspended here by September 1994, the plant will continue its primary mission of producing low-enriched uranium for use by commercial nuclear power plants. This mission will be continued safely, in an environmentally sound manner, economically and efficiently. We will continue our work with unwavering excellence, so as to be the world's best.

Serving 60 utilities in 11 countries

Plant product continues to fuel 170 reactors

The Portsmouth Gaseous Diffusion Plant continues its primary mission of producing low-enriched uranium for use by commercial nuclear power plants. Following is a summary of that mission and the U. S. Department of Energy's Uranium Enrichment Enterprise (UEE).

UEE Customers

The Uranium Enrichment Enterprise currently has contracts to supply uranium enrichment services to 60 utilities in 11 countries. These countries are France, Germany, Japan, Mexico, South Korea, Spain, Sweden, Switzerland, Taiwan, United States and Yugoslavia.

Each year the UEE provides enrichment for approximately 170 nuclear reactors in these 11 countries. These nuclear reactors furnish electricity to millions of people around the world. Annual sales total approximately \$1.2 billion.

Enrichment Marketing

The marketing of enrichment services is a combined effort of the DOE Office of Uranium Enrichment (Washington, D.C.); the DOE Business Operations Division (BOD), which is part of the DOE Field Office, Oak Ridge; and the Marketing Support Division of Energy Systems. Marketing activities focus on three major world regions — North America, Europe, and the Far East.

Every year each customer is visited as often as needed (but at least twice) by UEE marketing teams. The U.S. utilities are visited throughout the year; visits to international customers are made during market-

ing trips that take place on a more periodic schedule.

Marketing representatives also meet with enrichment customers at major trade meetings throughout the year. Events such as the United States Council for Energy Awareness' (USCEA) Fuel Cycle Conference, the USCEA's Uranium Seminar, the USCEA's International Enrichment Conference, the World Nuclear Fuel Market Annual Meeting, and the Uranium Institute Symposium offer the marketing teams good opportunities to meet with customers and prospective customers from all over the world.

Special meetings are frequently hosted to inform customers of the progress of the enrichment program. This fall, representatives from all of Japan's electric utilities attended a special meeting in the United States for our Japanese customers. The event featured visits to the Paducah Gaseous Diffusion Plant (PGDP) and to the AVLIS facilities at Lawrence Livermore National Laboratory (LLNL).

While in Paducah, participants toured the plant and heard presentations on the use of non-firm power and on the increase of product assay at PGDP. The LLNL portion of the meeting featured a tour of the AVLIS facilities and presentations on the progress toward the full-scale AVLIS enrichment demonstration and the development of feed and product interfaces with the fuel cycle. The Japanese customers account for a significant portion of our enrichment business.

With the dissolution of Soviet influence

in Eastern Europe, a new enrichment market may be opening up. Several Eastern European countries have expressed interest in dealing with nuclear fuel cycle suppliers from the West. Our marketing team made its first visits to a number of Eastern European countries earlier this year.

Customer Service

Customer satisfaction is paramount in building lasting business relationships. We are committed to working with each enrichment customer on an individual basis to guarantee that we deliver the best service possible.

Whether a customer needs assistance in securing an export license, expediting a product shipment, or acquiring an emergency reload, we are willing to help.

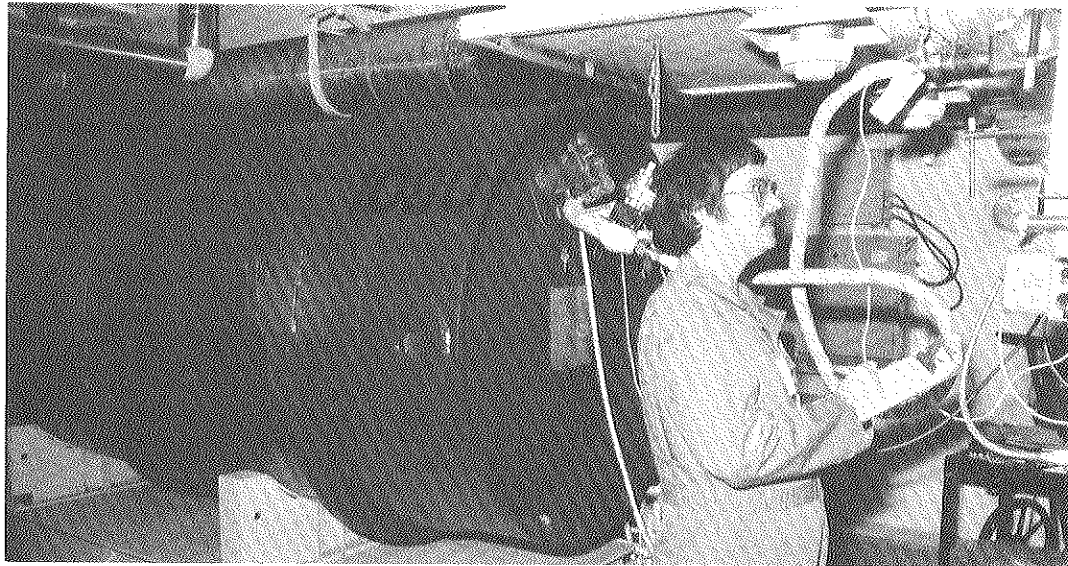
We welcome customer suggestions. For example, customers asked for greater flexibility on order notice lead time. Last year we put a program in place to respond to this request. This flexibility offered utilities significant reductions in the lead time required for setting their enrichment orders, thus increasing precision in fuel management and saving customers time and money.

During the past year, an Order Processing and Tracking System (OPTS) was developed that will allow DOE Account Executives, DOE Enrichment Specialists, and Portsmouth and Paducah plant personnel to track customers' orders from the day the order is received throughout the enrichment process, including shipping of the product, invoicing, and payment. This system will

(Continued on Page 2)

10-ton withdrawal assay limit raised

The first plant withdrawal from the cascade of U-235 of an assay above 4.5 percent into a 10-ton cylinder occurred in mid-November. The assay of the material withdrawn was 4.85 percent. Normally, only 4.4 percent is withdrawn. This provides a safer, more efficient operational mode for the cascade and uranium materials handling. The new process involves less movement of liquid-filled containers which means there is less chance of a UF₆ release. Material can also be withdrawn at a more rapid rate. The approval to make this type of withdrawal required the efforts of many Energy Systems and DOE organizations over the past three years.



Plant serves 60 utilities in 11 countries

(Continued from Page 1)

reduce costs while ensuring that the status of any order can be checked in a timely manner.

Contracting

Most utilities prefer to cover a substantial portion of their reactor requirements through longer-term contracts. They then look to obtain lower-cost enrichment for the remaining portion of their requirements.

HEU suspended

(Continued from Page 1)

During this first year of the suspension program, ending Sept. 30, 1992, environmental, safety and operational reviews will be completed. In the second and third years, ending September 1993 and September 1994, production of HEU will be stopped and residual uranium inventories will be removed.

Within three years, the DOE will decide whether to keep the HEU production portion of the plant in standby or to shut that area down permanently.

Energy Systems' current employment level of more than 2,600 at the Portsmouth Plant will not be affected until the appropriate reviews and procedures are completed. The plant's overall employment, involving both salaried and hourly personnel, will be reduced by approximately 500 positions by the end of the third year.

Staffing reductions are estimated to be 280 positions by Sept. 30, 1993, and an additional 220 positions by Sept. 30, 1994.

Donnelly said Martin Marietta hopes that attrition and other employment actions could substantially reduce or eliminate the need for layoffs. The company also will make every effort to minimize the effect of this reduction by offering training for reassignment within the plant, by exploring opportunities for transfer to other Martin Marietta facilities, by establishing an outplacement center, and by providing job search (resume writing and interview) training.

Marketing for these remaining requirements is very competitive.

DOE provides its long-term customers with enrichment services through its Utility Services Contract. This contract is a 10-year contract with rolling extensions; each year utilities must make a decision on renewing their contracts for one year, 10 years in advance (for example, in 1991, utilities would be asked to make decisions on renewing for the year 2001). Other contract features include base commitments of 70 percent or more of reactor requirements, ceiling price protection, and changes in percentage commitments at no charge with a five-year notice.

Tailoring contracts to meet customer needs has become extremely important in the competitive uranium enrichment market. Individual contract flexibilities are especially attractive to customers. The UEE works closely with each customer to tailor contract terms to create maximum value for the utility.

As a result of a world enrichment market oversupply and low spot-market prices for

enrichment, many customers prefer to shorten their planning horizons. Many utilities are now seeking to reduce their future commitments from 10 years to five or seven years. Contract length is a flexibility that is negotiated with customers on an individual basis.

Pricing

Price is also an important factor in securing a customer's uncommitted requirements. For the UEE to maintain a competitive price, minimizing production costs through use of non-firm power and other operational efficiencies is essential.

Considering inflation, we have reduced our base price for enrichment services by nearly 30 percent in real dollars since 1984. The base price is for 70 percent of the utilities' requirements. In addition to reducing the base price we have also offered a lower price for the remaining 30 percent of the utilities' requirements. As a result, customers purchasing 100 percent of their requirements from the UEE benefitted from even greater savings.

Kunkel credited with designing airport lights

Harold Kunkel, Superintendent, Electronic and Instrument Engineering, recently received recognition for designing the runway lights at the Pike County Airport.

Don Vulgamore, Chairman of the Pike County Airport Authority, expressed "sincere thanks and appreciation" to Kunkel for putting in nearly 120 hours on the project during his off-work time.

Kunkel volunteered his efforts writing specifications and drawing the plans for the project. Vulgamore said without Kunkel's assistance, "This project would have been fiscally impossible."

Kunkel's efforts also drew the attention of the Ohio departments of Transportation and Aviation as well as the Pike County Commissioners.

A resident of Piketon, Kunkel has worked for the Portsmouth Gaseous Diffusion Plant for 27 years.

MARTIN MARIETTA

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New Employees

November 4

Dale J. Fennell, Waste Management Planning and Engineering Support (D-452).

Dennis B. Howard, Quality Assurance (D-411).

Kenneth R. Egan, Procedures Systems Management (D-072).

November 11

John O. Burns, Environmental Control (D-103).

November 18

Robert L. Dupras, Health Physics (D-102).

Jami S. Boykin, Computing Systems & Data Services (D-346).

Jennie L. Kimble, Nuclear Materials Accounting (D-932).

Susan M. McDowell, Purchasing (D-321).

Timothy E. Goodbred, Quality Assurance (D-411).

Edward S. Coulter, Training Services (D-225).

Jonathan A. Bloom, Maintenance Division (D-741).

Cheryl K. Goff, Quality Programs Statistical Services (D-412).

December 2

James P. Flanders, Process Engineering (D-535).

Brent A. Richards, Environmental Control (D-103).

Gregory L. Wells, Chemical Operations (D-823).

Leonard C. Stenzel, Quality Assurance (D-411).

Mark W. Granus, Health Physics (D-102).

Retirees

Granville L. Smoot, Portsmouth, Production Process Operator (D-812), after more than 21 years.

Paul E. Briggs, Portsmouth, Production Process Operator (D-812), after more than 37 years.

Joyce A. Shuter, Minford, Sr. Secretary (D-620), after more than 11 years.

Samuel S. Bowman, Jackson, Electrician 1/C (D-711), after more than 16 years.

New Arrivals

Son, Tyler Avery, Nov. 20, to Avery (D-743) and Rebecca (D-321) Adams.

Daughter, Brooke K., Dec. 1, to Marcus (D-911) and Melissa Collins.

Compliance training required for site access

General Employee Training (GET) modules scheduled

The Portsmouth Gaseous Diffusion Plant began a General Employee Training (GET) program July 9 to offer compliance training classes consistently, on a weekly basis, and to eliminate redundancy of class presentation.

The GET program provides an indoctrination for employees in the general requirements applicable to their work assignments to ensure they have the knowledge necessary to perform their work effectively without jeopardizing the safety of themselves, their co-workers or surrounding communities, the environment, and plant operations or equipment.

The ensuing GET program description will also introduce a new Energy Systems aspect of the program that has company-wide applications.

There are three parts to the Portsmouth plant GET program: Martin Marietta Energy Systems (Energy Systems) GET, hereafter entitled General Employee Training for Access (GET-Access), Portsmouth-Specific GET, and Job-Specific GET.

General Employee Training For Access (GET-Access)

A new policy that is being developed requires all Energy Systems employees, subcontractors, and non-Energy Systems personnel given unescorted access to any of the five plants to complete GET-Access training. This policy is being developed by a Management Issues Team organized to address the concerns related to non-Energy systems personnel on Energy Systems-managed sites.

The team is composed of representatives from the Policy and Management organization; Office of the General Counsel; Engineering; Purchasing; Security; Environment, Health and Safety; Emergency Preparedness; Training; the ORNL User Facility; and line management. Requirements for the policy have been taken from Federal regulations, Department of Energy (DOE) Orders, and good management practices.

A goal of the policy is to standardize General Employee Training for Access to allow unescorted access to all Energy Systems-managed sites, regardless of where the training occurs.

GET-Access training is a biennial requirement and is composed of three modules: Radiation Protection, Hazard Communication, and General Topics.

- The Radiation Protection module covers the risks, including prenatal, of low-level occupational radiation exposure; basic radiation protection concepts; DOE and Energy Systems radiation protection policies, procedures, and responsibilities; and emergency procedures.

- The Hazard Communication module, often referred to as "workers' right to know," covers chemical hazard evaluation, warning labels, material safety data sheets, and other aspects of the hazard communication program.

- General Topics covers a general description of the facilities managed by Energy Systems and the company's role in interacting with DOE; flowdown of requirements; job-related policies, procedures,

and instructions; criticality safety; emergency plans, industrial safety and hygiene programs, fire protection, security, quality assurance, and environmental compliance.

This training does not exempt individuals from requirements for additional training for access to hazardous locations. Additional training may be required by Plant Training, Construction Engineering, Safety Department, etc. or Facility Custodians.

Employees who have completed equivalent modules during a specified time period will be exempt from the new requirement for two years from the earliest date trained. The following are modules that will be used to exempt or "grandfather" personnel into the GET-Access program: MAN01.01 General Nuclear Criticality Safety, if taken after 1/1/90; MAN02.06 Hazard Communication, if after 1/1/90; MAN03.01.01 Radiation Protection, if after 1/1/90; and MAN05.01 Emergency Preparedness, if after 1/1/91.

When the policy is fully implemented (to be announced in a General Notice), individuals will not be allowed unescorted entry unless they have received the training. Employees are encouraged to check with their Division Training Coordinator (DTC) to ensure that their records are current.

Portsmouth-Specific GET

In addition to GET-Access training, all plant employees are required to complete various training courses as required by federal, state, or local laws, DOE Orders, or management. This program will vary as ne-

cessary. The courses to be included in PORTS-Specific GET include MAN03.51.01 Whole Body Frisking, biennially; MAN05.01 Emergency Preparedness, annual; PCM# TBD, Waste Minimization (under development), annual; OCO01.01.-01 (TMIS #2113) Conduct of Operations, as required; PCM#TBD, Procedures Users Training (under development), frequency TBD; and MAN04.01 Health and Safety Rights, annual.

Job-Specific GET

Employees, subcontractors, and non-plant personnel depending on their work location or work assignment may be required to participate in Job-Specific GET.

Job-Specific GET includes compliance training required for more than half of the individuals on plant site, and crosses division lines (e.g. Maintenance; Operations; and Environment, Safety & Health personnel need Confined Space Entry training). This training may also include training necessary to work in hazardous locations. The courses presently included in Job-Specific GET are MAN03.51.01 Whole Body Frisking, MAN02.14 Carcinogens, MAN02.08 Corrosives, MAN02.09 Solvents, MAN02.12 Gases, MAN02.11 Poisons, MAN02.10 Oxidizers, MAN02.02 Heat Stress, MAN02.03 Cold Stress, MAN07.14 Safety Systems, MAN02.01 Hearing Conservation, MAN02.04 Confined Space Entry, and MAN04.05.10 EWP and HWP Training (soon to be "lock-out/tagout" training).

All Job-Specific GET courses are required annually.

General Information

The General Employee Training Department is responsible for planning and coordinating all of the GET programs for the Portsmouth plant. Initially, instruction will be provided by instructors from all (seven) Plant Training Departments.

GET is conducted in the X-7721 MST building in accordance with a standard schedule, which can be found on the DEC 1022 computer system "Bandit" by entering "Help Train."

Employees will be permitted to "Test-Out" of GET modules with the exception of Radiation Protection, Whole Body Frisking, and Emergency Preparedness. "Test-Out" allows employees to demonstrate mastery of module learning objectives through a series of proctored examinations in the X-7721 without attending training. Employees who are unable to "Test-Out" of a specific module will be required to attend training on that subject.

If you have questions about the GET training requirements or would like to arrange to "Test-Out," please contact Howard Cutright on extension 4049, Sally Cunningham on extension 2447, or your Division Training Coordinator.



Engineering Personnel conduct Halloween costume contest

Elvis was seen at the Portsmouth Gaseous Diffusion Plant Oct. 31. Members of the Engineering Division dressed in Halloween fashion to "treat" co-workers. Winners of the costume contest were Jack Jenkins as Raggedy Ann (ugliest), Sonia Singh as a dancer (prettiest), Betty Bihl as the scarecrow (scariest), Debbie Jordan as a clown (funniest), and Crystal Bays as Elvis (most original). The Engineering Values Council endorsed this activity. Melonie Valentine was its

secret judge. Winners received a bag of candy. Personnel photographed that day were (front row) Kathy Haggard, Crystal Bays, Jack Jenkins, Scott Reiser, (back row) Betty Bihl, Joyce Shuter, Sonia Singh, Cheryl Whitt, Bob Mollette, Rita Park, Mabel Blair, Sandy Fout, Michelle Rolfe, Carol Snively, Dan Noble, Bobbi Hartwell, Paula Ridgeway, Debbie Jordan, Neil Snyder, Sara Lowman, Jay Hutchins, Gail Wolfe, Roy DePue, Chuck Feld and Shirley Walter.

“We are on to something”

Hopkins reviews Total Quality Management goals at October Forum

Energy Systems President Clyde Hopkins, speaking to Energy Systems employees at the annual Total Quality Management Forum in October, said he intends to visit every division in 1992 to demonstrate his commitment to employee empowerment and to encourage employees to incorporate TQM principles into their work.

Hopkins said that he believes “we are on to something” with TQM, “but in order for it to work, both the company and the employees have to benefit.”

Hopkins’ comments followed several presentations on implementing TQM and developing empowered work teams.

Donna Griffith, Publications Division director, noted that some say empowerment is a panacea and others believe it is closer to anarchy. Griffith said the 18 months in which her organization has been implementing TQM principles has been similar to taking a journey.

Griffith said that managers, who act as “guides,” must be “fit for travel” — knowledgeable, willing to let others share in decision making and in responsibility for successes and failures, and committed to empowering others.

Griffith said employees were trained in team building and took Myers-Briggs type

indicator training and that a TQM specialist was appointed to support TQM efforts in the division. Griffith said the cultural change elicited reactions ranging from “enthusiasm and fear to excitement and confusion.”

Listening to employees’ concerns and “being prepared to make course corrections can ease the strain” of embarking on a journey to a new culture, Griffith said.

Dave Reichle, ORNL associate director for Environmental, Life and Social Sciences, said that although his first reaction to TQM was to ask himself what the corporation had come up with now to keep us from getting our work done, he later realized that TQM is “a restatement of traditional values of pride in individual performance.”

Empowerment allows for participatory decision making, information sharing and delegation of authority, he said, noting that while committees review, study and recommend, “empowered teams identify, analyze and resolve.”

Empowered employees and work groups can help cope with demands, schedules and technical matters that are too overwhelming to be handled by managers alone, he said.

Reichle said that one lesson of implementing TQM is seen in shared energy research laboratories where no one individual was responsible for environmental, safety and health compliance.

With the appointment of laboratory stewards empowered to react to environmental, safety and health concerns, the problem was solved. Stewards participated in developing operating procedures and were delegated authority to remove personnel who were not complying with prescribed practices and to “shut down the labs if necessary.” As a result, Reichle said, ORNL came through its tiger team assessment with flying colors in that area.

Reichle said that if supervisors establish clear objectives, they can delegate responsibility and hold employees accountable for what they do. People usually will accept responsibility if they feel that they can contribute to the work environment and that they have input into decisions that affect their well-being, he said.

Other presentations featured members of empowered high-performance work teams.

Bill Simon, Utilities Department superintendent for the ORNL Plant and Equipment Division, said that before TQM, Steam Plant employees saw themselves as being “at the low end of the ORNL totem pole,” but the empowered Steam Plant team sees itself now as a vital part of the research process.

Simon said TQM can help improve communication among managers and union personnel. Noting that no grievances have been filed by Steam Plant union workers in two years, Simon said “that doesn’t mean we don’t disagree, we’re just able to discuss it when we do disagree.”

Butch Nolan, a supervisor at the Steam Plant, said that with empowerment comes job ownership and pride in one’s work.

Members of a high performance work team from HAZWRAP (Charlotte Bingham, Cathy Butterworth, Susan Davis, Jill Holley, Mona Mangrum, Linda Moyer, Amy Phillips and Bonnie Teasley) discussed their development of an administrative support manual “to establish consistency in dealing with daily tasks,” Davis said.

Davis said the group learned to work as a team and established mutual respect for different views.

Through empowerment, TQM can work, said Teasley — for all Energy Systems employees.

This team and the manual it produced enabled HAZWRAP to increase the productivity of administrative support personnel by some 217.5 employee hours per year, with a cost avoidance of about \$100,000 annually, Mangrum said.

Julie Dorsey, head of the Y-12 Plant Laboratory, said that according to author Peter

Koestenbaum, empowerment means developing and motivating quality in people. The best managers are those who see their primary function as “serving the people who work for them,” she said. “The effective manager must not only do things right, but have the vision to do the right things.”

“Empowered teams decrease the burden of requirements on supervisors while it challenges and motivates personnel,” said Randy Howell, quality assurance manager for the plant laboratory. “We have to attain compliance to stay in operation,” he said, but to compete, “we must aim for excellence.”

Plant lab employee Mike Napier, who leads a high-performance team responsible for material accountability and waste management, said his team’s changes in shipping procedures resulted in a cost avoidance of some \$170,000 for the Plant Lab.

Wanda Banks of the physical measurements and asbestos high-performance team, said improved customer relations resulted from better communication and decreased turnaround time.

Savings Bond interest rates set at 6.38%

The semiannual market-based interest rate for Series EE Savings Bonds issued between Nov. 1, 1991, and April 30, 1992, is 6.38 percent for their initial semiannual interest period. The current minimum rate is 6 percent for Bonds held at least five years. The semiannual rate changes each May and November and is based on market averages during the preceding six months.

Obituaries

Ellora L. Clark, 86, Portsmouth, Nov. 17. Survivors include her son-in-law, David McQuay (D-346).

Pete Peterson, Oak Ridge, Nov. 19. Peterson was first plant manager at Good-year Jackson and was later associated with Goodyear Aerospace Corporation’s gas centrifuge machine project at Oak Ridge. He is survived by his wife, Rosalee, and one daughter.

Ethics Hotline

To report possible wrongdoing or to obtain clarification on ethical matters, contact 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).

SERVICE MILESTONES

EDITOR’S NOTE: In the October issue, the list of service milestones for November was incorrect. We inadvertently repeated the list for September 1991. We apologize for the error.

November 1991

35 years — Karl R. Wedebrook and John F. Hall Jr.

20 years — Robert B. Kefgen.

15 years — Patricia A. Johnson, William L. Shortridge, Marvin K. Ross, Carl E. Williams, Francis L. Cyrus, Ronald E. Dorning II, Norman E. Kruckenberg and Keith D. Banks.

10 years — Charles K. Witt, Richard L. Matthews, Bobby D. Fuhr, Angela F. Litten, Steven D. Smith, Walter J. Cox, Michael K. McFann, Thomas A. Kramer and Marsha C. Stubbs.

5 years — Orval Dean and Gerald A. Costilow.

December 1991

35 years — Lorena M. Thompson.

30 years — Patricia J. Cramer.

25 years — John O. Warner.

20 years — Ronald E. Willis and Wilma M. Yerian.

15 years — Daniel J. Ruggles, Thomas L. Lowe, Dorothy M. Clifford, Stephen K. Boehm, Larry D. Foreman, Ralph D. Preble and Karen L. Hollback.

10 years — Lynne T. Odle, Ronald W. Hurley, William J. Partin and Gregory L. Maynard.

January 1992

35 years — John J. Ward.

20 years — Michael L. Kidd, Charles R. Blevins and Ralph D. Strickland.

15 years — Katherine M. Johnson, Paul D. Austin, William D. Strunk, Larry W. Edwards, Wayne J. Spetnagel, Steven A. Fetherolf, Timothy T. Mitchell, Miriam J. Clausing, Bonnie L. Williamson, Helen L. McNelly, Paula M. Ridgeway, Gregory D. Thompson, Gwendolyn F. Blanton and John M. Hortel.

10 years — Lloyd Clausing, Dewey L. Godfrey, Robert D. Moore and Charles E. Fannin.

5 years — Donald E. Ray and Anne J. Sheller.

Wayne Cook "hams" it up Amateur radio class focuses on new no-code license class

By John Christian

Wayne Cook is busy this quarter "hamming it up" with students at Ohio University in Chillicothe.

Cook, who works in Laboratory Services, offers a course for new amateur radio, or "ham" enthusiasts.

"We not only want to teach the theory for the Novice portion, but also the Technician portion of the license," he explained.

Amateur operators operate in frequencies in the upper bands as well as the short-wave band. To operate the equipment legally, however, users must carry a valid license.

"We're teaching a new course to gain a license as a No-Code Technician for ham radio," Cook said. "In the past you needed to pass a morse code test at five words per minute."

The new "No-Code Technician" license class, available just this spring to ham operators, is "for people that are interested in radio, but don't want to get particularly involved in the Code," Cook said.

With the new license people can work on ham radio bands 50MHz or higher.

Lower frequencies are out of bounds to most ham operators due to an international agreement that stipulates ham radio operators know Morse Code.

Using the same electromagnetic waves that are common to television, radar, and space communication, ham radio works in wavelength ranges more commonly known as high frequency (HF) and very high frequency (VHF).

Ham radio is a non-commercial hobby for volunteers, Cook explained. "You cannot be compensated for the things you do. Someone can't hire you to send a message somewhere."

So why would anybody be interested in ham radio?

The answer falls back on human nature. "The intent is to be able to develop radio operators and to be able to respond to public emergencies," Cook said. The reputation precedes the name in this case.

At one time, during the hasty development of radio after World War I, amateur operators executed such amazing feats as the first transatlantic radio contact in 1921. Their assistance provided during emergencies is invaluable when normal communications are disrupted. "I think it started when hams found they could build their own equipment," Cook said.

These pioneers of wattage showed no resistance to their conduction of assembling radio sets. "They were able to put together radio sets that weren't selective as far as frequency," Cook said. "They would transmit all over the radio spectrum."

When commercial stations and public broadcast stations came into being, they developed methods to better control beams to a narrow frequency.

Hams can work on several different bands. Cook said, "That's one thing nice about it. You can pick a band that will function for best propagation (transmission)."

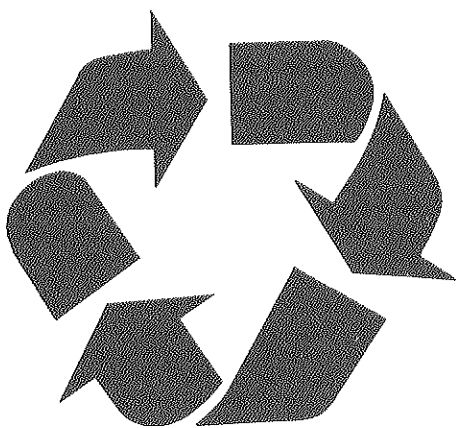
The Scioto Valley Amateur Radio Club sponsors Cook's class. "What we're doing is conducting a class in the interest of that club. And the only thing we require is that people get an associate membership in the club for one year," he said. Materials for the course are available at Radio Shack stores when in stock.

The name, amateur radio, is a little misleading. Such organizations have launched a number of satellites piggyback with regular launches by the U.S., the Soviet Union, and the European Space Agency.

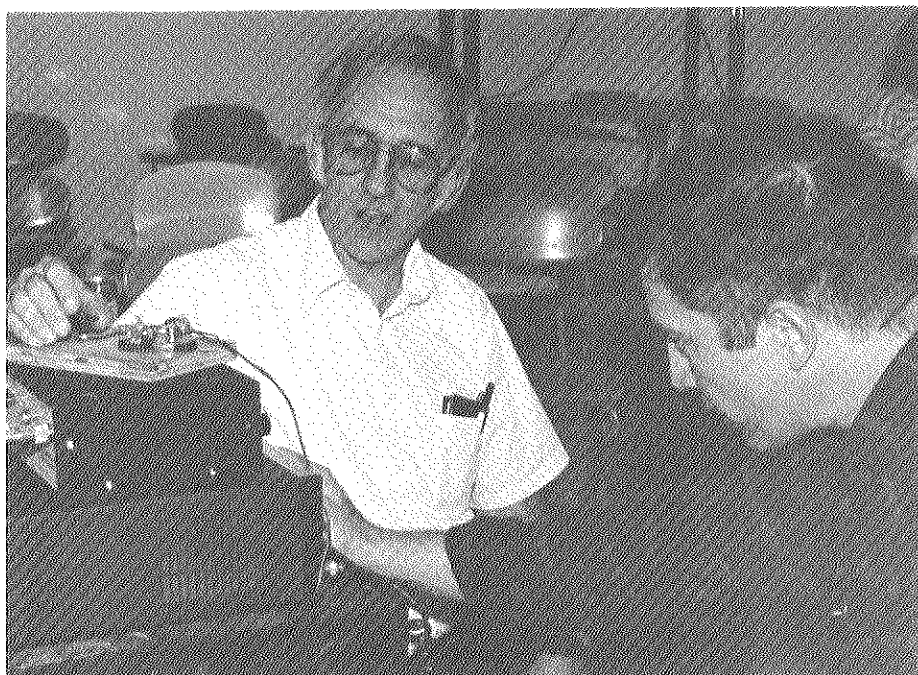
Radio waves used by the normal short-wave spectrum are usually not reflected by the ionosphere. Even if they are, signals can travel hundreds, even thousands of miles either bouncing off the ionosphere or satellites. "Most of it depends on the antenna," Cook explained. "Antennas are directional, just like light beams can be. You can have a flashlight, or you can have a single light, like a candle where beams can go in all directions."

Cook earned his electrical engineering degree at the University of Cincinnati and currently serves as a design engineer designing laboratory equipment. He received his ham radio license in 1982. He is a member of the plant's Atomic Amateur Radio Club.

More than 1.5 million people worldwide hold amateur radio operator licenses.



**Recycling is ...
doing your part
again and again!**



Energy Systems employee Wayne Cook tests his teletype talents with a student at Ohio University in Chillicothe. Cook offers "ham" radio courses at the university through the Scioto Valley Amateur Radio Club. Cook works in Laboratory Services.

Wilcoxon named to manage Contracts and Commitments

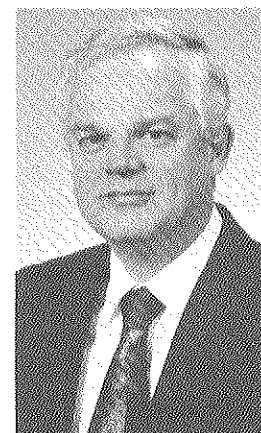
Ralph Wilcoxon has been named Contract and Commitments Manager. He reports to Bob Bush, Manager, Business Services.

In this new position, Wilcoxon will be responsible for administering the many aspects of the new Uranium Enrichment contract with the Department of Energy for the Portsmouth Gaseous Diffusion Plant. Included are Award Fee activities, the commitment management system, allowable/unallowable cost considerations, and DOE Order baselining.

Wilcoxon came to work at the Portsmouth plant in January 1968 as an Engineer on the Technical Squadron. In various assignments, he worked beginning in June 1969 as a Staff Engineer and as Senior Engineer beginning in June 1977. He became Section head for the R/A Machine Assembly and Disassembly group in the Gas Centrifuge Enrichment Plant (GCEP) organization in September 1980, and Supervisor, Manufacturing Engineering and Services, in the GCEP organization in April 1983. He became Superintendent, Purchasing Department, in July 1985.

Wilcoxon was graduated from the University of Dayton with a bachelor's degree in chemical engineering in December 1967 and from Ohio University with a master's degree in industrial and systems engineering in August 1971. He has also completed work toward a master's degree in chemical engineering at Ohio University.

He and his wife, Anne, have three children and live in Sciotoville.



Wilcoxon

Energy Systems' 2nd half rating Performance is satisfactory

Martin Marietta Energy Systems has received its award fee performance ratings from the Department of Energy for the six-month period that ended Sept. 30, 1991.

The rating for the Oak Ridge facilities is 85 (Satisfactory), with the amount of the award set at \$6,927,237 or 62.5 percent of the estimated available fee. The Oak Ridge facilities contract is for Energy Systems management of the Y-12 Plant, the Oak Ridge

National Laboratory, and the K-25 Site.

The rating for the uranium enrichment contract, covering both the Paducah and Portsmouth plants, is 84 (Satisfactory), with a corresponding award of \$3,518,274 or 60 percent of the estimated available fee.

Rating summaries every six months address both areas showing improvement and projects and programs identified as needing additional attention.



Plant Office Machine Technicians Doug Etling and Chuck Fannin set up typewriters while Jeanette Langford and Albert White, executive director of the Portsmouth Inner City Development Corp. (PIDC) discuss logistics for an upcoming class. The 12-week class, jointly sponsored by the Scioto County JTPA, the PIDC and Martin Marietta, is a typing refresher course aimed at providing job training for minorities and low-income individuals. Langford, Equal Opportunity and Affirmative Action program manager at the Portsmouth plant, designed and managed the class conducted at the PIDC building in Portsmouth.

Energy Systems participates in typing skills training

The combined effort of three area organizations interested in Equal Employment Opportunity has recently provided jobs for eight area residents.

The Portsmouth Inner City Development Corp. (PIDC) designed and managed the project, which was a first of its kind for the area.

The Scioto County Job Training Partnership Agency (JTPA) and PIDC joined together in developing a program designed to meet the needs of area businesses.

Jeanette Langford, manager of Martin Marietta's EEO/Affirmative Action Program at the Portsmouth Gaseous Diffusion Plant, assisted in developing the intense typing skills training course.

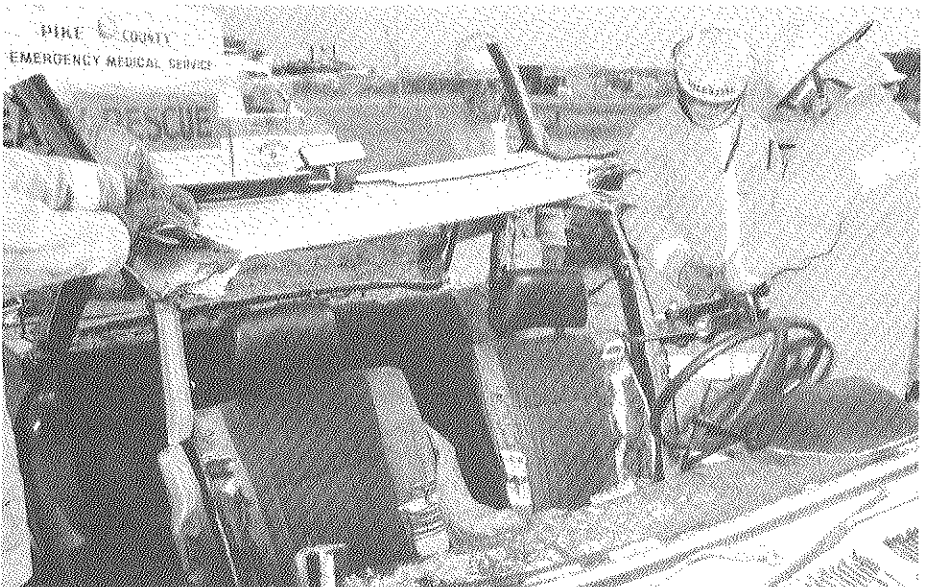
Langford said the program supported a growing national concern that minorities were not being given similar advantages when being recruited for employment. She

said the best way to deal with that concern was to "get someone to put participants through a strenuous clerical refresher course and test them."

The JTPA program funded the course and recruited participants. The PIDC provided space to house and monitor the program. Martin Marietta supplied the equipment.

The course involved 12 residents attending half-day classes Monday through Friday over a 12-week period with continuous testing throughout the program. Joanna Steiff, a retired teacher from the Scioto County Joint Vocational School, designed the typing course outline for the program. Langford said Steiff has a reputation for producing successful students.

Langford said she hopes to see a similar course conducted in January with computer use added to the curriculum.



At five Energy Systems sites United Way contributions more than \$1.5 million

Energy Systems employees pledged more than \$1.5 million in the 1991 United Way campaign, exceeding campaign goals at all five sites. Some 15,000 participants at Oak Ridge facilities made Energy Systems the largest contributor to United Way in the 16-county region it serves. Martin Marietta Corporation also donated to the fund, bringing the company's total contribution to a record \$1,568,544.95.

Employee and corporate contributions at the Paducah plant totaled \$122,314.12, and at the Portsmouth plant, \$100,531.92.

Unions at Energy Systems sites also surpassed their goals for the campaign.

The Atomic Trades and Labor Council (ATLC) at Y-12 pledged \$86,464 (112.7 percent of goal), and ATLC members at ORNL pledged \$47,149 (154.3 percent of goal). The International Guard Union of America (IGUA) at ORNL pledged \$1,667 (100.1 percent of goal), and IGUA at the Y-12 Plant pledged \$21,257 (140.6 percent of goal). At K-25, the Oil Chemical and Atomic Workers Union (OCAW) pledged \$26,702 (107.3 percent of goal), and the United Plant Guard Workers of America (UPGWA) pledged \$3,165 (123.8 percent of goal).

Although OCAW and UPGWA at the Paducah facility and UPGWA at the Portsmouth facility did not set separate goals, union presidents served as campaign co-chairpersons, providing support for the plant-wide campaign.

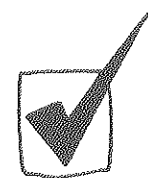
The combined contributions are distributed to 16 counties in East Tennessee, seven in the Paducah area and 16 in the Portsmouth area. Givers may designate counties that are to receive their contributions. At the end of the campaign, the combined contributions distributed among the specified counties, were as follows:

Oak Ridge area counties: Anderson, \$616,007.67; Blount, \$26,271.76; Campbell \$17,573.42; Cumberland, \$6,021.32; Hamblen, \$1,911.00; Hamilton, \$2,491.24; Jefferson, \$2,070.28; Knox, \$521,113.14; Loudon, \$71,518.32; McMinn, \$3,689.08; Monroe, \$9,050.80; Morgan, \$48,394.36; Rhea, \$3,626.44; Roane, \$223,033.28; Sevier, \$4,907.36; Union, \$6,000.72; and

Mesa Co. Colo., (where employees from the Oak Ridge area are on special assignment) \$4,414.76.

Paducah area counties: McCracken, \$84,459.44; Ballard, \$11,271.04; Graves, \$9,450.68; Marshall, \$5,012.48; Carlisle, \$3,144.64; Massac Co., Ill., \$7,015.44; and Mississippi Co., Mo., \$626.40.

Portsmouth area counties: Adams, \$858.07; Athens, \$360; Cuyahoga, \$50; Franklin, \$928.29; Highland, \$122; Jackson, \$9,108.82; Lawrence, \$130; Meigs, \$24; Montgomery, \$120; Pickaway, \$1,730.09; Pike, \$24,006.26; Ross, \$25,631.79; Scioto, \$36,278.20; Vinton, \$48; Cabell Co., W.Va., \$96; Greenup Co., Ky., \$640.40.



Safety

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Extrication training

The Waverly City Fire Department and Pike County Emergency Medical Services joined with Martin Marietta fire fighters on Nov. 18 to conduct vehicle extrication training at the plant. Energy Systems recently acquired the "Jaws of Life" rescue tool that was used during the four-hour training session. Waverly Fire Chief Randy Armbruster was the lead instructor for the training session.

Martin Marietta Energy Systems, Inc.

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