UNION CARBIDE

Nuclear Division News

Vol. 13, No. 9 • April 29, 1982

'A SMILE PER PERSON' — Union Carbide's 'hands-on' exhibit at the 1982 World's Fair depicts the myriad uses of 'Eveready' ENERGIZER batteries in toys, computers, games and other facilities. The exhibit is in the Lifestyle and Technology Center.

Open house planned May 15

Employees and Oak Ridge-area residents are invited to attend an open house at four Nuclear Division visitor sites Saturday, May 15, from 9 a.m. to 4 p.m.

Areas open to visitors will be the ORGDP and ORNL Visitor Overlooks, and the Graphite Reactor and Aquatic Ecology Laboratory at ORNL. The ORNL Overlook is a new facility, and the ORGDP Overlook, Graphite Reactor and Aquatic Ecology Laboratory all have undergone recent remodeling and landscaping, and contain new exhibits.

Guides will be on hand during the open house to greet visitors, answer questions and distribute informational brochures. No advance reservations are required.

For more information about the open house, contact the Public Relations Department at 574-4163.

Museum of Science and Energy 'fine-tunes' displays for Fair

Major revisions have been made at DOE's American Museum of Science and Energy in Oak Ridge. Science Applications, Incorporated, which operates the Museum for DOE, has "fine-tuned" the displays for the large influx of visitors expected during the World's Fair in nearby Knoxville.

At the Museum entrance there is a large replica of a guard tower, gate and fencing, reminiscent of the "Manhattan Engineer District" period at Oak Ridge during World War II. The gate leads to a new exhibit known as the "Oak Ridge Story" room. Telling the story of early Oak Ridge through contemporary work in energy research and production, the new exhibit fulfills requests from many visitors over the years for more information on the history and current activities of Oak Ridge.

The Energy Science Lab exhibit area presents information, facts and principles of basic science important to an understanding of energy issues and technologies. Topics covered include flywheels, turbines, and exhibits on electric circuits, batteries, motors, generators, generating plants, plus a large multi-media exhibit of an "electric city" illustrating energy demand, generation, delivery and peak load management.

The Energy Efficiency exhibit area shows the evolution of American society from one of labor intensity to one of energy dependency. A highlight of this exhibit area is a colorful diorama depicting the evolution of automobile technology from the 1900's through the present. America's love affair with the automobile is depicted with automobile parts, artifacts, photographs and videotapes.

Another large, new exhibit area displays Earth Energy Resources featuring information on fossil fuels, geothermal energy, synthetic fuels and hydropower. A dominant feature of this section is a coal exhibit which simulates the appearance of an underground coal mine. A mini-theater features a film on the production, distribution, consumption and environmental impact of coal.

(Please turn to Page 4)

UCC's 'See How They Run' exhibit promises Fair smiles

What's the most fun application of battery energy? Union Carbide knows the answer — put "Eveready" ENERGIZER batteries into toys and games to "See How They Run." That's just what Union Carbide has done for the 1982 World's Fair in Knoxville, set for a gala opening Saturday, May 1.

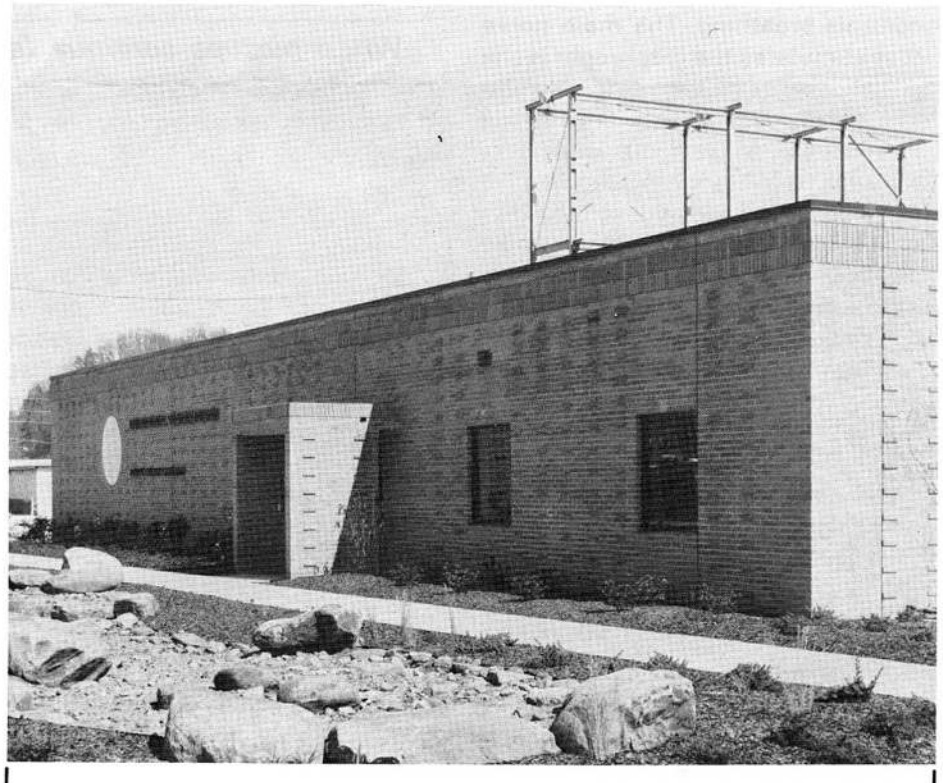
Featuring new and familiar battery-powered toys and games, "See How They Run" is one of the few "hands-on" exhibits in the World's Fair. It is located in the exposition's Lifestyle and Technology Center.

Exhibit attractions will delight the whole family. New and exciting hand-held arcade games (even a miniature Pac-Man); learning devices that talk back, give correct answers and even pose another problem; and train sets ranging from an HO scale model to a locomotive a child can sit on and drive around the track are all on display. Also in "See How They Run" are electronic organs that produce their own rhythm, and target shoots to challenge the sharpest shooter.

Games for the young and the young at heart include football, baseball, chess and backgammon. For tots, there are sonic control dolls that walk to the snap of fingers, a dog that barks and romps to the clap of hands and a neighing hobby horse to ride. There are cars too, and trucks and airplanes, and much, much more.

Visitors to "See How They Run" can experience first-hand how Union Carbide's fundamental energy product, the "Eveready" battery, ENERGIZES the toys and games on display. As an extra attraction, visitors may also view a pictorial presentation of Union Carbide's world-wide contribution to present and future lifestyles through the Corporation's involvement with energy conversion, usage and conservation.

"One smile per person," is all it costs to "See How They Run" at the Fair.



In this issue . . .

The newly enlarged and landscaped Aquatic Ecology Laboratory will be among four Nuclear Division areas open to visitors during the World's Fair period. See story on page 3.

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Hiccups — Causes and treatment

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 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)*

Hiccups can be as simple as a brief, unpleasant feeling. When persistent, however, they can be a symptom of a serious underlying illness. Many people cannot remember the last time they suffered from hiccups, while others have them frequently. Although much has been written about how to stop hiccup attacks, relatively little has been said about their causes.

A hiccup is the direct result of a spastic contraction of the diaphragm, the muscle that controls breathing.

A hiccup is the direct result of a spastic contraction of the diaphragm, the large bellows-like muscle that controls breathing. The main nerve that stimulates the diaphragm is the phrenic nerve, which originates in the spinal cord at the level of the fourth cervical vertebra and runs through the neck, descending in front of the lung down into the diaphragm. Several other nerves also send fibers to the diaphragm, and the irritation of any of these can cause hiccups.

When the diaphragm contracts suddenly, it expels air in sudden spurts from the lungs up through the larynx. Air passing through the larynx and the voice box results in the sounds some people make while hiccupping. The usual hiccup rate is 6 to 12 times per minute, but it occasionally can reach 50 to 100 times per minute. Fortunately, most hiccups represent diaphragm spasms on only one side of the chest.

When hiccups continue for many hours, they can cause physical exhaustion, the inability to eat and muscle fatigue.

Because hiccups are commonly associated with overeating or drinking heavily, it is believed that the distention of the stomach or some toxic effect of alcohol irritates the phrenic nerve.

When hiccups continue for many hours, they can cause physical exhaustion, the inability to eat and muscle fatigue.

More serious possible causes include stroke, pneumonia, cancer, gastritis, peptic ulcer, gall bladder disease, pancreatitis, heart attack and infections under the diaphragm. These are uncommon, but they must be considered when frequent, persistent or severe attacks occur.

Hiccups sometimes accompany infections of the upper respiratory tract.

Hiccups sometimes accompany viral or bacterial infections of the upper respiratory tract. One type of streptococcus bacteria causes a respiratory infection that is usually accompanied by hiccups. Epidemics have been reported in which many residents of a community suffered from sore throats and hiccups simultaneously.

Some home remedies for hiccups include holding one's breath, swallowing sugar or vinegar or inducing sneezing. Dr. Janet Travell, former physician of President John F. Kennedy, developed quite a reputation for curing hiccups by pulling the tongue and causing a gagging reflex. Most of these techniques are designed to break the spasm cycle of the diaphragm.

Home remedies include holding one's breath, swallowing sugar or vinegar or inducing sneezing.

A number of drugs, including sedatives and tranquilizers, also have been used. Breathing a five percent carbon dioxide gas has sometimes proved successful. Occasionally, the phrenic nerve is injected with a local anesthetic, and a last resort, the nerve can be surgically crushed, thus paralyzing the diaphragm on the affected side.

The record for persistent hiccups is 57 years, according to the *Guiness Book of Records*. Most episodes, however, are brief and end by themselves. In 1977, Dr. Timothy Lamphier published in the *Maryland State Medical Journal* a long list of management methods for persistent hiccups. The number one cure was one teaspoon of white granulated sugar swallowed "dry." Dr. Lampier claimed it would stop 80 percent of hiccup cases. Did you ever try to swallow dry sugar?

The great Greek physician, Galen, born in 130, A.D., said that hiccups were caused by too much excitement, which aroused the stomach to violent emotions. He recommended inducing sneezing. Two thousand years later, the treatment of hiccups hasn't really changed a great deal!

Anniversaries

PADUCAH

30 YEARS

Joe R. Houston, Cascade Operations; Paul Strickland, Cascade Operations; William D. Greer, Power, Utilities and Chemicals; Crait Parr, Cascade Operations; Howard L. Day, Power, Utilities and Chemicals; Hester Albritton Jr., Cascade Operations; Wayne M. Koster, Fabrication Shop; Robert R. Mick, Compressor Shop; William H. Allbritton, Plant Services; James M. Compton, Process Maintenance; Bobby Smith, Fabrication Shop; Herman L. Connor, Compressor Shop; Lawrence S. Franklin, Fabrication Shop; William R. Hines, Fabrication Shop; William E. Shelton, Mechanical Shop; Howard H. Webb, Mechanical Shop; James R. Morton, Uranium Control; R. G. Little, Cascade Operations; C. Marion Daniels, Shift Superintendent; William O. Boren, Power, Utilities and Chemicals; and Harmon C. Spear, Process Maintenance.

QA WINNERS — Gary Hall, second from left, and Wanda Holliman were the lucky winners of $85 in Paducah's Quality Assurance cryptograph contest drawing. Holliman was one of only four plant employees to correctly solve the cryptograph in its first appearance. Paducah Maintenance Division Manager Robroy Millican, right, made the presentation. Dale Miles, left, is the Maintenance Division Quality Assurance coordinator.

UNION CARBIDE

Published every other week for employees such as:

William J. Grove, Y-12 Dimensional Inspection.

Nuclear Division News

UNION CARBIDE CORPORATION
NUCLEAR DIVISION
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Oak Ridge, Tenn. 37830

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PADUCAH
Darlene M. Mazzone, Bell 208

INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS

Aquatic Ecology Laboratory houses new visitor displays

The Aquatic Ecology Laboratory, part of ORNL's Environmental Sciences Division, is one of four Nuclear Division facilities open to visitors touring the Oak Ridge-area "Energy/Environment Loop" during the 1982 World's Fair period.

The aquatic lab, which has been enlarged and newly landscaped, houses displays, exhibits and audiovisuals depicting the various ORNL programs in the life sciences.

Visitors will see tanks of fish used in current research on the environmental effects of power plant cooling systems. Display panels and exhibits will cover the full range of life sciences research. And a video theater will show programs on the National Environmental Research Park and other current activities.

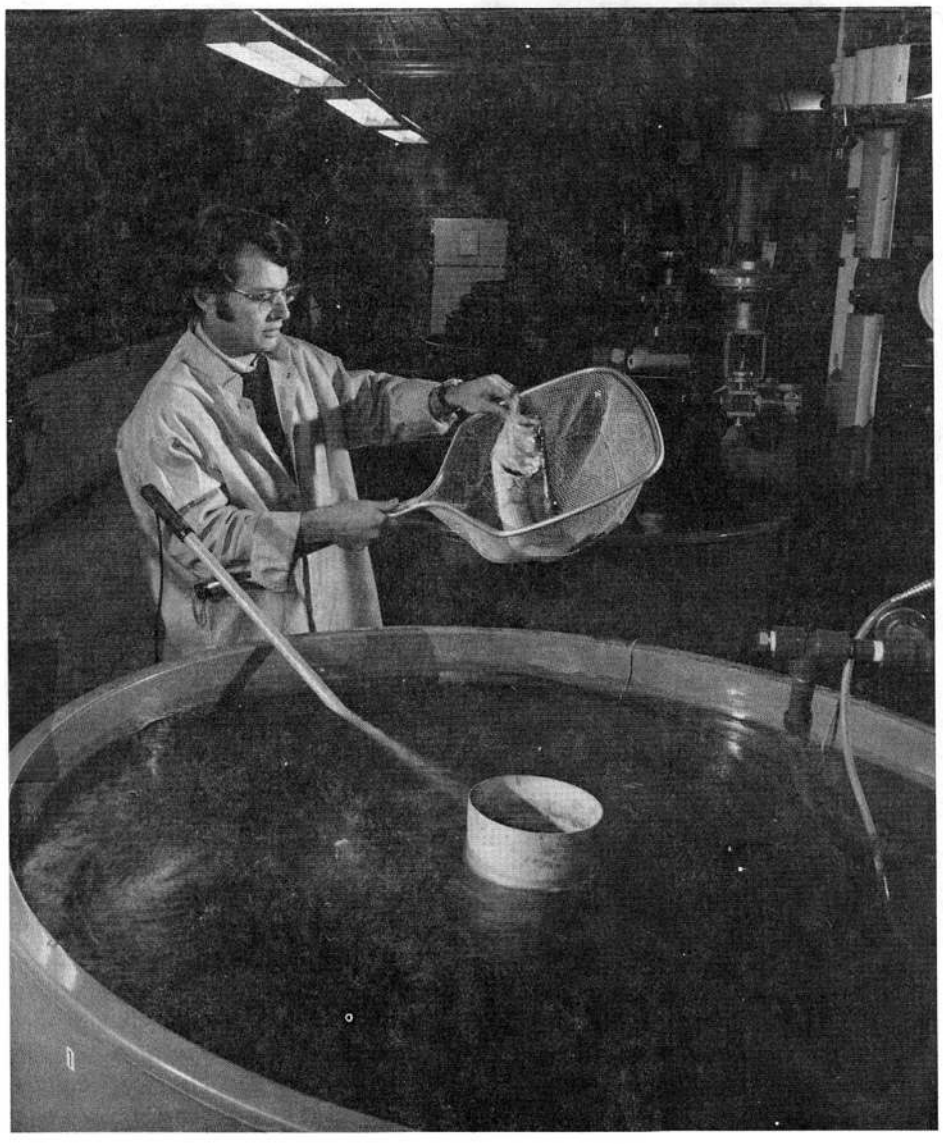
Environmental research ponds, a solar-powered weather station and a woody biomass plantation will be included in a series of outdoor displays.

Guides will be available at the facility to greet visitors, answer questions and distribute informational brochures. Parking, including several spaces for buses, will be available in an area just east of the aquatic lab.

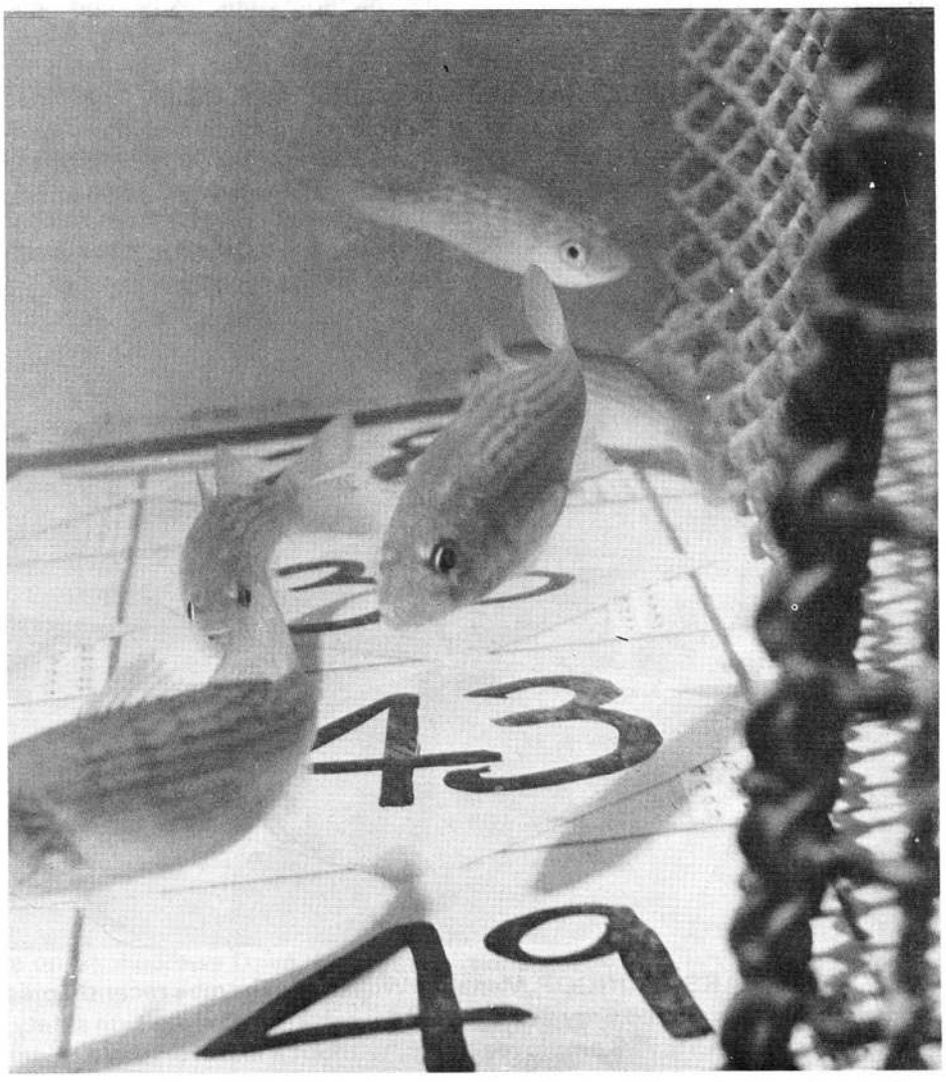
Other Nuclear Division facilities open to visitors include the Visitor Overlooks at ORNL and ORGDP, and ORNL's Graphite Reactor. Visiting hours are 9 a.m. to 4 p.m. Monday through Saturday and noon to 4 p.m. Sunday.

An open house for the four facilities will be held Saturday, May 15, from 9 a.m. to 4 p.m.

READY FOR VISITORS — David Cox and Abby Goldsmith of the ORNL Environmental Sciences Division examine one of the many displays available to visitors in the Aquatic Ecology Laboratory.

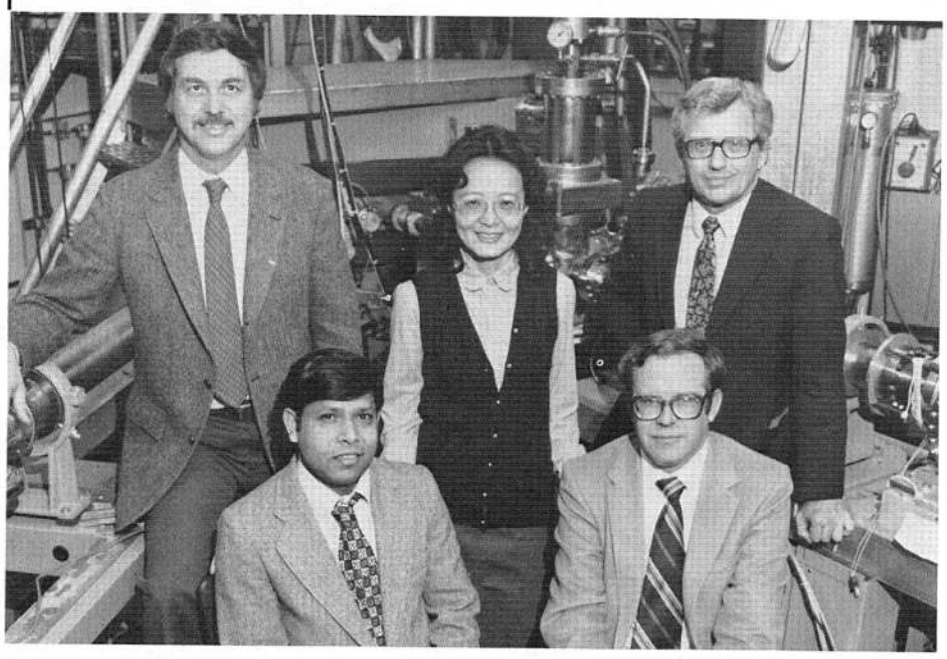


LABORATORY STUDIES — Researchers like Charles C. Coutant conduct studies of largemouth bass at the Aquatic Ecology Laboratory to determine what effects heated water and pollutants discharged from power plants have on aquatic organisms.



ECOLOGICAL RESEARCH — One of the studies conducted at the Aquatic Ecology Laboratory is aimed at determining the ability of juvenile striped bass and other fish species to avoid being impinged, or pulled into screens, at power plant cooling water intake areas. Visitors to the Laboratory may view these and other types of fish and aquatic organisms.

News About People



Seated from left: Jagdish Narayan and C. Woody White
Standing: Bill R. Appleton, Rosa T. Young and Richard F. Wood

Researchers take DOE's award

ORNL researchers have been named winners in DOE's 1981 materials science research competition.

The award is for "outstanding sustained research in solid state physics" and recognizes the work on "laser processing of materials" by five scientists in the Solid State Division — Bill R. Appleton, Jagdish Narayan, C. Woody White, Richard F. Wood and Rosa T. Young.

The development, which over a four-year period has resulted in more than 90 scientific papers and three patents, shows great potential for investigating the melting and rapid solidification of materials, determining factors that limit the incorporation of alloying elements during crystal growth, studying fundamental excitations and interactions in solids, and preparing new surface alloys.

The DOE materials-science awards are given annually in three categories — metallurgy and ceramics, materials chemistry, and solid state physics — to encourage a continuing awareness of the need for innovative, high-quality research. Selection is made by laboratory managers and program directors of the DOE Division of Materials Sciences.

K/PH 82-0542

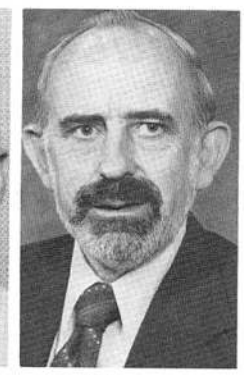
20 SAFE YEARS — ORGDP Manager William F. Thomas recently presented an award to employees of the Finance, Materials and Services Division for setting a new division safety record at ORGDP. They have worked 20 years, or 6,455,726 employee hours, without a lost workday accident. Some of the employees who were part of the Division during the entire period, December 6, 1961, through December 5, 1981, are shown with Thomas and Division Manager Christine Travaglini. Front row, from left: Willard Brock, Lucille Thackston, Carson Baldwin, Virginia Cabe, Billye Lee, Frank Branam, Gerald Rea, Travaglini, Thomas, Clarence Parrish, Lester Riggs, Paul Baker, Flora Lewis and Jimmy Qualls. Back row, from left: Clarence Mowell, Anna Lou Horton, Ralph Patterson, Willard Moore, John Edwards, Billie Evans, J. Lewis, Jim Brandon, Jim Marney, Jim Anderson and Glenn Brooks. Not present: Joe Marshall, Jack Marshall, Alvin Marten, Bud Plemons, Sam Howard, Bill Byrd, Joe Walker and Charles Taylor (retired).

Barnett, Young named AAAS Fellows

Clarence F. Barnett and Jack P. Young, senior research staff members at ORNL, have been elected fellows of the American Association for the Advancement of Science (AAAS).

The designation by the AAAS Council recognizes members "whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished."

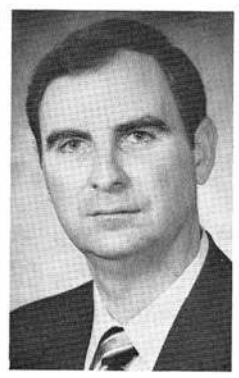
Barnett



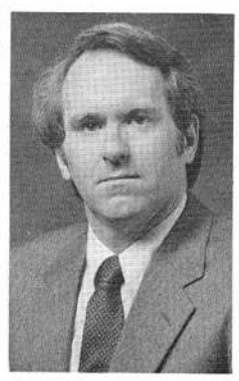
Young

Named American Physical Society fellows

Arakaw



Bertrand



Hogan

Noggle

Rome

Sheffield

Six researchers at ORNL have been elected fellows of the American Physical Society. They are Edward T. Arakawa, Health and Safety Research Division; Fred E. Bertrand, Physics Division; Thomas Noggle, Solid State Division; and John T. Hogan, James A. Rome and John Sheffield, all of the Fusion Energy Division.

The status of fellow is conferred on members of the American Physical Society by the ruling of its Council, following their nomination by existing fellows. Nomination must be based on specific achievements in the physical sciences.

Museum . . .

(Continued from Page 1)

The new Energy from Atoms exhibit area consists of three major sections. The first deals with basic nuclear science, the second with nuclear fission and the third with nuclear fusion. The operation of various fission reactor types is explained, along with the concept of fusion power reactors planned for the 21st century.

Admission to the Museum, which hosts more than 250,000 visitors each year, is free. This number is expected to be greatly increased during the Fair's six-months run in Knoxville. The Museum also serves as home base for DOE's national traveling exhibits program, which reaches between 9 and 12 million persons annually.

Question Box

Retirement major medical coverage

QUESTION: I enrolled in the Major Medical Medicare Supplement Plan on August 1, 1981, and no deductions have been made for my payments. I have checked with the Benefit Plans Office, and they tell me I am enrolled and they are going to try to straighten it out. I am going into the hospital next month. Am I really covered?

ANSWER: Yes, you are. A number of retirees have reported that these deductions are not being made. The problem is in connection with transmission of enrollment and premium information from the Corporate Benefit Plans Department to the Prudential Insurance Company for entry into the computer. Every effort is being made to correct the condition, and we hope a solution is near. In the meantime, those retirees who have completed the enrollment card can rest assured that their coverage under this very good benefit plan is in effect.

Determining pensions

QUESTION: How much of your last three years' pay average is figured into your Union Carbide pension? Overtime, shift premium, pay-in-lieu of vacation, weekend pay...are any of these factors used?

ANSWER: Your Union Carbide pension is based on average straight-time earnings for the highest three years in the last ten years worked. The earnings are computed by determining an average straight-time rate and multiplying this rate by the **regularly scheduled** hours. **Actual** earnings may be much different, depending on whether the actual hours worked are more or less than scheduled. In determining the average straight-time rate, pay for time not worked, such as jury duty, funeral leave, vacation, voting and personal time is included, together with the equivalent hours. The straight-time portion of the overtime pay, along with the equivalent hours, is included in the calculation. When shift differential is paid, it is included in the average rate calculation. The intent is to provide an earnings figure which accurately reflects the average straight-time earnings which the employee would have received for a full schedule with no absences and no overtime.

Salary budget

QUESTION: Does UCC-NC submit a salary schedule to the Department of Energy for approval?

ANSWER: Yes. We obtain approval each year from the Department of Energy concerning the movement of our salary ranges and the total expenditure involved for both the exempt and nonexempt salary budgets. Our proposal for the exempt salary budget is always based on Union Carbide Corporation's program while the nonexempt budget proposal is based on what other major employers in our area are doing.

Corporate world ...

UNION CARBIDE CORPORATION has reported first quarter net income of $90.8 million, a 49 percent decrease from the $178 million recorded during the same period last year.

It was reported that businesses that serve the automotive, housing and steel industries were hurt by the economic slump, but the report noted strong performances from battery products and from businesses related to the oil and gas service industry.

Earnings per share for the 1982 first quarter were $1.32, down from the $2.64 per share posted in 1981's first quarter.

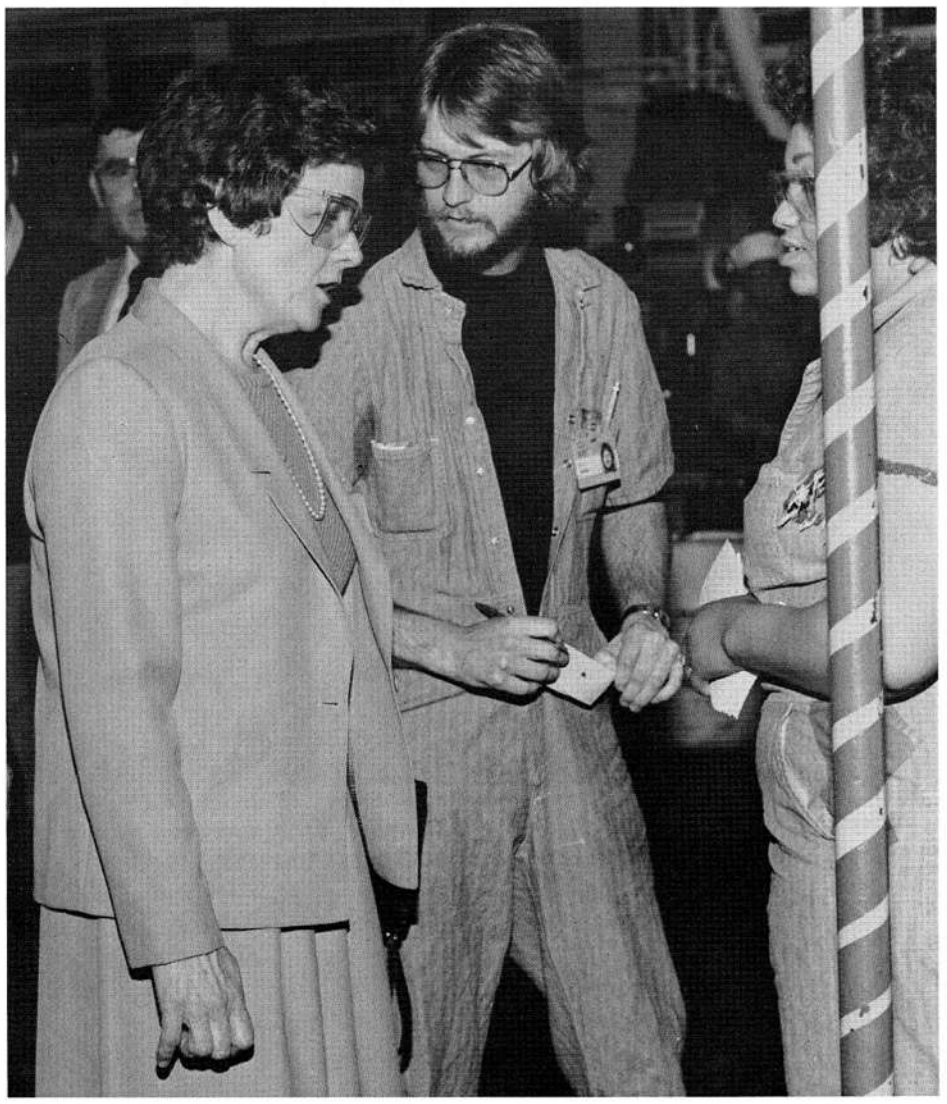
Worldwide sales in the first quarter were $2.31 billion, a 12 percent drop from the first quarter 1981 sales of $2.64 billion. Approximately a third of the decline in sales could be attributed primarily to the divestment of the ferroalloys business in 1981. International sales of $758.7 million were 9 percent below the $831.4 million recorded in 1981's first quarter. First quarter sales in the United States and Puerto Rico of $1.55 billion were 14 percent below the $1.81 billion recorded in the same period last year.

Warren M. Anderson, chairman and chief executive officer, said that Union Carbide's selling, administrative and other expenses declined in the first quarter of 1982 compared to the same period last year. "The company is continuing to see significant results from its programs to contain overhead costs. However, research and development expenditures will continue to increase in support of the company's strategic plans," he noted.

Anderson added that, although first quarter sales in the Chemicals and Plastics Division were down 14 percent from the same period last year, there was an improving sales trend through the first three months of 1982 and some evidence of strength in recent shipments.

Next issue...

The next issue will be dated May 13. The deadline is May 5.



CONGRESSWOMAN VISITS Y-12 — U.S. Representative Marilyn Lloyd Bouquard recently visited the Y-12 Plant, where she was given a tour and briefing on various weapons component production operations. Here, she discusses equipment in one of the machine shops with Gregg A. Skeen, Fabrication Division, and Toletha M. Kerr, Industrial Engineering Division.

Head sections in Computer Sciences

ORNL 12162-82

Bass

Holdeman

B. Richard Bass and Jonas T. Holdeman have been named section heads in the Technical Applications Organization of Computer Sciences.

Bass serves as head of the engineering mechanics section of the Technical Applications Engineering Department. A native of St. Augustine, Fla., he joined the Nuclear Division in 1976.

Bass received his BS and PhD degrees in mechanical engineering from Tulane University. Prior to joining the Nuclear Division, he taught at Old Dominion University and served as a visiting faculty member at the University of Wales.

Bass's most recent position in the Nuclear Division has been as an applications consultant. He is a member of the American Society of Mechanical Engineers and the Society for Natural Philosophy.

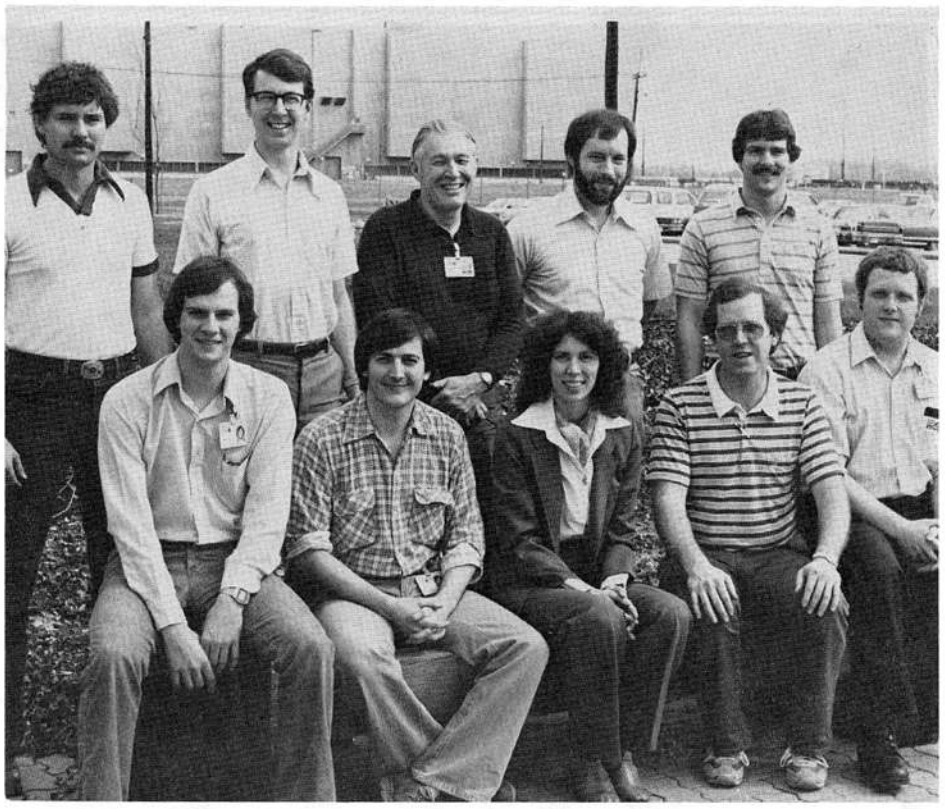
He and his wife, Mili Cooper Bass, live on St. Andrews Drive, Farragut.

Holdeman is head of the environmental and geo-physics section, Physics Department, of Technical Applications. A native of Baton Rouge, La., he received his BS and MS degrees in physics and astronomy from Louisiana State University and his PhD degree in physics from Case Institute of Technology, Case-Western Reserve University.

Prior to joining the Nuclear Division in 1974, Holdeman taught at the University of Southwestern Louisiana and at Michigan State University. He also served on the research staffs of Michigan State University and Los Alamos Scientific Laboratory.

Holdeman's most recent position has been as a computing applications specialist in Computer Sciences at ORNL. He is a member of the American Physical Society, Society of Sigma Xi, American Association for the Advancement of Science and the Southeastern Section of the Association for Computing Machinery.

He and his wife, Judith Ann, have three sons. They live on Lovell Road in Concord.



TOURNAMENT CHAMPS — The Smashers, with a season record of 20-7, took Paducah's end-of-season volleyball tournament championship by winning two out of three matches against Captain Carbide Cannons. Smasher team members include, seated from left, Greg Englert, Richard Kuehn, Debbie Blagg, Tommy Thompson and Peter Allen, coach. Standing from left are Sid Thomas, Joe Blagg, Elvin Kuehn, Bill Halicks and Terry Fletcher. Mary Gail Fletcher is not pictured.

Save Energy / Share The Ride

Y-12

RIDE from Lenoir City, Eaton's Crossroads area to West or Central Portal, F Shift. Mildred Rogers, plant phone 4-2631; home phone Lenoir City 986-5600.

VAN RIDERS from Fountain City, Inskip, Norwood, Powell Shopping Center, to all portals, 8-4:30. Bill Moyers, plant phone 4-3195; home phone Knoxville 689-4087.

RIDERS from Harriman or Kingston to North or Biology Portals, 8-4:30. W. L. McKinney, plant phone 4-1261; home phone Harriman 882-1827.

JOIN CAR POOL from Karns area to North Portal, 8-4:30. Bob Cooper, plant phone 4-4329; home phone Knoxville 691-8411.

VAN POOL RIDERS from Maryville-Alcoa to East or North or Central Portals, 8-4:30. Daryll Coppenger, plant phone 4-1380, home phone Maryville 983-5939.

JOIN CAR POOL from West Town area to Pine Ridge Portal, 7:30-4. S. R. Jordan, plant phone 4-5368; home phone Knoxville 693-5869.

ORNL

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

VAN POOL RIDERS NEEDED from Sutherland Avenue and Papermill Drive area, to ORNL, 8:15-4:45. D. P. Atkins, plant phone 4-5463; home phone 584-3766.

FREE RIDE — Van pool needs riders and backup driver from Walker Springs area (Sans Souci, Plantation Manor, Wesbridge, Brendon Park and Crestwood Hills) to any portal, 8-4:30. Mike, plant phone 4-4885; home phone 691-4194.

ORGDP

BUS RIDERS NEEDED from LaFollette, Lake City and Clinton areas. Gary Lindsay, plant phone 4-9680; home phone 562-6864.

Safety Scoreboard

Time worked without a lost-time accident through April 22:

Y-12 Plant	97 Days	3,655,000 Employee-Hours
ORGDP	70 Days	1,756,000 Employee-Hours
ORNL	711 Days	16,649,199 Employee-Hours
Paducah	631 Days	5,467,152 Employee-Hours

Bowling alley notes...

Y-12 Classic...

The Atta-Boys are two points ahead as the Classic League heads into its final days. They're just inches ahead of the Pendulum, the only threatening team. Season-highs went to Ron Korkow, with a single of 293 handicap; series of 750. The Lightning Balls hold the top series, 3212 handicap; while the Tigers hold a high single of 1128. Recent highs saw Larry Hammonds roll a 677 series; while Bob Hagood posted a high single of 258.

K-25 Tuesday...

The All Stars keep their lead in the K-25 Tuesday League, rolling an average 857 per game. Weekly highs were split between L. A. Owens and D. Pollitt, each with a 223 scratch game. Owens also tied L. M. Wilson with a 247 handicap single. Wilson's 709 handicap series was a weekly high also.

Carbide Wednesday...

The Hit Men still hold a slim lead in the Carbide Wednesday Bowling League. Jim Fletcher, Amps, recently picked up a 609 scratch series...while Leonard Miller, The Operators, posted a 630/714 series. In singles it was Chuck McCluskey, Sues Sooners, rolling a 237 game; while Charlie Hetch, Amps, added up a 257 handicap single. In team rolling it was the Operators, 3171 handicap series; and the Protectors, 1059 handicap series.

Family Mixed...

Mae Carmichel paced bowlers in the Carbide Family Mixed recently, posting a 191, along with Eloise Kirk. Carmichel's handicap single rose to 230; while Kirk's came up to 244. Carmichel's 530 series scratch was high, as was her 647 handicap total.

UCC Mixed...

Frank Adams posted a 223 single and Sally Stockstill rolled a 233 to highlight bowling for the UCC Mixed League. Allyn Zerby posted a 561 scratch series; and Barry Vickers and Chuck Jones tied with a 667 handicap series. Stockstill's 555/645 was high for women.

ORGDP Women's...

The Spotters still hold a scant lead in the ORGDP Women's circle, despite a four-point loss to the Ten Pinners. Sally Stockstill was the star of the night recently, posting a 212/246 single and a scratch series of 544. Mickey Moore rolled a 678 handicap series. The Spotters took high single, 843 handicap; while the Pickups picked up high series, 2471 handicap.

Monday Mixed...

The Pacesetters extended their lead in the UCC Monday Mixed, as they rolled a series of 2292 recently. Churchill Moore, Pacesetters, paced bowlers with a 643 series; as Cheryl Womack, Four Eagles, rolled a 627. Moore's single of 252 was high, as was Womack's 242.

ORGDP divisions set picnic

Employees of the Separation Systems and Technical Services Divisions at ORGDP will have a picnic on Saturday, May 15, at Clark Center Recreation park.

Activities, beginning at 9 a.m., will include softball games (on both fields), volleyball, horseshoes, tug-of-war, sack races, relays, bingo and card games with prizes being awarded to all winners. An unusual event will be a toy auction for children, whose top bid will be limited to $1.

Entertainment includes a weight-lifting demonstration, cloggers, music and dancing.

Experienced chefs will offer a menu of barbeque, baked beans, coleslaw, potato chips, cotton candy and soft drinks. Food service will begin at 4 p.m.

Tickets, which cost $2.50 for adults and $1.25 for children, are available from division secretaries and committee members at ORGDP.

BOAT-LAUNCH FACILITIES — Carbide Park offers launching facilities to accommodate skiers, fishermen and other boaters. Ample parking spaces are nearby.

'Performance speaks louder than words ' highlights week

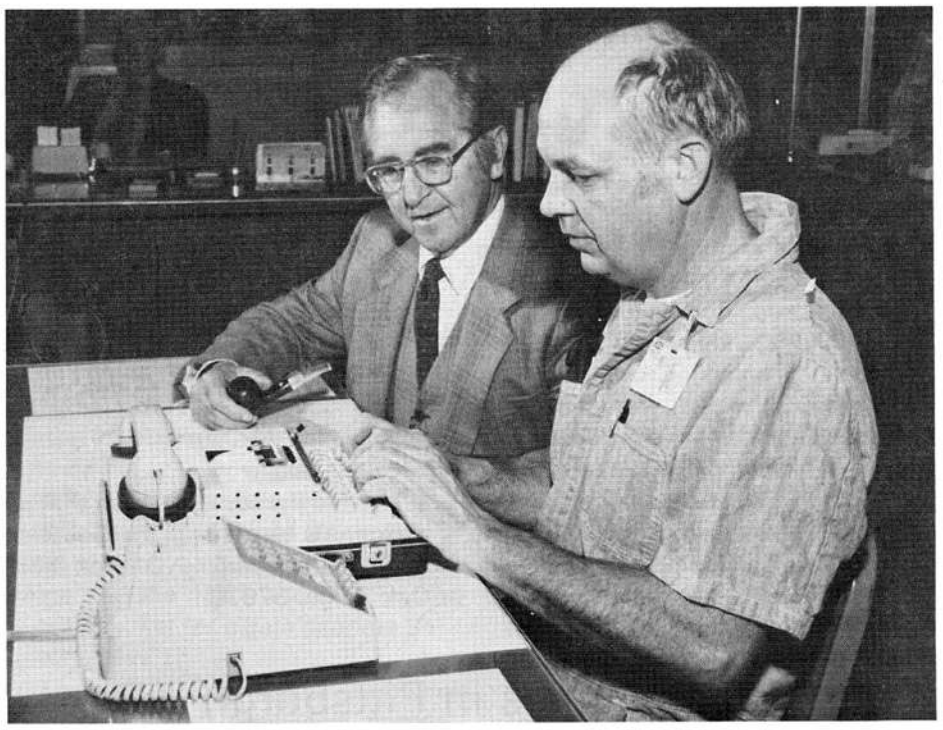
The theme of Hearing-Impaired Awareness Week, observed May 1-8 in the Nuclear Division, is "Performance Speaks Louder Than Words." As the theme implies, the Division's 15 employees with severe hearing impairment may not converse in the usual manner, but they manage to communicate successfully in many other ways.

These employees perform their duties in a variety of areas, including ORGDP's Engineering, Separation Systems and Finance, Materials and Services Divisions; the Environmental Sciences, Engineering Technology, Computer Sciences and Information Divisions at ORNL; and the Fabrication and Maintenance Divisions at Y-12. Their roles include word processors, keypunchers, machinists, reproduction clerks and laboratory technicians. Their special needs in these work roles are met by several communications and development programs, illustrated by the accompanying photographs.

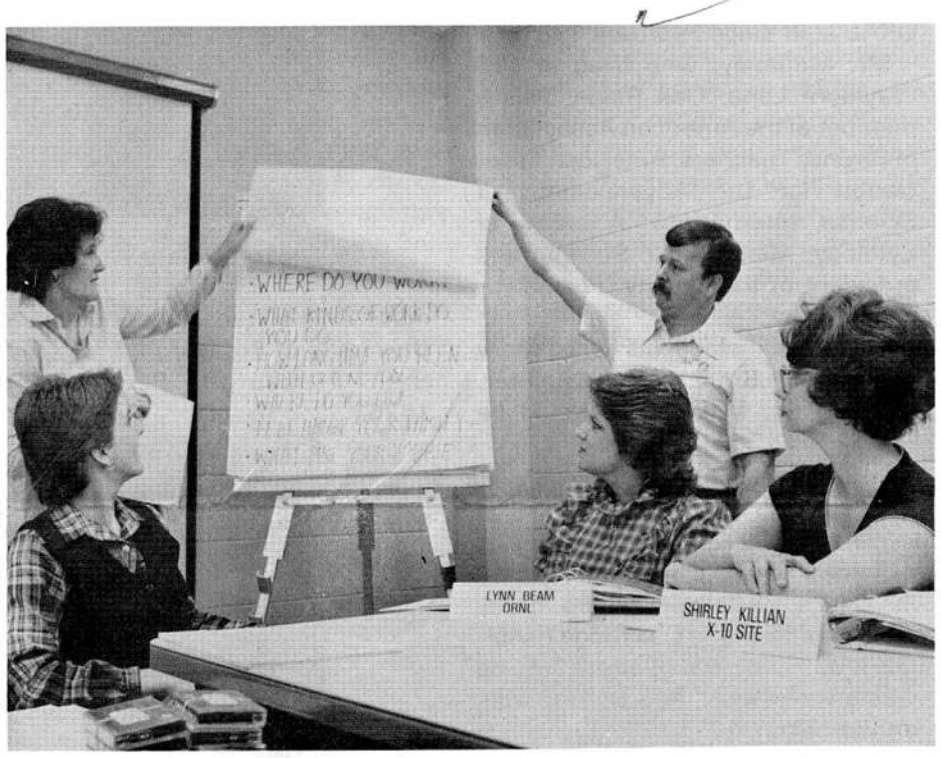
Special communications programs within the Nuclear Division involve the use of teletypewriters, interpreting and sign language. Teletypewriters, which serve as telephones for the hearing impaired, are located in the Shift Supervisor's Offices at ORGDP, ORNL and Y-12. Interpreters from the Knoxville Area Communication Center for the Deaf may be provided for Nuclear Division meetings and other occasions, and sign language courses are also available for hearing employees who would like to learn to converse with their hearing-impaired co-workers.

Employee development programs recently adapted for the hearing-impaired include the Career Planning Program for salaried employees and the Defensive Driving Course, both of which have been conducted with the aid of interpreters.

For more information on any of these programs, employees may contact their facility's Affirmative Action Office.



Y-12 TELETYPEWRITER — Jack Reagan, right, of Y-12's Fabrication Division, and his supervisor Harold Alvey demonstrate the new teletypewriter available to hearing-impaired employees at the Y-12 Plant.



CAREER PLANNING PROGRAM — Participants in the Nuclear Division Career Planning Program for hearing-impaired employees include, seated from left, Robin Shuh, interpreter; Lynn Beam, ORNL Information Division; Shirley Killian, Computer Sciences Division at ORNL; Jane Patterson (standing), program leader; and Doug Woods, ORGDP Finance, Materials and Services Division.

USING SIGN LANGUAGE — ORGDP Finance, Materials and Services Division employees Doug Woods, center, and Henry Coleman discuss work assignments with Bobbie Lee, who serves as an interpreter in the group.

Tips for car pool members

For the hundreds of Union Carbide employees who share cars, vans and buses...the following tips are printed They were produced by the San Antonio Energy Conservation Program, and offer suggestions to improve car pools.

1. You have to cooperate to stay together. Most of it is a matter of common courtesy. Learn, and respect, each other's likes and dislikes from the very beginning. The radio, conversation, smoking and reading are all issues that should be settled at the beginning.

2. When sharing the driving duties, rotate weekly or monthly, instead of daily. This reduces the chances for misunderstanding and confusion.

3. Agree in advance on reimbursement for driving expenses. Then set regular payment schedules. Here's an easy way to decide what each member pays: multiply the round trip mileage by 30 cents per mile (for a standard size car), add daily parking costs, and then divide by the number of occupants for each one's daily share.

4. Make a "clean car" policy and stick to it. The car that carries you to and from work should be clean, safe, comfortable and well serviced.

5. Avoid side trips. One of the easiest traps to get into is doing errands on the way to or from work. Set a regular route and stick to it. This avoids a lot of hassles.

6. Don't honk for your passengers.. Honking is not good for the neighbors — especially at early hours. Wait a predetermined amount of time for each passenger and then drive on.

7. Establish a chain of communication. This is so adjustments can be made in the daily schedule with minimum delay and inconvenience if illness or mechanical problems occur. The chain of communication should parallel the morning pick up sequence.

8. Expect occasional adjustments. People move and change jobs. Be prepared to find a replacement if a member drops out.

9. Drive safely. Speeding, taking chances or just plain negligence should never be tolerated. Make safety your rigid rule.

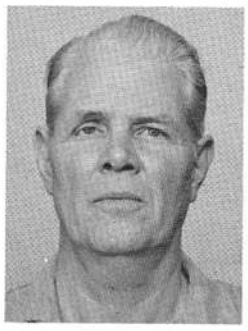
10. Discuss your pooling plans with your insurance agent. Liability coverage is usually adequate but make sure of it. Many companies offer reduced rates for carpoolers.

Joe Brumit dies in Oak Ridge

Joe C. Brumit, General Machine Shop, Y-12, died April 10 at the Oak Ridge Hospital. A native of Johnson City, he came to Y-12 in 1961. He was a veteran of the U.S. Army.

Survivors include his wife Evelyn Brumit, 112 Kingsley Road, Oak Ridge; a son, Joe; two daughters, Nancy Byrge and Francis Brumit; his mother, Frances Crowe; sisters, Kathrine Schwartz, Jane Shipley, Lena Wise and Elizabeth Harvey; and two grandchildren.

Funeral services were held at the Asbury Presbyterian Church, Johnson City, with burial in Monte Vista Cemetery.



Mr. Brumit

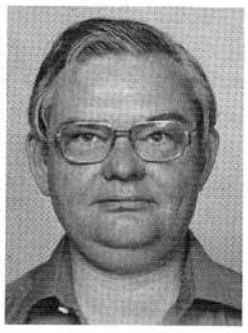
The family has requested that any memorials be made to the Oak Ridge Cancer Cupboard, P.O. Box 3187, Oak Ridge, 37830.

Paul Mullaney dies in Pittsburgh

Paul F. Mullaney, a program director in the ORNL Biology Division, died April 8 at University Hospital in Pittsburgh. He had been a member of the ORNL staff since February 1981.

Mr. Mullaney, who lived at 116 Claymore Lane, Oak Ridge, was a member of the American Association of Physics Teachers, American Association for the Advancement of Science, International Academy of Cytology, Biophysical Society and president of the Society for Analytical Cytology.

Survivors include his wife, Mary Ann; son, Brian; and daughter, Maura Ann. Memorials should be made to The Transplant Foundation, University of Pittsburgh, 954 Scaife Hall, Pittsburgh, Pennsylvania 15261.



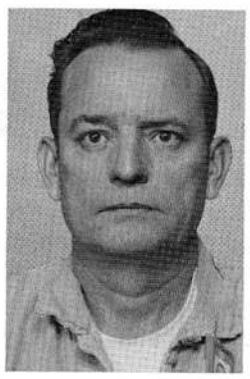
Mr. Mullaney

Holbert Salyers dies in Oak Ridge

Holbert M. Salyers Jr., a machinist in Y-12's General Machine Shop, died April 13 in the Oak Ridge Hospital. A native of Wise County, Va., he was a veteran of the U.S. Air Force, and came to Y-12 in 1961. He lived at Route 4, Clinton.

Survivors include his wife, Louise David Salyers; a son, John; daughters, Suzette Salyers and Shelia Bradshaw; a brother, Mark Salyers; and sisters, Marie Miller, Arlene Forish, Audra Davidson, Louechel Shortridge, Christine Gilbert and Viola Stallard; and one granddaughter.

Funeral services were held at Weatherford's Chapel with burial in Oak Ridge Memorial Park.



Mr. Salyers

Diana Bowers dies at Powell home

Mrs. Bowers

Diana Lynn Bowers, an operator in the Operations Division at ORGDP, died April 18 at her home.

Mrs. Bowers, an eight-year Carbide employee, lived at Route 2, Powell.

Survivors include her husband, Randy Bowers; daughter, Melissa Ann Edwards, Harriman; stepdaughter, Velvet Nicole Bowers, Oak Ridge; and mother, Virginia Cabe, Harriman.

Services were conducted April 21 in the chapel of Weatherford Mortuary in Oak Ridge. Burial was in Anderson Memorial Gardens.

Rachel Smith gleans secretary title

Rachel R. Smith, in the engineering integration group of the Operating Contractor's Project Office, has been named Secretary of the Year by the Professional Secretaries International's local chapter. Louise Scogin, CPS, last year's winner, presented Smith her trophy at the Early Bird Breakfast held recently to kick off Professional Secretaries Week.

Employed at ORGDP since 1974, Smith has worked in Operations Engineering and the Operations Analysis and Planning Department before her present assignment.

She attained the CPS rating in 1976 and enrolled in Roane State Community College, graduating in 1981. She is currently enrolled in the University of Tennessee's evening school.

Active in PSI, she serves as recording secretary, chairman of the speakers' bureau and co-chairman of Professional Secretaries Week.

A native of Morristown, she and her husband, Douglas P. Smith, live in Oliver Springs with their two daughters.

Mezda to manage low-level waste

Lance J. Mezga has been named program manager for ORNL's activities in the DOE National Low-Level Waste Management Program.

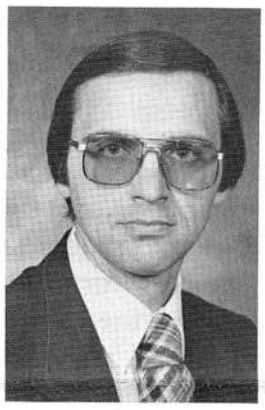
An associate lead contractor for technology development in the national program, the Laboratory manages technology development activities in such areas as improved techniques for low-level waste treatment, handling, packaging and disposal in support of EG&G-Idaho, the lead contractor.

Mezga succeeds Robert S. Lowrie, who will be returning to research in nuclear waste programs. Lowrie has served as manager since 1979.

Mezga has been with Union Carbide in Oak Ridge since 1979 and was formerly program manager of the Conservation and Renewable Resources Assessment Program. Since 1981, he has served as technical manager for disposal technology.

He received BS and MS degrees in geology from Kent State University in 1971 and 1973.

Mezga and his wife, Ernestine, reside at 1090 Concord Woods Drive, Knoxville. They have two daughters.



Mezga

Rifle league . . .

Jack Spurling, Y-12, took the first high power rifle shootout with a 765 out of a possible 800. Don Kiplinger, ORNL, posted second with 737; and Roger Wiegand, Y-12, came in third with a 722.

Other scores: L. Weston, ORGDP, 713; R. Crawford, ORNL, 653; Hugo Bertini, ORNL, 639; Harold Fell, Y-12, 633; M. Baker, ORNL, 595; D. Mobley, ORNL, 524; and R. Hatmaker, TIC, 462.

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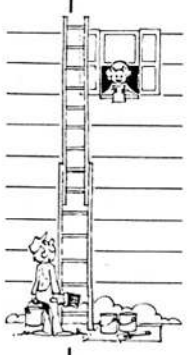

ADDRESS CORRECTION REQUESTED