

# Nuclear Division News



A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 8/No. 13 — June 23, 1977

## In this issue ...



Whittling away at a hobby, R. Michael Oliver, ORNL Graphic Arts Department, carves out another of his favorite subjects — a shark. His interest in this toothy creature existed long before the shark craze generated by the movie "Jaws." See Oliver's "Different Drummer" on page 4.

## Ride sharing: savings for commuters

Need a ride to work? Tired of paying big gasoline bills every month? Over the past several weeks, ride sharing representatives at the three Oak Ridge installations have been working to update computer information on location of those employees interested in ride sharing, including both van pools and car pools.

Although PGDP has no computerized program, ride sharing assistance is available through the Employee Relations office.

Many van pools are already operating in the Oak Ridge and Paducah areas, and there are a great many more employees who are car pooling. The inducements are many: economy, environmental protection, convenience, reduction of traffic jams and insurance against future gas

shortages. Ride sharing fits squarely into the recent emphasis that has been put on conservation of energy.

### Typical savings told

Nuclear Division employees in Tennessee may drive many miles each way to get to work, even if they live in Oak Ridge (and only 32 percent of them live in the Atomic City!). Paducah employees live in at least three states, and the Paducah Plant is about 18 miles away from Paducah itself.

The farther an employee commutes to work, the more money can be saved by ride sharing. A monthly cost comparison from a typical employee, who drives 30 miles each way to work, shows that he spends \$201.60 if he drives alone, \$50.40 if he car-

pools, and \$35.50 if he rides in a van pool.

John M. Ball is coordinating the Nuclear Division's ride-sharing program. Representatives in the Oak Ridge installations are Kathy Coleman (3-3293) at ORGDP, Jerry Johnson (3-6219) at ORNL and E.W. Whitfield (3-7382) at Y-12; pooling efforts at PGDP are under the direction of Keith Bryant (208).

### New printouts coming

Oak Ridge's program has had an assist from the Knoxville Commuter Pool and the University of Tennessee, which have received data, maintained the computer files and provided the requested output. The recent drive to update the computer information, which was several years old, began at Y-12, followed by ORGDP and ORNL at two-week intervals. Output from the update is now being received, and each person who filed an updated form will receive a computer list of neighbors interested in ride sharing.

The Nuclear Division's emphasis on ride sharing is intended to be continuous, John Ball says. New employees are invited to join the computerized program, and employees who have already completed forms may submit new information if their situations have changed. Also, employees not currently interested in ride sharing may submit forms in the future, should they become interested.

### Van pool information

The University of Tennessee's Transportation Center has published a booklet which gives full details on the purchase of a van, the setting up of a van pool and other pertinent information, such as insurance, obtaining a special driver's license, and rules of the road.

The University and the Knoxville Commuter Pool have worked with the State to provide more economical insurance for both van pools and car pools, and have worked with area credit unions in providing up to 100 percent financing for personally-owned van pools. (The Federal Abort Program provides guaranteed financing up to 90 percent to protect lending agencies should a personally-financed van pool fail for some reason.)

The continuing emphasis on ride sharing, Ball says, will include examining various approaches to encourage van and car pooling. The installation coordinators welcome any suggestions from employees towards this effort.

## Payroll Savings campaign underway

UNION CARBIDE CORPORATION  
270 PARK AVENUE  
NEW YORK, N. Y. 10017

WILLIAM S. SNEATH  
CHAIRMAN OF THE BOARD

Dear Fellow Employee,

This year's U. S. Savings Bond campaign theme, "Look Ahead," is especially appropriate. As we approach mid-year, there are many encouraging signs that our country's economy is improving. Even so, any thoughtful person who looks ahead must realize that many serious problems remain to be solved, and should realize that individual citizens have an important role to play in their solution.

Consider, for example, the problem of our national debt. You may well ask how any individual can realistically expect to make a significant contribution toward solving that enormous, complex problem. The fact is that individual purchases of Savings Bonds do add up in a highly significant way: In 1976, it cost the United States about two cents less to raise a dollar through Savings Bonds than it did to raise a dollar through capital markets. Savings Bond purchasers helped our country save about 25 percent in debt costs. That's a multi-billion dollar assist to the nation's financial stability.

On a more personal level, those who look ahead should do so with Savings Bonds in mind. These bonds are exempt from state and local taxes. Federal income taxes can be deferred until after retirement, or, if you buy the bonds in a child's name to pay education costs, you may be able to reduce the federal tax substantially or even entirely. (These tax advantages are explained in more detail in the attached booklet.)

The interest rate on all Savings Bonds is six percent per year. You can find higher rates on other investments -- provided that you have a lot of money to invest. But for those who have modest amounts to put aside each week or month, it's doubtful that they can find an investment paying as much as six percent. And they certainly can't find one that's safer, since Savings Bonds are literally the safest investment in the world.

For your convenience, a payroll deduction authorization form accompanies this letter. If you are already buying bonds, I urge you to consider that this may be the right time to increase your purchases. If you are not yet in the payroll savings plan, I urge you to look ahead and join now. One day, you'll look back and be glad.

Sincerely,

The above letter from William S. Sneath, Chairman of the Board of Union Carbide, describes for employees some of the advantages of participating in the Corporation's Payroll Savings Plan.

The Nuclear Division is once again participating in a Corporation-wide program designed to encourage employees to purchase U.S. Savings Bonds through the Payroll Savings Plan.

For the past seven years, a Savings Bond campaign has been conducted at each Nuclear Division installation, with solicitors contacting employees and urging them to sign enrollment cards. During this period, the number of employees participating in the program has grown from 730 to more than 11,400.

The 1977 campaign is being conducted on a different basis. This year all employees who are not currently purchasing Savings Bonds through the Payroll Savings Plan will receive a letter from Roger F. Hibbs, Nuclear Division President, citing the advantages of participating in the program. An enrollment card and a return postage-paid envelope will be enclosed.

While this method of reaching employees is less direct than that used in past years, Division management feels strongly that participation in the Payroll Savings Plan is an excellent way to establish and maintain a planned savings program.

A campaign similar to the one being conducted throughout the Nuclear Division has been developed by the Corporation on a nationwide basis. A letter from William S. Sneath, Chairman of the Board of Union Carbide, appears on this page; it describes some of the many advantages of participating in the Payroll Savings Plan.

In his letter to Nuclear Division employees who do not now purchase Savings Bonds, Hibbs stressed the value of the program.

## question box

If you have questions on company policy, write the Editor, Nuclear Division News (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

### Education vs. background

**QUESTION:** Recently a bid stated "Experience or appropriate educational background in auditing or accounting is required." During the interview the statement was made that only a college graduate would be considered and "experience doesn't count." Why were the requirements allowed to be misrepresented?

**ANSWER:** The Job Opportunity System bid you refer to did state, "Experience or educational background in auditing or accounting is required." Therefore, to consider only a college graduate was wrong, and the supervisor involved has been so advised.

### Business survey planned

**QUESTION:** In the April, 1977, issue of the *Union Carbide World*, a news brief described two types of surveys being conducted for Union Carbide. The first, by Opinion Research Corporation, covers "employees' views of Union Carbide as a member of the business community." The second, by International Survey Research, entails attitude surveys "at selected locations."

Has any Nuclear Division plant been selected for another attitude survey by ISR? If so, which plant(s) and when?

**ANSWER:** Employee attitude surveys have been conducted by various divisions of Union Carbide over a long period of time. Such surveys were made at all Nuclear Division installations about three years ago. A number of other Carbide locations were surveyed in 1976 and are being surveyed in 1977.

Since our locations have been

covered in the recent past, no Nuclear Division installation is included in the "employee attitude" surveys at this time.

All four Nuclear Division installations will be involved in the "Union Carbide Business Community Profile" survey. About one employee in every twelve will receive a questionnaire through the mail from Opinion Research Corporation.

### Hiring rates

**QUESTION:** There are weekly salaried employees at Paducah who were hired to do a job for X dollars. It appears that effective January 1, Salary Administration decided that job should be paid XX dollars, so all personnel hired after that date received XX dollars. Some of those hired before then discussed this with their supervisors, and adjustments were made in the salaries. However, it seems likely that when it comes time for their annual merit raise, they may receive a smaller percentage rate than they would had they remained at the old X dollar rate. Is this right?

**ANSWER:** If things happened as you indicate they did, it would have been a mistake. When, from time to time, hiring rates are increased for nonexempt salaried jobs, those employees already on the payroll are adjusted to the new rate or above before those hired from the outside are brought in at the higher rate. When special adjustments are made, they are disregarded in determining the timing and amount of the next merit increase. To determine exactly what happened in your instance, we would suggest you discuss this matter with your supervisor.

## Named supervisor in ORGDP Finance, Materials and Services



Richard C. Snyder

77-2130  
Richard C. Snyder has been named supervisor of Stores, Warehousing, Material Delivery, Property Sales and Excess Materials and Scrap at ORGDP.

A native of Chicago, Snyder worked at Ford Motor Company and at the Dempster System prior to joining Union Carbide in 1976. He holds a B.S. degree in labor economics from Illinois Institute of Technology.

He lives at 416 South Maple Street, Maryville.

## Named information center coordinator

Bonnie C. Talmi has been appointed information center coordinator for ORNL.

In her new position, Talmi will assist Chester R. Richmond, associate laboratory director for Biomedical Sciences, in overseeing and administering information center activities to ensure that their operations are consistent with Laboratory objectives. She will coordinate strategic and long-range planning and will interpret Laboratory policies and procedures related to technical information to other organizations.

Talmi received her bachelor's degree in sociology and master's degree in library science from Cornell University and Columbia University, respectively. Before joining the ORNL Library staff in 1972, she worked as a reference librarian at Cornell University.

Since August 1973, Talmi has worked in the Laboratory's Program Planning and Analysis Office.

Talmi is a member of the American Society for Information Science, and chairs its special interest group on In-

formation Analysis Centers. She lives at 179 Louisiana Avenue, Oak Ridge.

## ANS announces Special Award; new Fellows named

The American Nuclear Society (ANS) has presented its 1977 Special Award for major roles in the development of "The Fuel Cycle" to four ORNL researchers.

Sharing the award, which consists of \$1,000 and a citation, were: Floyd L. Culler Jr., deputy director of the Laboratory; Don E. Ferguson, director, Chemical Technology Division; Raymond G. Wymer, associate director, Chemical Technology Division; and John O. Blomeke, program manager for waste management, Chemical Technology Division.

The presentation was made at the ANS annual meeting in New York City.

Five ORNL staff members also were honored as newly elected Fellows of ANS. In addition to Wymer, they are: Arthur P. Fraas, retired member and now consultant to the Engineering Technology Division; A.L. Lotts, manager, thorium utilization program and manager, gas-cooled reactor programs, Metals and Ceramics Division; Murray W. Rosenthal, associate director for Advanced Energy systems; and James L. Scott, manager, magnetic fusion energy materials program, Metals and Ceramics Division.

In receiving the Special Award, Culler, Ferguson, Wymer, and Blomeke were cited by ANS President Vincent S. Boyer "for outstanding work on the fuel cycle and in recognition of their leading roles over the past third of the century in the chemical technology of fuel recycle."

The Chemical Technology Division at ORNL was cited for outstanding contributions to nuclear fuel recycle during the past 30 years.

In 1975, Edward G. Struxness, associate director of the Environmental Sciences Division, was the recipient for his contributions to the science and technology of radioactive waste management. Warren R. Grimes, director of the former Reactor Chemistry Division and now on the staff of the Chemical Technology Division, was honored in

(Please see page 5)

## anniversaries

### ORGDP 30 YEARS

Mary H. Hughes, Plant Managers' Division; and James H. Cantrell, Operations.

### 25 YEARS

Robert G. Longmire, Richard R. Shelton, Donald R. McCammon, Harmon G. Smith, Robert W. Browell, Kenneth B. Silva, James S. Brown Jr., Richard J. McNamee and Donald R. Kellog.

### 20 YEARS

Douglas E. Gain and Doris W. Frazier.

### Y-12 PLANT 30 YEARS

Stewart Hatcher, Process Maintenance; and Luther A. Walton, Buildings, Grounds and Maintenance Shops.

### 25 YEARS

A. Hayes Hunter Jr., Thomas R. Har-

vey, Pheolian E. Woods, Homer Young, William E. Dunlap, Edmond Roberts, Benson W. Garrett, Bobby J. Vest, O. Duane Sanders Jr., Max J. Bezik, Walter R. Clevenger, David Gillespie and Bruce T. Fox.

### 20 YEARS

Benjamin H. Norman, William E. O'Dell Jr., Fed White, John F. Partin Jr. and Raymond W. Curtis.

### PADUCAH 25 YEARS

Eugene Byers, James H. Chesnut, Ezra F. Draper, Vaughn L. Reed, Raymond C. Shrewsbury, Alma L. Seaton, Thomas O. Cocke, Albert S. Friedmann, M.E. "Gene" Rollins and Paul E. Graves.

### ORNL 30 YEARS

Dock Smith, Plant and Equipment; Harry C. Hoy Jr., Engineering Tech-

nology; Frank L. Rogers, Chemical Technology; Alberta P. Henley, Biology; Robert Smith Jr., Engineering Technology; Blaine E. Thomas, Finance and Materials; Ralph H. Jones, Plant and Equipment; Harry E. Seagren Jr., Plant and Equipment; and Richard F. Kimball, Biology.

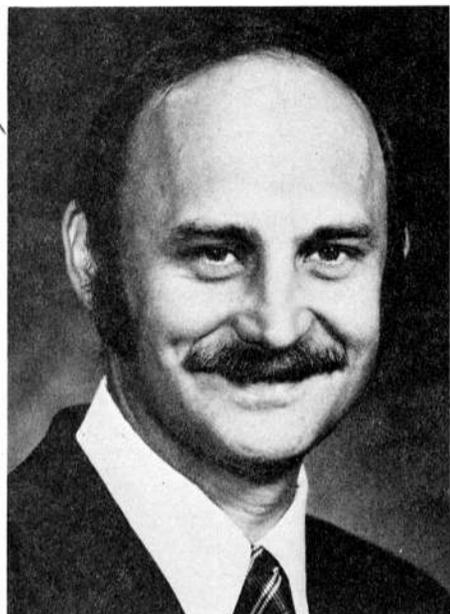
### 25 YEARS

Sigfred Peterson, Rollins E. Helms, Juel F. Emery, J.C. Price, James L. Crowley, Alva C. Duncan, Walter G. Whatley, Billy K. Norris, Anthony J. Caputo, Wilbur F. Schaffer Jr., James W. McNeillie, Wallace R. Gambill, Jay W. Reynolds, John L. Redford, Eugene H. Waters, Thomas G. Hill, David R. Alford III and Frances M. Burkhalter.

### 20 YEARS

Harold F. Keesee, Jerry N. Brantley, Gerald B. Young, Richard G. Spurling, Robert T. Santoro and William C. Ulrich.

# New division established; Kaye appointed director



Stephen V. Kaye

The establishment of a new Health and Safety Research Division and the appointment of Stephen V. Kaye as division director have been announced by Herman Postma, director of ORNL.

The Division brings together programs concerned with assessing the effects of both nuclear and non-nuclear energy technologies on man. It is one of two new divisions that resulted from consolidation of the Analysis and Assessment section, (previously in the Environmental Sciences Division), the Biomedical Radioisotopes group (previously in the Operations Division), and portions of the former Health Physics Division, whose director was John A. Auxier.

Auxier will serve as director of the other new division, called Industrial Safety and Applied Health Physics, which will include the Laboratory support functions of the former Health Physics Division.

Under Kaye's direction, the Health and Safety Research Division will aid

in assessing various energy technologies in order to assure that they offer the nation safe options for meeting future energy needs. This objective will be carried out through integrated studies on physical and chemical interactions of pollutants, assessments of health effects, dosimetry, pollutant transport modeling, and determinations of risks to individuals and populations.

The new division, comprising approximately 100 persons, is organized in four major sections, whose leaders are: Harvel A. Wright, Biological and Radiation Physics; W. Ray Garrett, Chemical Physics; J. Kenneth Poggenburg, Biomedical Effects and Instrumentation; and Paul S. Rohwer, Technology Assessments.

Kaye, previously head of the Analysis and Assessments section in the Environmental Sciences Division, joined the ORNL staff in 1960 as a member of the Radiation Ecology section of the Health Physics Division.

A native of Avenel, N.J., Kaye received his bachelor's degree from Rutgers University and master's degree in animal ecology from North Carolina State University. In 1963, he was awarded an advanced health physics fellowship from the U.S. Atomic Energy Commission (now ER-DA), and received his doctorate in radiation biology from the University of Rochester.

Kaye's major research efforts have included assessing radiation doses to human populations from consumer products containing radioactive sources, and from facilities associated with the nuclear fuel cycle. This work also has been extended to the assessment of nonnuclear pollutants.

Kaye has been involved in organizing and chairing several national and international conferences dealing with radiation effects on man and the environment.

He is the author or coauthor of more than 50 publications on radiological



Morrow

Phillips

Raines

Robinson

## Four promoted at ORGDP

Four promotions have been announced at ORGDP. Dwight L. Morrow has been named a laboratory supervisor in Separations Systems Division; A. Foster Phillips an engineer in Operations Division; Esco J. Raines an inspection supervisor in Technical Services Division; and Howard Robinson Sr. a supervisor in Barrier Division.

Morrow, a native of Fontana, N.C., is a graduate of Knoxville Business College and attended the University of Tennessee. He worked with Mid-South Pavers and in the Y-12 Quality Control Department before transferring to ORGDP in 1973. Morrow and his wife, Sharon (an employee at the Y-12 Plant), have a daughter, Lindsey; the family lives at Route 5, Clinton.

Phillips was born in Evensville, Tenn. He attended Lincoln Memorial University and the University of Tennessee; before joining Union Carbide in 1975 he worked with the cities of Oak Ridge and Knoxville. Phillips and

his wife, Mary Lea, live at 108 Cahill Lane, Oak Ridge, with their two children, Charles and Catherine.

Raines came to the Nuclear Division in 1968 after participating in the Training and Technology Program at Y-12. He is a native of Caryville, and he resides there at 101 Oak Street with his wife, Shirley, and two children, Stacey and Daryl.

Robinson was employed by Oak Ridge Associated Universities before coming to ORGDP in 1975. A Knoxville native, he attended Knoxville College. He and his wife, Viola, live at 3001 Linden Avenue, Knoxville, with their six children: Andrea, Elizabeth, Howard Jr., Giovanni, Antonnio and Valeria.



## Nation celebrates 201st happy birthday!

To show you exactly how time flies, it has been a year now since we celebrated our big 200th birthday for the United States. Monday, July 4, marks the real beginning of the nation's third century.

Monday will be an official holiday for all Nuclear Division employees, unless his/her presence is required for continuous operations or plant security.

protection and related areas, and is a member of several professional organizations.

He and his wife, Moira, and three children; Moira Alice, Stephen Thomas, and Matthew Randall, live at 1042 West Outer Drive, Oak Ridge.

As director of the Health and Safety Research Division, Kaye will report to Chester R. Richmond, ORNL associate director for Biomedical and Environmental Sciences.



Formulating plans for the 1977 United Way campaign are, from left, Gary Riser, ORGDP chairman; Herm Snyder, general chairman; Jerry Dunn, Y-12 chairman; and Mary Ayles, assistant general chairman. Gordon Fee, ORNL's chairman, was not present for the photo.

## '77 United Way planning begins

Although the opening of the Nuclear Division's 1977 United Way drive for the three Oak Ridge plants is still three months away, committee members have been at work on plans and preparations since April.

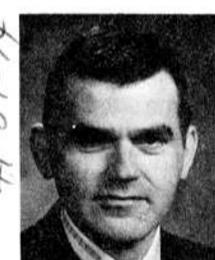
The 1977 drive will get underway September 26 and will run through October 21.

General chairman for this year's drive is Herman G. P. Snyder, superintendent of Y-12's Employee Relations Division and a 31-year Nuclear Division employee. Snyder has been chairman of the Y-12 campaign twice, most recently in 1974.

Assistant general chairman is Mary C. Ayles, a Y-12 employee relations representative. Ayles, who has been with Union Carbide since 1972, conducted solicitor training sessions for the 1976 campaign.

This year's installation chairmen are:

• Gary Riser, ORGDP. Riser, a 10-year Nuclear Division employee, is manager of general accounting for the Division. He was co-chairman for ORGDP's 1974 United Way campaign, and has worked in past campaigns on the departmental level.



Fee

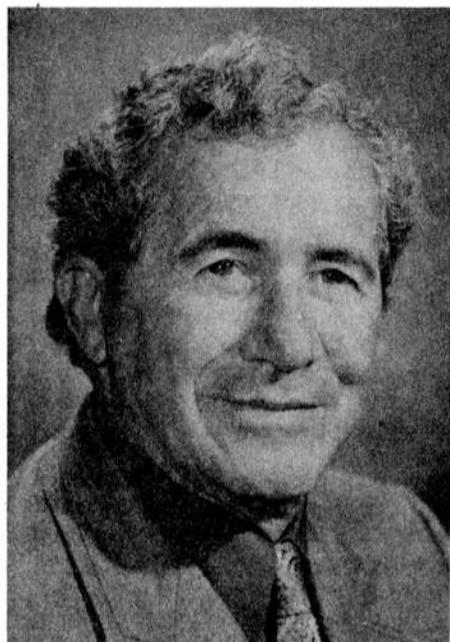
• Gordon Fee, ORNL. Fee is director of ORNL's Engineering Technology Division and a 21-year Union Carbide employee.

• R. G. "Jerry" Dunn, Y-12. Dunn, supervisor of Y-12's Capital Accounting and Budget Department, has been with the Nuclear Division 23 years. He has served in several previous United Way campaigns, both at the plant and general committee levels. (Please see page 8)

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At PGDP 25 years

# Ex-truant Beekman now holds perfect attendance record



Sam Beekman

When Sam Beekman drops his badge at a PGDP portal for the last time, it just might qualify for candidacy in the **Guinness Book of World Records**. According to rough calculations, the number of times he has performed that act lies somewhere in the neighborhood of 6,500.

For the unmathematical mind, that reveals a record of 25 years, 52 weeks a year and five days a week: in 25 years at Paducah, Beekman has never missed a day's work. What's more, he has never been late or forgotten his badge.

But things have not always been this way. It all started back in Mount Vernon, Ill., when Beekman was in high school. A night owl, he was perpetually late for class. "My only claim to fame in the high school year book was honorable mention for being tardy more than anyone else in school," he says. The high school's assistant principal recognized that Beekman had an incurable penchant for being late, and expressed doubts about his future after graduation.

Then Uncle Sam (no relation to Beekman) took affairs in hand, and what came next may have changed the course of Beekman's life. He was called upon to take charge of his squad in the Army, which included the task of seeing that every man was out of his bunk and on his feet at 6 a.m. For Beekman, that was a task indeed—but one that ultimately brought him to the outstanding attendance and punctuality record he now holds. "I never had any trouble getting up early after that," Beekman gratefully admits.

Beekman first came into contact with the Nuclear Division in 1952, while (during a career as an oil driller) he was core drilling on the Paducah Plant site. Shortly thereafter, he accepted a position as a cascade operator in the PGDP Cascade Operations Division, where he later became a cascade foreman.

And so, after 25 years of loyal attendance, Beekman has finally refuted his high school teacher's doubts about his shaky career possibilities. He is living proof that his incurable tardiness was not a terminal case after all.

Beekman is now looking toward retirement, when he plans to return to his "first love," oil exploration. And instead of getting up and leaving home every morning to do that, he'll just crank up his 28-foot travel trailer and take it with him.

about people . . .

## Accountants' Man of Year

Robert F. Limburg, finance manager for Advanced Energy Programs at ORNL, was honored as Man of the Year at the May meeting of the Knoxville Chapter of the National Association of Accountants. This award is presented annually to the member who has contributed the most to the organization during the year.



Limburg

He also received a certificate of appreciation for his contribution to management accounting by researching, developing and writing a technical manuscript on the subject of "EOQ (Economic Order Quantity), on Inventory Management Technique." Limburg is past president of the Knoxville Chapter and secretary of the Tennessee Council for National Association of Accountants.

Limburg, his wife, Melinda, and son, Bobby, live in Martel Estates East, Lenoir City.

### next issue . . .

The next issue will be dated July 7. The deadline is June 28.

### safety scoreboard

Time worked without a lost-time accident through June 16:

Paducah . . . . .	120 Days	1,557,040 Man-Hours
ORGDP . . . . .	49 Days	1,655,000 Man-Hours
Y-12 Plant . . . . .	121 Days	3,780,000 Man-Hours
ORNL . . . . .	52 Days	1,122,500 Man-Hours

## retirements

 Charles R. Connatser Y-12 Research Services 26 years service	 Milton Carlton Y-12 Research Services 26 years service	 Sarah Virginia Swanner Y-12 Computer Sciences 32 years service	 Lynn B. Cabe Engineering, Y-12 22 years service
 Bruce T. Fox Y-12 Maintenance 25 years service	 Otis O. Milam Y-12 Maintenance 10 years service	 Loyd N. Wakefield Y-12 Material Transfer 29 years service	 Cordell H. Dixon Y-12 Stores 30 years service
 Carl W. Kidd Y-12 Stores 33 years service	 Wade M. Roberts Y-12 Material Procurement 23 years service	 Myron E. Stooksbury Y-12 Chemical Services 29 years service	 Arthur B. Seabolt Y-12 Casting 29 years service
 Paul H. Dobbins Y-12 Beta-2 Assembly 17 years service	 Thomas M. Faulkner Y-12 Inspection 16 years service	 Claude B. DeLozier Y-12 Inspection 23 years service	 George H. Steinecipher Y-12 General Shops 22 years service
 Robert F. Long Y-12 Machine Maintenance 23 years service	 Roy G. Brown ORGDP Barrier Division 26 years service	 Mary Ellen Hazelett ORGDP General Accounting 26 years service	 Fred H. Joiner PGDP Electrical Department 25 years service
 James E. Parham Computer Sciences, ORNL 31 years service	 Robert F. Myrick Plant and Equipment ORNL 30 years service	<p>Also:</p> <p>John R. Fritts Plant and Equipment ORNL 24 years service</p> <p>David E. Rosson Metals and Ceramics ORNL 28 years service</p> <p>Martin Witkamp Environmental Sciences ORNL 17 years service</p>	

# Here we grow again . . .



**BIOLOGY ADDS LABS** — In ORNL's Biology Division, the two-floor section of Building 9211 is expanding to four floors. The addition, scheduled for completion by mid-1978, will add 8,000 square feet of laboratory space for the joint ERDA National Cancer Institute carcinogenesis program.

## Three promotions told at Y-12



Hatfield



Newman



Bailey

Three promotions have been announced at the Y-12 Plant. David E. Bailey has been named a fire and guard captain and John J. Hatfield a fire and guard lieutenant, both in the Security, Plant Protection and Utilities Division; and Thomas D. Newman has been named a senior welding inspector in Product Certification.

Bailey, a native of Brent, Ala., was self-employed before joining the Nuclear Division 24 years ago. He and his wife, Mildred, live at 102 Norwood Lane, Oak Ridge. They have two married daughters.

Hatfield was born in Anderson County. Before joining Union Carbide

in 1969, he worked at Roane Hosiery in Harriman and Ford Motor Co. in Utica, Mich. He and his wife, Edith, have two daughters, Debbie and Linda. The family lives at Route 1, Oliver Springs.

Newman is a native of Dayton, Tenn., and participated for six months in 1968 in Oak Ridge Associated Universities' Training and Technology Program as a welder trainee. Before joining the Nuclear Division in 1971, he worked with TVA at the Bull Run Power House, John Sevier Power House and Widow's Creek Power House. He and his wife, Nancy, live at Route 5, Clinton. They have two daughters, Stephanie and Sheri.

## ORNL promotions announced in P&E, Operations Divisions

Four promotions have been announced at ORNL: Charles C. Gaddis was promoted to buildings and grounds supervisor in the Operations Division; E. Kaye Johnson was named an administrative assistant in the Plant and Equipment (P&E) Division, David L. Laughlin was promoted to a reactor supervisor in the Operations Division; and W. Dewey Todd was named a general supervisor in the Building and Utility Services Department, P&E Division.

Gaddis, a Carbidier since 1975, is a native of Isabella, Tenn. He was formerly a member of ORNL's laundry crew. From 1964 to 1975, Gaddis was employed by the city of Oak Ridge.



Gaddis

Gaddis, his wife, Joan, and son, Don, live at Route 3, Oliver Springs.



Laughlin

Joining Union Carbide in 1954, Laughlin has been at the Laboratory since 1960. He worked first at the Y-12 Plant as a chemical operator before coming to the ORNL mail room, and later in the Operations Division as a reactor controller.

A native of Lenoir City, Laughlin, and his wife, JoAnn, live at 413 6th Avenue, Lenoir City. They have three children: Janet, Jeff and Gary.

Todd joined the Nuclear Division in April, 1946, in ORNL's Guard Department. He was later selected for the P&E apprentice program and promoted to journeyman pipefitter in 1955.

Before his new appointment, he served as a maintenance supervisor in the Building and Utility Services Department. Todd also served four years in the U.S. Army.

Todd, a native of Benton County, has lived in Oak Ridge more than 30 years. He lives at 131 Nevada Circle.



Todd

Johnson joined ORNL in May, 1976, as a technical assistant, Laboratory Protection Division. In January she transferred to P&E to serve as space allocation coordinator, and will continue to serve in this capacity.

A native of Knoxville, Johnson received her B.S. degree in business administration from Mississippi State University, and is doing graduate work at the University of Tennessee, Knoxville.



Johnson

Before joining ORNL, she was employed by Exxon Company, Mobile, Ala.

Johnson lives at 5109 Bluefield Road, Knoxville.

## ORNL employees honored by ANS

(Continued from page 2)

1967 for his contributions in the field of reactor chemistry.

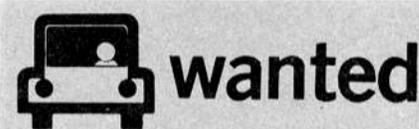
This year's Special Award, for "The Fuel Cycle," recognizes a major focus of research and development since the Laboratory's establishment in 1943.

Culler, ORNL deputy director since 1970, has been recognized internationally for his leadership and contributions in areas such as nuclear fuel reprocessing and waste management. He serves as U.S. representative on the Scientific Advisory Committee of the International Atomic Energy Agency and is a member of the National Academy of Engineering. Previously he has been a recipient of the International Atoms for Peace Award, the E.O. Lawrence Memorial Award, and the Robert E. Wilson Award from the Nuclear Division, American Institute of Chemical Engineers.

Ferguson, director of the Chemical Technology Division since 1964, has specialized in the chemical processing of reactor fuels. His research interests have included research on chemical separations, processing of transplutonium elements, and development of integrated fuel cycles for power reactors. He has served as a U.S. representative to the Geneva Conferences on the "Peaceful Uses of Nuclear Energy."

Wymer, who first joined the ORNL staff as a radiochemist in 1953, became associate director of the Chemical Technology Division in 1973. He is responsible for programs in chemical development, pilot plant operation, and fuel recycle. His recent work has involved fuel cycle development for both the High Temperature Gas-Cooled Reactor and current light water reactor nuclear power plants.

John O. Blomeke came to ORNL in 1944 to work on the chemical development of uranium-plutonium separations processes. Since 1950, as a member of the Chemical Technology Division, he has specialized in the reprocessing of spent reactor fuels and development of radioactive waste management methods, serving most recently as program manager responsible for overall planning and economic evaluation in the latter area.



Y-12

RIDERS wanted from California-Delaware area, Oak Ridge, to North or Biology Portal, straight day. N.W. Moyer, plant phone 3-5801, home phone Oak Ridge 483-8781.

*'A Different Drummer'*

**Oliver carves guns, circuses,  
but sharks still favorite subject**

2545-77



by R. Michael Oliver

My interest in wood carving began in high school, where my first carving, a dolphin, was stolen. I remember how crude it was compared to my more recent works, but then I think, "someone must have liked it."

**"always a mystery about the piece of wood I work with, because I never know how the grain will turn out ..."**

I like working with wood because it is more natural than other mediums, such as plastic or clay. There is always a mystery about the piece of wood I work with; because I never

2546-77



know how the grain will turn out until it is nearly completed. The grain is the natural beauty of the wood, and this is what most carvers strive to show to its best advantage.

The pleasure I get from creating a shark, animal or whatever, is greater than the observer might see. My reward is the satisfaction and relaxation derived from starting with a block of pine or walnut and creating an artistic shape.

Several people influenced my decision to go into wood carving. My dad was the biggest influence. We both share an interest in carving circus models, complete with wagons, tents, and paraphernalia of the 1930's and 40's. Dad encouraged and guided me in carving "Big Top" animals, and intricate band wagons.

**"We both share an interest in carving circus models—complete with wagons, tents and paraphernalia of the 1930's and 40's."**

I hope that this glimpse of an earlier decade will benefit those too young to remember the large tented circuses of the past.

People I work with are also very helpful with their constructive criticisms and suggestions on what I should carve next. Jerry King, also in the ORNL Graphic Arts Department, has been a tremendous help to me in carving guns. He also carves, and we sometimes work together solving

problems of accuracy and movable working parts.

Of all the fish and animals that I've carved, sharks are my favorite. I've spent endless hours studying sharks and their habits through books as well as first hand observation. As a hobby, my wife and I collect sharks' teeth on the beaches of Venice, Fla., a favorite vacation spot.

**"Sharks fascinated me long before the movie 'Jaws' came out . . . Although I enjoyed it enough to see it three times . . ."**

Sharks fascinated me long before the movie "Jaws" came out. My interest will last longer than the fad created by "Jaws." (Although I enjoyed the movie enough to see it three times.) "Jaws" has created an unnecessary fear in most people.

After studying and carving sharks for several years, I now have a profound respect for them. Their sleek graceful forms lend very well to wood carving. Since many sharks are distinguishable only by color, I paint my sharks with an airbrush, which is another art form in itself.

In anything I carve, I strive for realism, but especially in sharks. My technique is to carve the fish out of one piece of wood, adding only the pectoral fins and teeth. These additions are individually carved with tiny serrated edges, then glued into the jaw.

**"Every carving has its beginning on paper."**

Every carving has its beginning on paper. Each view of the subject is carefully planned and drawn to the best use of the wood, then transferred to a block. I use white pine almost exclusively, because of my budget, and its soft, pliable texture makes for easy carving. The design is

roughed out on a band-saw, this is called a "blank." The blank is then chip-carved to shape with a pocket knife and thoroughly sanded. Details are added with a pen knife and then painted or naturally finished.

To date, I have 50 fish in my collection, 75 percent of which are sharks. Other carvings include 30 animals, 75 circus wagons and 8 guns.

*R. Michael Oliver, draftsman trainee in ORNL's Graphic Arts Department, has worked at Carbide for almost three years. A member of the Smoky Mountain Woodcarvers' Association, Oliver was a silk screen artist at the Athletic House in Knoxville.*

*He and his wife, Suzanne, live at 7728 Gleason Road, Knoxville.*

**ORNL seminars**

**ORNL Engineering Division Seminar** — John F. Clarke, ORNL Fusion Energy director will speak on "Future Prospects and Engineering Challenges of Fusion Energy," on Monday, July 18, at 1 p.m. in the Central Auditorium, 4500-N.

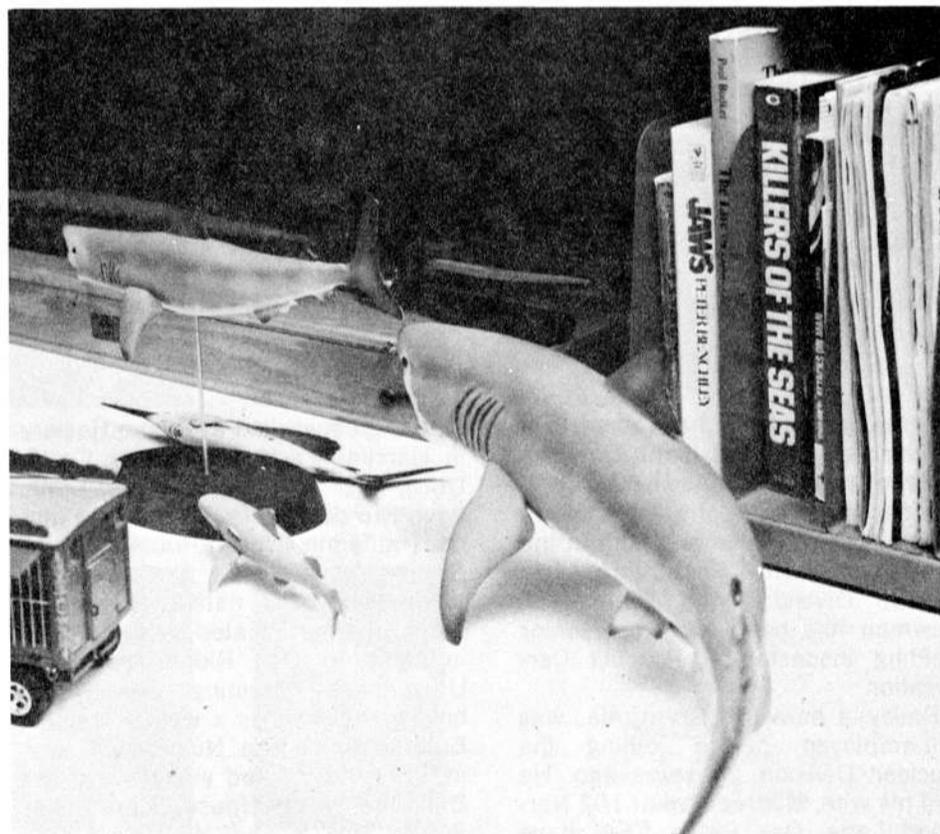
\* \* \*

**The ORNL Summer Seminar Series** — A program of summer lectures for visitors, summer employees and regular staff — begins Tuesday, June 28, when Floyd L. Culler, deputy director of ORNL, speaks on "New Initiatives in Nuclear Energy." All Summer Seminar talks will be held on Tuesdays at 3 p.m., East Auditorium.

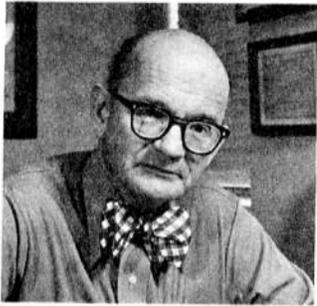
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**Second in Summer Series** — Mike Roberts, program manager for The Next Step (TNS), will speak on Tuesday, July 5, on "Making Fusion an Energy Source — A Current View." His talk will be the second of six in the ORNL Summer Seminar Series.

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**SHARK SPECIALTY** — Oliver has spent endless hours studying sharks and their habits — not only through books, as evidenced by two in his collection above, but also through first hand observation.



# medicine chest

by T. A. Lincoln, M.D.

*(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)*

**QUESTION:** I have read recently that most cancers are preventable. Is that really so, and how does one prevent, for example, cancer of the breast or of the brain?

**ANSWER:** Last year Dr. John Higginson of the International Agency for Research on Cancer in Lyon, France, calculated that 90 percent of human cancers should be, at least theoretically, preventable.

### Cancers in different countries

There are tremendous differences in the incidence of various cancers in different countries. For example, it is known that cancer of the esophagus is 300 times greater in Iran than in Nigeria and cancer of the uterine cervix is 15 times greater in Columbia than in Israel. Cancer of the stomach is 25 times more common in Japan than in Africa and many times higher than in the United States.

When members of a low cancer incidence population move to a country with a high incidence, they, or their descendants, eventually develop the same high cancer incidence of their new country. The opposite also occurs. After three generations, Japanese migrants to the United States have a much decreased stomach cancer incidence, which is about the same as other Americans.

If cancer were primarily a genetic risk, one would expect that moving would not make an appreciable difference. If the primary cause were environmental, then one could expect the changes which have been observed. Something eaten, breathed, applied to the skin or an exposure to some type of physical stress must be the major reason.

### Environmental causes?

It may be due, in part, to the total general environment such as air or water pollution and general food supplies or to a person's personal environment such as smoking, drinking, eating and medicine consumption. The environment at work where good health protection programs do not exist can be an important cause. The exposures which occur during hobbies or recreational pursuits can be significant.

If these assumptions are correct, then theoretically it should be possible to reduce the cancer incidence to the lowest rate found in any population. By finding the lowest incidence rates for all the major can-

cers and comparing them with the rates in countries where these cancers are common, Dr. Higginson concludes that about 90 percent of cancers should be preventable.

Unfortunately there is no practical way to convincingly test this attractive theory. Nevertheless, there is increasing evidence both experimentally and epidemiologically (studies of the incidence or prevalence of specific diseases in human population groups) that a great deal of cancer is caused by the environment. At least 80 percent of lung cancer is caused by cigarette smoking, sometimes in combination with occupational or rural air pollution.

### Smoking, alcohol

In an editorial in the *Lancet*, March 26, 1977, it was estimated that abolition of smoking would reduce the total cancer incidence in British men by 50 percent. Smoking is a major cause of cancer of the larynx, pharynx, lung, esophagus and bladder and possibly of the pancreas and these account for 50 percent of all cancers.

Alcohol consumption, often in combination with tobacco smoking, probably adds another 10 percent. Exposure to nitrosamines or nitrosamine precursors in the diet probably accounts for much gastrointestinal cancer.

We don't know the environmental factors in most cancers. We don't know what environmental factors, other than excess radiation and possibly estrogen hormones, cause breast cancer. These exposures have been usually almost totally absent in most women who develop breast cancer so they are a minor factor. We know, however, that having a baby at an early age seems to offer some protection. We know almost nothing about the cause of brain tumors.

The point to remember is that there may be many cancers which have a strong genetic cause but their total number is small when compared to the cancers caused by the environment. We now are on a fantastically expensive binge to reduce exposures to potentially carcinogenic materials at work and in the air we breathe at home yet we encourage, indeed we subsidize, the growth and consumption of tobacco which kills 80 - 100,000 people each year.

**QUESTION:** If a person runs, on the average, five miles a day and

## Savings Plan-Personal Investment Account

Recent unit values:

	Fixed Income Fund	UCC Stock	Equity Investment Fund
December 75	11.9880	58.7886	7.8231
December 76	13.0554	59.2723	8.8167
March 77	13.3325	59.9204	8.0002
April 77	13.4258	56.3605	7.9538
May 77	13.5196	52.4283	7.8699

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 8.70% for 1977. Union Carbide stock values are the average cost of stock purchases during the month plus brokerage charges. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. The price for each unit is determined by dividing the total value of the securities by the number of units in the Fund.

## division deaths

Arnold E. McDaniels, welding technologist in ORNL's Quality Assurance and Inspection Department, died July 13 at University Hospital, Knoxville.

Mr. McDaniels joined Union Carbide in 1951 as a member of ORGDP's Guard Department, and worked from 1953 to 1961 in the Maintenance Planning Division. His last 16 years were spent in Inspection Engineering at ORNL.

Survivors include: his wife, Jeanette; three daughters, Pam, Lisa and Connie; mother, Mrs. Minnie Lee McDaniels; and sister, Mrs. Maxine Davis.

Services were held at Berry Funeral Home, with burial in Woodlawn Cemetery, Knoxville.

The family requests that any memorials be in the form of gifts to the American Heart Society, in care of Mrs. Evelyn Brooks, Hamilton First

National Bank, Jackson Square, Oak Ridge.

Walter J. Kisiah, a pipefitter in Y-12's Maintenance Division, died June 3 at the Cumberland Medical Center, Crossville.

A native of Matthews, N.C., Mr. Kisiah was a veteran of the U.S. Navy. He joined Union Carbide in 1953.

Survivors include his wife, Frankie Kisiah, Route 3, Monterey; four daughters, Donna Turner, Sandra Greer, Mary Jane White and Amy Kisiah; one son, Patrick Kisiah; three brothers, Jerry, Cecil and Donald; and two sisters; Lavonne and Suzie Kisiah. Two grandchildren also survive.

A prayer service was held at the Goff Funeral Home, Monterey, with interment in the Wilson Cemetery.

gives a pint of blood should he slow or stop his running? For how long?

### Running and giving blood

**ANSWER:** I wouldn't recommend running for at least eight hours after a donation. You may notice some easy tiring the first time you run but for a while thereafter you may find you run better. Olympic rowers and cross country skiers, who submit themselves to the greatest expenditure of energy over a long period of time, often have lower levels of red blood cells and hemoglobin in their blood than average adults.

Apparently, in order to perform at this extremely high level of energy expenditure, the body adjusts its red blood cell level downward. In other words, the body "thins" the blood, to enable a more rapid flow rate through the lung. These increased flow rates more than compensate for diminished oxygen carrying capacity caused by the decrease in the number of red blood cells.

The practice of blood doping, which was done by some athletes in the last Olympics, apparently has little scientific basis. This transfusion of ex-

tra red cells the day before the race doesn't improve the oxygen-carrying capacity enough to be of much help.

The drop in blood count after giving one unit of blood is modest, and the system adjusts quite rapidly. It should cause no major problem.

**QUESTION:** Should warts be removed? Is this a "do it yourself" kind of job with commercial products on the market?

### Wart removal

**ANSWER:** Virus warts should be removed if they impair function (for example of fingers), look bad, are painful or appear to be rapidly growing and spreading. Most of the commercial "do it yourself" remedies are not particularly effective. Liquid nitrogen freezing can be a "do it yourself" project after being instructed by a dermatologist and having the material available. Warts can also be burned off or treated by special corrosive chemicals.

I understand in Kentucky they rub the cut side of a potato on the wart, bury the potato and wait. That waiting is often a great cure!

# Paducah pairs take fishing honors



**Largest stringer crappie**  
Mr. & Mrs. Frank Arnett, Brian and Barry

Mr. and Mrs. Frank Arnett pulled in the largest stringer of crappie and Mr. and Mrs. C. V. Allen claimed the top stringer of bass in the PGDP Fishing Committee's recent husband and wife Fishing Tourney (see surrounding photos). The number one crappie was captured by Mr. and Mrs. Bruce McDougal, and the prize-winning bass was hauled in by Mr. and Mrs. Archie Miller Jr. The contest ran from 9 a.m. to 4 p.m., with a lunch break for barbecue and homemade ice cream.

The next specie category in the Annual Contest, for spoonbill and bream, ends June 30. The catfish competition will begin July 1 and end July 31; the Rough Fish category will begin August 1 and end August 31. All other game fish will be judged July 15. Don't forget the drawing at the season's end for all non-winners!



**Largest crappie**  
Mr. & Mrs. Bruce McDougal



**Largest stringer bass**  
Mr. and Mrs. C. V. Allen

## about people . . .

Richard J. Beaver and James A. Horak, both of ORNL, have received registration as professional engineers by the state of California. Beaver was registered in quality engineering (California is the only state offering this registration); while Horak was certified in nuclear engineering.

Beaver, quality assurance coordinator for the Metals and Ceramics Division and ORNL's Thorium Utilization Program, joined the Nuclear Division in 1950. He has worked as a process metallurgist and project manager in Metals and Ceramics and as a technical representative for ERDA's Division of Reactor Development and Technology, Washington, D.C. He was registered in the field of quality engineering.



Beaver



Horak

Horak, registered in nuclear engineering, worked at Sandia Labs, Los Alamos Scientific Laboratory and Argonne National Laboratory before coming to ORNL in 1974. He has also taught nuclear engineering and materials science and engineering at the University of New Mexico in Albuquerque. Horak is a senior research scientist in ORNL's Metals and Ceramics Division.

## '77 United Way

(Continued from page 1)

The 1977 general committee also includes: Robert DeBinder, treasurer; Charlie Williams, computer management; Jack Holt, computer reports; John Shumpert, payroll auditor; Kurt Land, documentation; Tony Medley, campaign materials; Carol Grametbauer, publicity; and Harry Brown, Ron Todd and Nelson Bethea, general staff advisors.

In last year's drive, the Nuclear Division's goal was exceeded by eight percent, with pledged contributions from the Oak Ridge plants totaling \$580,000. In that campaign, ORGDP attained 113 percent of its goal, Y-12 109 percent and ORNL 105 percent.

## patents granted

To Samuel R. Buxton and David O. Campbell, both of ORNL, for "Recovery of Transplutonium Elements from Nuclear Reactor Waste."

wanted



Y-12 PLANT

RIDERS from Norwood area, Clinton Highway, or Cherrybrook subdivision, Cherokee Ridge, to East, North or Central Portals, straight day. J. F. Baker, plant phone 3-5935, home Knoxville 947-3396.

JOIN CARPOOL from Norwood, Clinton Highway area to Central Portal, 8-4:30. Vicki Foster, plant extension 3-7365, home phone 687-1987.

ORNL

RIDE from UT-Knoxville area to East Portal, 8:15 to 4:45. Iris Howard, plant extension 3-6156, home phone 523-6915.

ORGDP

RIDE from Lovell Road area, Knoxville, to Portal 3, straight days, 8-4:30 shift. Boyd Beets, plant phone 3-3421; home phone 966-5312.

Form or join CAR POOL from Norwood area of Oliver Springs to Portal 1, 7:45 - 4:15 shift. Jan Green, plant phone 3-3121; home phone 435-0842.



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