



In this issue . . .

ORNL employee Claude Haws relates the tale of his travels in West Germany with the Friendship Force, an adult exchange program, on page 2.

Other features:

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Question Box

What is Division snow policy?

QUESTION: Why were employees on different payrolls paid differently on the East Tennessee "ice day," January 19, 1982?

ANSWER: Exempt-salaried employees are, as their designation indicates, exempt from payment of overtime if they work extra hours. They are also protected from loss of pay if they miss work for short periods of time.

Hourly employees are paid only for hours actually worked in line with contractual agreements with unions representing them.

Nonexempt-salaried (weekly) employees are paid for all hours worked. They are paid on an overtime basis if the hours worked are in excess of eight in any 24-hour period or in excess of 40 within a payroll week. These employees are also allowed time off with pay when they are absent for short periods due to extenuating circumstances beyond their control. On January 19, road conditions were generally not safe in the morning but had improved by midday. Nonexempt employees who worked any period on January 19 were paid for the full day, with the nonwork period being counted as "personal with pay." If such employees did not work at all on January 19, they were given "personal with pay" time for the morning and vacation or "personal without pay" for the afternoon hours — as each employee elected. Exceptions could be made, and the full day could be considered as "personal with pay" when in the opinion of the supervisor rare and unusually extenuating circumstances prevented an employee's getting to work at any time that day.

Clean-up priorities

QUESTION: What is the Nuclear Division's policy in connection with removing snow and ice from working areas and the parking lots?

ANSWER: Maintenance managers at the three Oak Ridge facilities have agreed on the following general priorities for snow and ice removal during the winter season:

Priority 1: Walks and steps which have heavy traffic or represent the greatest hazard to pedestrians inside the plant and at entrances from parking lots; streets and main thoroughfares used by emergency vehicles; and portal entries, secondary streets and streets leaving the plant.

Priority 2: Parking lots and traffic arteries within and around parking lots, including pedestrian routes, access roads, lanes between parking areas and parking areas in the parking lots.

The treatment used to clear ice or snow will be determined by maintenance personnel depending on temperature, depth of the material and whether or not it can be removed with available equipment. Gravel or ice chaser may be used, or the area may be scraped and/or swept and the snow or ice removed. The type of treatment used will be the one which results in the safest situation for the area.

In general, treatment will start before the areas of concern are in heavy use. When snow or ice storms begin during the day, treatment will start before time for shift change in the afternoon. Snow and ice that accumulate at night will be treated early the next morning before the 7 a.m. shift change.

Nuclear Division attains best-ever safety record

The Nuclear Division, with about 19,000 employees in Oak Ridge and Paducah, ended calendar year 1981 with its best-ever safety record. As a result, later this year the Division and its facilities will receive the highest safety performance awards given by Union Carbide, the Department of Energy and the National Safety Council.

During the year only three employees experienced occupational injuries resulting in lost workdays, a 33 percent improvement over the Division's previous all-time low rate established in 1979. In addition, the number of occupational injuries or illnesses that did not involve lost workdays was just 162, resulting in the lowest incidence rate since reporting of this information was begun in 1975.

The three lost workday cases involved a maintenance mechanic who suffered a fractured leg when he was struck by a heavy cutting tool that fell when a band-to-chain weld failed, a clerk-typist who fell on an asphalt tile floor and suffered a fractured hip, and a boilermaker who received puncture wounds and lacerations when the punch stem on a metal-forging press failed and fragmented.

In 1981 there were 217 off-the-job disabling injuries in the Nuclear Division, the second-best record in five years, although it represents a slight increase over the 1980 record. There were four off-the-job fatalities during the year, all resulting from automobile accidents.

The Nuclear Division will receive Union Carbide's highest safety performance award — the Gold Award — for working more than 25 million hours without a lost workday injury. This is the first Gold Award ever presented by the Corporation.

In addition, both ORNL and Y-12 will receive two Union Carbide Outstanding Safety Performance

Awards: the Bronze Award for eight million or more employee hours worked without a lost workday injury, and the Silver Award for twelve million hours or more. PGDP will receive the Corporation's Distinguished Safety Performance Award for working four million employee hours without a lost workday injury in a 440-day period.

All four Nuclear Division facilities will receive both DOE's Award of Excellence and the National Safety Council's Award of Honor, the highest safety awards given by the two organizations.

Employees at both ORNL and PGDP worked the entire year without an occupational lost workday case. As of December 31, ORNL employees had worked 600 consecutive days without a lost workday case, PGDP employees 520 consecutive days — records for both installations.

All of the safety performance awards will be presented at the Nuclear Division's annual safety luncheon, to be held in Oak Ridge later this year.

1982 World's Fair tickets available at cashier offices



A limited number of reduced-price tickets to the World's Fair in Knoxville will be available to Nuclear Division employees.

From now through April 1 (or until the supply is exhausted) employees will be able to purchase one-day tickets at each facility cashier office for \$7.75, compared to the gate price of \$9.95.

Retired employees may pick up one-day tickets at Central Employment, Charlotte Hall, downtown Oak Ridge. They are asked to bring their UCC retirement cards or other means of identification.

These reduced-rate tickets will be on sale during regular work hours at each Nuclear Division facility.

Union Carbide will be one of the major exhibitors at the World's Fair, having contracted for more than 4,000 square feet of space in the Technology and Lifestyle Center.

The exhibit, "See How They Run," will be arranged to provide hands-on opportunities for visitors to operate more than 150 toys and games powered by the company's "Eveready" ENERGIZER batteries. The toys and games are being selected for their appeal to pre-schoolers and primary school children.

Division families 'join forces' for German visit

[Editor's note: Three Nuclear Division families, those of Claude C. Haws (ORNL), Charles Angel (Engineering retiree) and Thomas G. Scott (ORNL), returned recently from a rather unusual trip to Europe. They were part of an exchange party of 325 persons from western North Carolina, eastern Tennessee and Atlanta who were hosted in private West German homes in the Hamburg area. At the same time, a similar number of West German citizens stayed in homes in western North Carolina. Forty-five Tennesseans, ranging from teenagers to retirees, participated.

The program was sponsored by the Friendship Force Club of Asheville, N.C. Information on a new Friendship Force Club for East Tennessee is found at the end of the following article.]

by Claude Haws

My wife Mary Evelyn and I were guests of the Wotzek family of Fallingbostal, a picture-postcard resort village about 60 miles south of Hamburg. We have many pleasant memories of our visit, but foremost is the hospitality of our hosts. Each of the Wotzeks, including the son and daughter, in their twenties, spoke excellent English, so extensive discussions were possible on a wide variety of topics. We had many subjects to choose from, since our ages, hobbies and general outlooks were very similar.

Herr Wotzek was retired from his job as an operating supervisor at a large chemical plant nearby. The son's hobbies were photography, country music and astronomy, and the daughter enjoyed horseback riding. The elders' principal hobby was caring for their attractive brick home and an extensive, beautifully kept formal garden.

'Typical' German meal

The dinners and discussions were accompanied by German beer (which is as good as its reputation) and an even better Czechoslovakian red wine.

One incident illustrates the Wotzeks' hospitality and the attention they gave to satisfying even our slightest wishes. We mentioned one evening that we had seen no sauerbraten, wiener schnitzel, sauerkraut or other "typical" German dishes, and that real German meals were certainly different from our American concept of them. We were almost embarrassed when Frau Wot-

zek exclaimed, "We will have eisbein tomorrow night." She could not be dissuaded, even though Herr Wotzek was the only member of her family who would eat the dish. The next evening the three of us enjoyed an excellent meal of pork shoulder and sauerkraut, while everyone else ate other fare.

Most evenings were spent in the Wotzek den, although we did attend a special evening benefit concert given by Her Majesty's NATO band in the village civic auditorium. The concert featured a tribute to band leader Glenn Miller, who was lost in World War II. We felt that this was a tribute by the British band to America as well as to a great American, and that, except for differences in geography and language, our three peoples are very much the same. We also remembered that, while we were jitterbugging to Miller's tunes almost four decades ago, American planes were bombing this same area of Germany both day and night. The thought now seemed so unreal.

Political discussions

At first we avoided discussing the war or world politics, since we could not anticipate our hosts' reactions. Eventually, however, they spoke dispassionately of their lives during the war. Frau Wotzek kept a picture of her brother, a handsome German officer who was killed during the conflict. Herr Wotzek was born of Czechoslovakian parents in Switzerland, but the family moved back to Czechoslovakia just before Hitler seized it. Herr Wotzek and his brother were immediately drafted into the German army, and our host spent two years in training at a camp near Fallingbostal. He was captured by the British in 1940 and held as a farm laborer until his repatriation in 1948.

His brother lost a leg and was trapped behind the Russian lines at war's end. The Wotzeks seemed to view him (and other relatives behind the Iron Curtain) as being enslaved and imprisoned. They visit relatives in East Germany, but the relatives cannot visit them. They describe the East Germans as existing without purpose and wandering through life much like zombies. We had read this description in the U.S.; however, it is quite different to hear it discussed by someone whose relatives are involved.

We realized their feelings of sorrow and helplessness as we stood at

the border dividing the two Germans. Two parallel barbed-wire-topped fences, separated by about 100 meters of mine fields, have been built by the East German government along the entire border. Observation towers and detection systems are located behind the inner fence. Constant jeep and dog patrols are maintained. The Wotzeks said that their East German nieces and nephews are taught in school that the fences are to keep others out. Their June 14 national holiday, equivalent, they say, to our July 4, is celebrated to demonstrate sympathy with East Germans killed by Russian tanks during the revolt against the Russians in the 1950's.

Scenic sites

Most of the sites we visited were much more cheerful, however. On consecutive days, we visited the Luneburger Heidepark, a park with thousands of rolling acres of wildflowers; an animal park containing the near-extinct European bison and the magnificent Siberian wolf; and the largest bird park in Europe. We also toured the picturesque medieval cities of Luneburg and Goslar. Of particular interest at Goslar was the Kaiser Pfalz (Imperial Palace) begun by Heinrich II and completed in 1009.

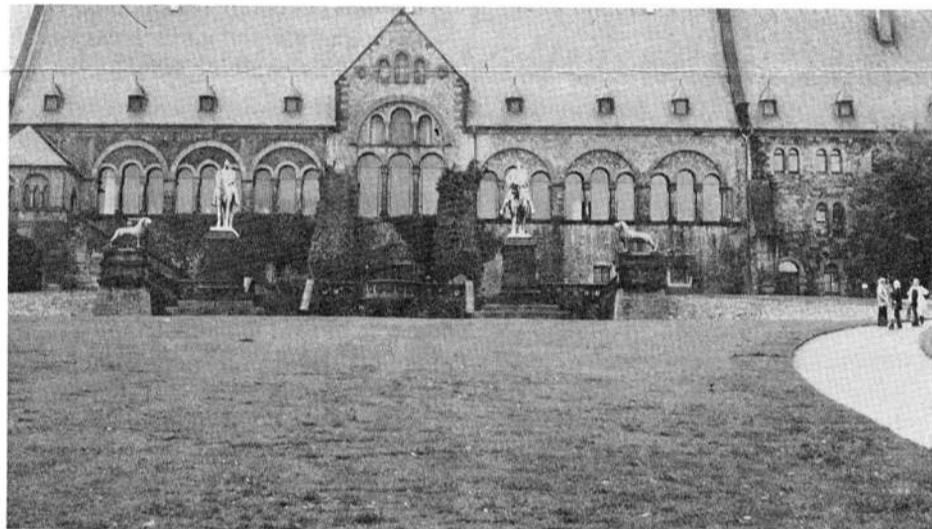
The palace served as a governmental seat of the Holy Roman Empire during the 11th, 12th and 13th Centuries.

As our hosts drove us to the train station at Fallingbostal, each of us felt regret that our pleasant visit had ended. However, we have not seen the last of the Wotzeks! They are planning to visit this area for the World's Fair, and we will attempt to show them the finest hospitality that East Tennessee can offer.

* * *

The Friendship Force is a non-profit, private organization chartered to promote understanding between people of the world through two-week citizen "exchanges." The group has chapters throughout the free world. As of January 1981, more than 100,000 people had participated in the exchanges.

Anyone interested in the program may attend the new local chapter's meetings with no obligation. Applications are being taken through February for a mid-May exchange between Seoul, South Korea, and East Tennessee. Contact Claude Haws (4-6626 or 966-3227) or Charles Angel (966-1332) for more information, and watch future *Nuclear Division News* issues for additional travel features.



THE KAISER PFALZ, or Imperial Palace, was built in the city of Goslar in the 11th Century.



THIS PICTURESQUE CITY GATE was photographed during the Haws' visit to Luneburg.



THIS SIGN at the East German border warned Mary Evelyn Haws and other visitors to "halt here."



Hypothermia — a major problem

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.)

QUESTION: "I have read reports of people freezing to death during the recent severe cold weather. Because of the high cost of heating, I imagine that a lot of people stayed cold during that time. What effect does living in cold homes or working in cold offices have on people's health?"

ANSWER: Chronic exposure to cold aggravates both rheumatic and arthritic diseases. Patients with angina caused by coronary heart disease suffer more frequent attacks when walking into a cold wind. Patients with bronchitis usually cough more when breathing cold air. Respiratory infections also occur more frequently during winter months, but exposure to cold probably is only a modest factor. Hypothermia is a major problem by itself.

Potentially dangerous accidental hypothermia is defined as a body core temperature of below 94

degrees Fahrenheit, resulting from exposure to environmental cold. It is sometimes an indirect result of the excessive intake of alcohol or drugs which confuse and disorient users, making them unaware of the danger of the cold. Occasionally, people become lost in blizzards or are exposed to unexpected cold weather while hiking or climbing. Sometimes people fall into cold water and become severely hypothermic before being rescued. Older people, especially those with chronic illnesses, may develop hypothermia in their own homes during the winter months.

Unreported cases

Many cases of fatal hypothermia probably are not reported. The number of cases that actually appear on death certificates probably represents only the "tip of the iceberg." The relationship between hypo-

thermia and other illnesses is complex, and many times the victim's body is discovered long after death. As the core (the deep or center part of the body) temperature drops, there may be severe cardiovascular effects, especially in the elderly. The heart rate slows, the pulse weakens and sometimes lethal conduction disturbances occur, causing a fatal ventricular fibrillation.

Unfortunately, most people think hypothermia occurs only when the outside temperature is far below freezing. A 1980 article in the *Southern Medical Journal* reported four cases, three resulting in death, in a hospital in Tampa, Fla. (That year, only one night of temperatures below freezing had been reported!) An elderly person who is inadequately clothed and inactive can easily become hypothermic at a room temperature of 65 degrees. The recommended air temperature for fully clothed older people who are inactive is 70 degrees.

Severe hypothermia

Mental function declines as the body temperature falls. Young people usually begin to shiver uncontrollably when their core temperatures fall only a couple of degrees. Older people whose temperature regulation mechanisms are defective may not shiver, and may not realize they are getting cold. As their core temperatures fall, they may not put on additional clothing, look for warmer areas to sit or get up and walk around to generate more body heat. They may just remain where they are as their body temperatures continue to fall. Unless others discover them, these people may become severely hypothermic.

Normal recovery usually is possible when an elderly person's body temperature is above 90 degrees. If the temperature has been lowered to between 80 and 90 degrees, permanent damage to the neurovascu-

lar system frequently occurs. This is usually fatal if the body temperature drops below 80 degrees. Survivors of hypothermia may experience a later attack when exposed to only moderate cold. One elderly patient in Louisville, Ky., suffered eight separate attacks of hypothermia.

Rewarming methods

A person who is cold enough to be severely confused but is not shivering should be taken to a hospital as soon as possible. The person should be rewarmed in a facility where medical resources are available to deal with possible complications. A core rewarming method involving the inhalation of heated aerosolized oxygen through a nasal tube is often used. Inserting inlet and outlet tubes into the abdominal cavity and circulating warm saline also helps raise the core temperature.

Using hot water bottles and blankets and rubbing the extremities are traditional rewarming techniques, but they should not be used with severely hypothermic patients. When the skin and subcutaneous tissues are rewarmed before the core by these techniques, the supercooled heart cannot circulate the amount of blood demanded by the rewarmed skin. The result may be a disastrous rhythm disturbance in the heart which could be fatal.

Detecting hypothermia

Remember, also, that oral temperatures are notoriously unreliable in detecting hypothermia. If one is concerned about the possibility of hypothermia, a rectal temperature should be taken.

Being cold can be extremely uncomfortable for most people. If possible, they usually seek a warm location, put on additional clothing, exercise or eat warm food. Older people may not receive the same signals, or may not respond. Therefore, they are the people about whom we should be most concerned.

Elizabeth L. Preston named technical assistant at ORNL

Elizabeth L. Preston has been appointed technical assistant to Chester R. Richmond, associate director for biomedical and environmental sciences at ORNL.

She will assist in the central administration and management of activities carried out principally in three divisions — Biology, Environmental Sciences and Health and Safety Research — as well as the Life Sciences Synthetic Fuels Program, University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences, Information Centers Program and Oak Ridge National Environmental Research Park.

These programs in the life sciences, involving some 300 individual projects, are supported by approximately \$60 million annually in funds provided by DOE, the Environmental Protection Agency, National Institutes of Health and other federal agencies.

Preston joined the staff of the Biology Division in 1974 after receiving BA and MS degrees in zoology and microbiology from the University of Wyoming. She has worked as an information center analyst in the



Preston

Information Division and is a candidate for the MBA degree in management at the University of Tennessee.

Her most recent assignments have been as a task leader responsible for managing special projects and the DOE Buildings Division Information System.

She is second vice-president of the Energy Conservation Society and is a member of the American Society for Information Science and the Society for Technical Communication.

Preston, her husband, Julian, and their five children live at 12 Mona Lane, Oak Ridge.

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**Alicia Fowler, Paducah Plant
Engineering Division.**



INTERNATIONAL ASSOCIATION
OF BUSINESS COMMUNICATORS



QUALITY INSPECTOR OF THE YEAR — G. Richard Jones, second from right, is congratulated by Nuclear Division Vice President Clyde Hopkins following his selection as the Division's "Inspector of the Year." He was recently informed that he has also been awarded this honor by the Tennessee Section of the American Society of Quality Control. Looking on are John Gerwels, Nuclear Division Quality Assurance manager, left; and Robert W. Levin, manager of the Technical Services Division at ORGDP, right.

G. Richard Jones named Quality Inspector of Year

G. Richard Jones, a senior inspector in the Centrifuge Quality Control Services Department of ORGDP's Technical Services Division, has been selected by both the Nuclear Division and the Tennessee Section of the American Society of Quality Control (ASQC) as "Inspector of the Year."

The award is presented annually to a quality control inspector who has made outstanding contributions to his employer in the following areas: on-the-job knowledge and abilities; interpersonal relationships with peers, supervision and off-site manufacturers; training of others;

and continued professional development efforts.

Jones will represent the Tennessee Section of ASQC in the regional competition. The winners will compete at the national and international levels.

A native of Oak Ridge, Jones received his associate of science degree from Roane State Community College and attended Middle Tennessee State University. He joined the Nuclear Division at the Y-12 Plant in 1970, transferring to ORGDP in 1975.

Jones, his wife, Gail, and their son live on Farmers Hollow Road in Clinton.



Contest highlights QA week, March 7-13

As part of "Quality Assurance Week" observances, March 7-13, Nuclear Division employees can test their skill at solving a cryptographic puzzle and win a season pass to the 1982 World's Fair in Knoxville.

The puzzle, which contains a QA message, will be published twice in the *Nuclear Division News*. In the first version, shown below, half of the squares which contain clues have been randomly blanked out to make the solution more difficult. The March 4 issue will include the complete puzzle with all the clues revealed.

The contest is open to all Nuclear Division employees, except members of the QA Week Committee, Nuclear Division QA Committee and division-level QA Coordinators. Two winners at each plant will receive a World's Fair season pass or its cash equivalent of \$85.

Each plant will hold two separate drawings on March 15. The first drawing will select a winner from among employees who correctly identify the QA message using the clues in this issue. Their entries must be received by February 26. The second drawing will be from correct entries received after the complete puzzle is published on March 4. The deadline for those entries is March 12.

The drawings will be conducted by QA Coordinators at each plant. They are Paul R. Melroy, ORGDP; Harvey T. Kite, Y-12 Plant; Frank H. Neill, ORNL; and Thomas A. Morris, PGDP.

Employees may submit only two entries, one for each drawing at the plant to which they are assigned. All entries must be on the official entry forms.

The number of correct entries for the first drawing should be substantially smaller than for the second drawing. Therefore, your chances of winning are probably much greater if you can solve the puzzle before February 26.



"Quality assurance — let's all make it happen."
(Submitted by Randy O. McClosky, Y-12.)

QA MESSAGE CONTEST

Entry Form

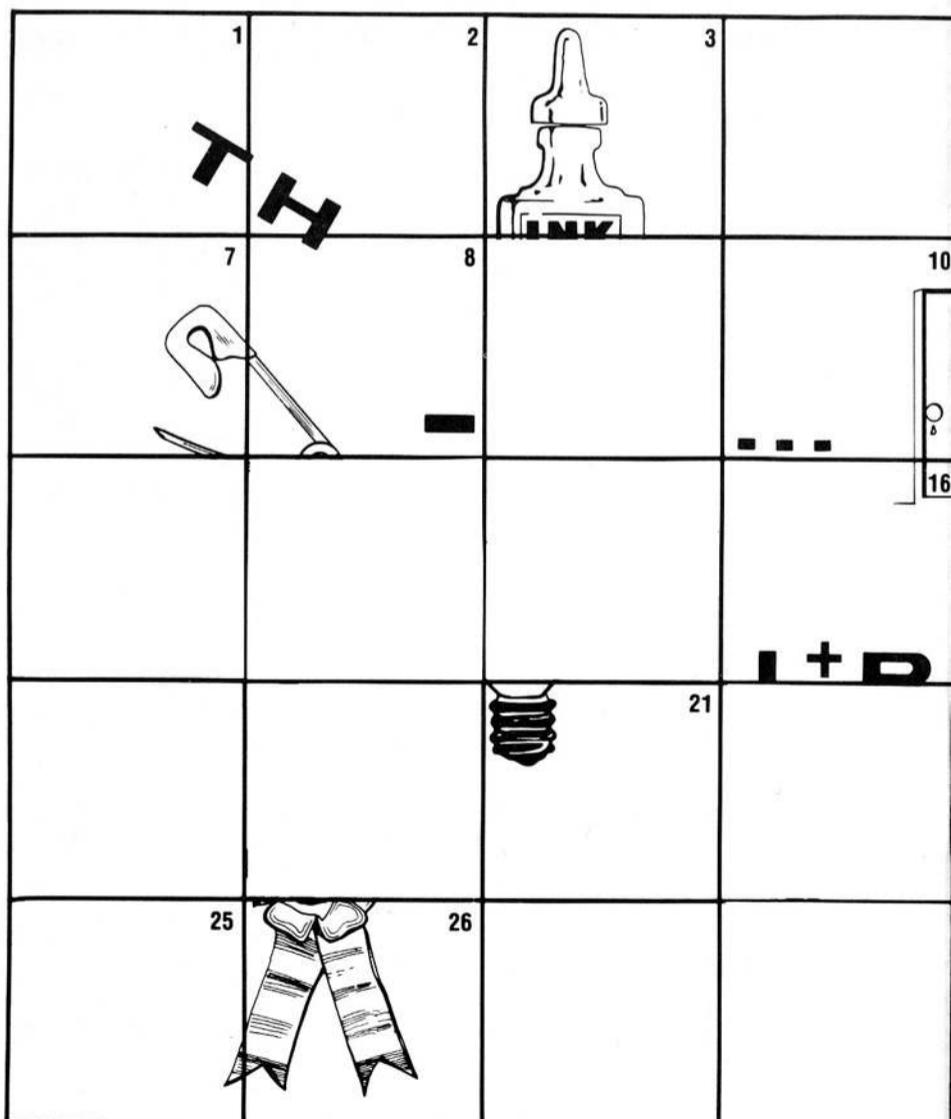
Name _____ Badge Number _____
Plant Mailing Address _____ Plant Phone _____

QA Message _____

Deadline — February 26, 1982

Send to: QA Coordinator
Y-12 - Building 9704-2, MS-11
ORNL - Building 2024, Room 207
ORGDP - Building K-1001, MS-124
PGDP - Building C100

2/18/82



Laboratory researchers develop reactor noise analysis system

By using an electrocardiograph, doctors can detect minor fluctuations in the human heart that may signal heart disease. Using the same principle, researchers in ORNL's Instrumentation and Controls (I&C) Division have developed a system to detect abnormal conditions in nuclear power plants.

The new system, using a technique known as noise analysis, is now being tested at TVA's Sequoyah Nuclear Plant. It was installed by I&C engineers Ned Clapp Jr. and Cy Smith.

Dwayne Fry, program manager of I&C's surveillance and diagnostic methods group, says, "We are very excited about the potential applications of this system, especially in situations where hard-to-detect problems have occurred." The new system is the first analysis system designed specifically for automated long-term noise monitoring of nuclear power plants.

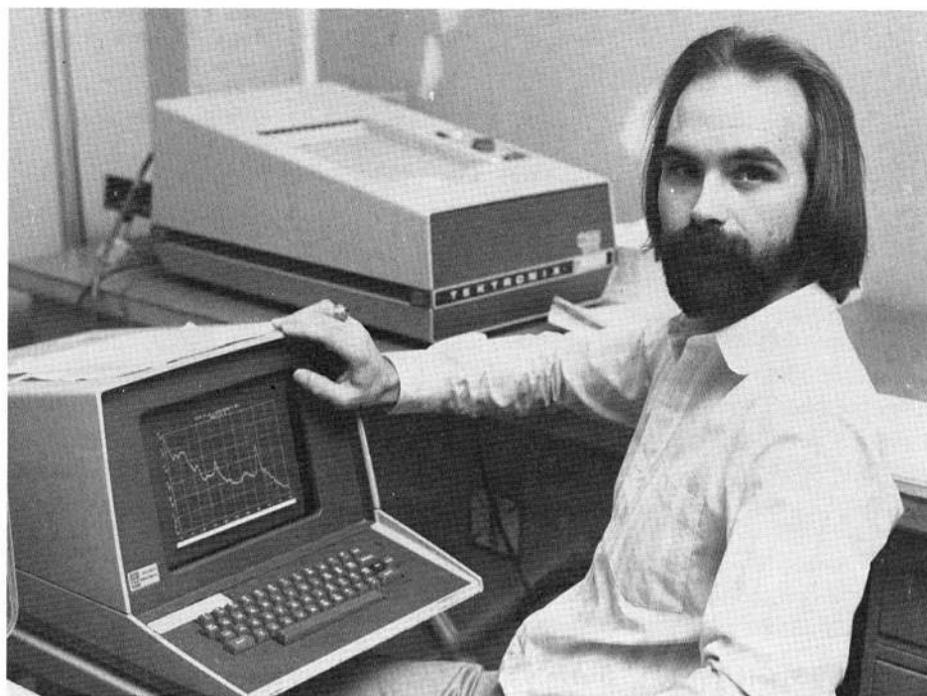
The noise analysis system monitors minor fluctuations in the plant's power level, coolant flow, temperature, pressure and vibration. During plant operation, the fluctuations, called noise signatures, are recorded in a minicomputer. The computer

then compares the fluctuations statistically to previously recorded information obtained during normal plant operation. I&C engineers then analyze the data if significantly different from the baseline data.

Difference between an unusual noise signature and the normal plant operation signature does not necessarily mean that an abnormal condition has occurred. Fry says, "Differences in operations, maintenance procedures, testing or other factors can affect a plant's noise signature."

The major purpose of the Sequoyah test is the collection of a full fuel cycle (approximately 18 months) of noise signatures. Fry says, "Our goal at Sequoyah is not to detect problems in plant operation, but rather to record signatures associated with normal operation of a pressurized water reactor." So far, no abnormal conditions have been detected by the noise analysis system, which is monitored at ORNL via a telephone hookup.

Once the Sequoyah test has been completed, I&C researchers hope to create a "generic" noise signature that can be applied to all nuclear power plants when a problem arises.



TELEPHONE HOOKUP — Cy Smith and other Instrumentation and Controls Division engineers monitor the noise analysis system via a telephone hookup.

This may enable engineers to quickly detect problems without costly plant shutdowns. When fully developed, the system is expected to provide an early detection of abnormal vibrations in conventional and future reactors.

The noise analysis system was successfully tested at ORNL's High Flux Isotope Reactor in 1979. Noise analysis was previously used to diagnose problems at commercial nuclear power reactors in the United States.

Patent

William H. McCulla and John D. Allen Jr., both of ORGDP, for "Apparatus for Shifting the Wavelength of Light."

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	OR	18
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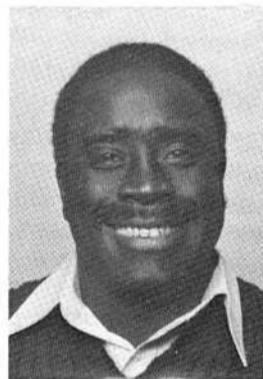
Howard Robinson, Y-12 dies

Howard Robinson, 9215 Rolling Mill in Y-12, died February 7 in Oak Ridge. He lived at 156 North Jefferson Circle.

Mr. Robinson joined Union Carbide in 1975 at ORGDP, and transferred to Y-12 January 1, 1982.

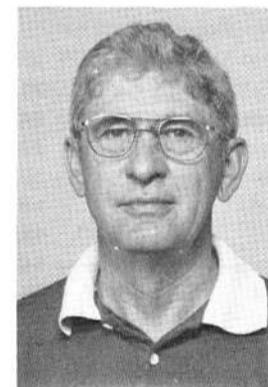
Survivors include his wife, Viola Robinson; children, Andrea, Elizabeth, Howard Jr., Giovanni, Antonio and Valeria Robinson; father, Comer Robinson; mother, Mrs. Rosalee Gillima; and grandparents, Mr. and Mrs. John H. Davis.

Funeral services were held at Jarnigan's Chapel, with burial in New Gray Cemetery.



Mr. Robinson

Ralph Apple, chemist, dies



Mr. Apple

Ralph F. Apple, a research associate in the ORNL Analytical Chemistry Division, died February 9 in Los Angeles as the result of a heart attack.

A 29-year ORNL employee, Mr. Apple lived at 83 Outer Drive, Oak Ridge. He was a member of St. Stephen's Episcopal Church, Faith Masonic Lodge and the Oak Ridge Elks Lodge. Mr. Apple was a World War II veteran of the U.S. Army.

Survivors include his wife, Mary Byrd Apple; two sons, John Bryan of Oak Ridge and Alfred Brooks of Williamsburg, Ky.; a brother, Gerald; and a sister, Naomi McBride.

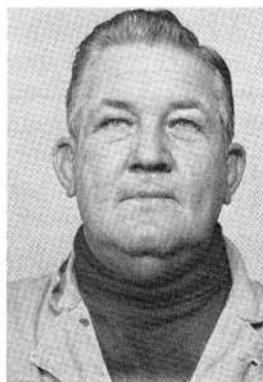
Burial was in Apple's Chapel cemetery in Eckerly, Ind.

ORGDP's Shields Brady dies

Shields O. Brady, an electrical mechanic in the Maintenance Division at ORGDP, died in a Knoxville hospital on February 4. Brady joined Union Carbide in 1977.

Survivors include his wife, Mary Elizabeth and son, Scott, of Knoxville; daughter, Mrs. Sandra Willis of Elmira, Ore.; stepsons, Ronald, Donald, Johnny, Jimmy, Eddie and Charles Hammond of Knoxville and Kenny Hammond of Kingston; stepdaughters, Debbie Hammond of Kingston and Mrs. Patsy Koch of Oregon; mother, Mrs. Lena Brady; sisters, Mrs. Mary Harris, Mrs. Clara Wilson, all of Knoxville; and 14 grandchildren.

Funeral services were held February 5 with interment February 6 at Greenwood Cemetery.



Mr. Brady

Bowling alley notes...

K-25 Tuesday...

The Mishaps stand atop the K-25 Tuesday Bowling League, more than 20 points ahead of the Atomics. Their 1111 series recently was high for the week. Lynn Hart rolled a 614 scratch series, while J. H. Peer posted a 247/270 game in singles. Peer's 657 handicap series was the week's high.

ORNL A...

The Half Frames have grabbed the early lead in the ORNL A League. Norman Jefferson posted a 661 handicap series; while Larry Williams rolled a 261 single handicap game. In scratch count, it was Bob Hagood, rolling a 228 single.

Monday Mixed...

The Pacesetters took over first place early in the second half of the UCC Monday Mixed Bowling League, and they did it in a big way. The team and two of their members set new records for the league in every category. The team's outstanding 771, 764, 757/2292 scores were sparked by Churchill Moore who rolled a 188-252-203/643 to lead all men in the league. Mary Johnson contributed to her teammate's highs by rolling a 238-188-191/617, which is her first 600 series. Joe Grey and Betty Thompson added to the team strength by rolling series of 572 and 470. Rounding out the top three places are the Go-Getters and Omegas.

Save Energy / Share The Ride

ORNL

RIDER NEEDED from Emory Valley to any portal, 8-4:30. Gerald Johnson, plant phone 4-4379; home phone 483-0262.

CAR POOL MEMBERS NEEDED from Cedar Bluff Shopping Center, West Knoxville, to East or South Portal, 7:30-4. Kim Weeks, plant phone 4-5363; home phone 691-4552.

VAN POOL RIDER NEEDED from West Knoxville area (Bearden through Farragut) to main portals, 8-4:30. Dean Treadway, plant phone 4-6580; home phone 584-4879.

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.

CAR POOL MEMBER WANTED from West Town Mall, Knoxville, 8:15-4:45. C. C. Travis, plant phone 6-2107; home phone 693-5970.

VAN POOL RIDER NEEDED from Rocky Hill, West Town Mall area, Knoxville, to South and West Portals, 8-4:30 shift. W. L. Pattison, plant phone 4-6888; home phone 691-0781.

Y-12 Classic...

The Atta Boys rolled into first place in the Y-12 Classic League, edging out the Has Beens. Ron Korkow rolled a 293 handicap game, a 750 series, as Bob Hagood posted a 285 game and Jimmy Davis placed third with a 279. Bob Bowers rolled a series of 689, and Ellis Kerns rolled a 684.

Y-12 C...

The Irregular Five took a 10-point lead in the Y-12 C Bowling League, edging out the Onodes. High scores went to Randy Howell, 718 series; Joe Morgan, 710 and Larry Moore, 687. In single firing it was Larry Washam, 293; Bob Cagle, 274; and Morgan, 264.

Family Mixed...

A four-way tie in the Carbide Family Mixed League saw Edith Duckworth, Debbie Bowman, Susan Stockbridge and Charlotte McElligott roll games of 218. Leon Hurd took men's highs with a 508 scratch series; while Norman Jefferson rolled a 620 handicap series.

Carbide Wednesday...

Elwood McCulley set the alleys afire recently in the Carbide Wednesday League, rolling a scratch 678 series, boosted to a 732 handicap total! Chuck McCluskey, however, took singles honors, rolling a 256/270 game. The Engineers keep a four-point plus lead in the action.

UCC Mixed...

Linda Burnett paced the UCC Mixed League recently by rolling a 212/237 single; series of 561/636; as Al Gladson took over men's tops with singles of 214/243 and series of 571/658.

Y-12 PLANT

VAN POOL RIDERS WANTED from downtown Kingston area, 8-4:30. Sid Booth, plant phone 4-0154; home phone Kingston 376-4579.

RIDE from Crossville to Y-12, straight day shift. Robert C. Anderson, plant phone 4-1803; home phone Crossville 945-2264.

SHARE THE RIDE or JOIN CAR POOL from northeast Knoxville to any portal, straight day. Lee Jackson, plant phone 4-0545; home phone Knoxville 637-6047.

ORGDP

JOIN or FORM CAR POOL from Belmont West/Gulf Park subdivisions, West Knoxville, to Portal 1 or 2, 7:45-4:15 or 8-4:30. Elena, plant phone 4-8722; home phone 691-0866.

RIDE NEEDED from Crossville (downtown) to Portal 2 or 4; 7:30-4:00 shift. Call Marvin Kerley at 4-8850 (plant); home 483-5814.



LADIES' CHAMPS — Suzie's Slicers came away from Paducah's 1981 Ladies' Golf League with top honors. Members of the winning team are back from left, Denise Seltzer and Suzie McDougal. Front from left are Jo Anne Richardson and Shirley Deshler. Not present for the photograph were Anne Erwin and Kathy Parham. Other awards went to Shirley Deshler for most improved player, Denise Seltzer for best scratch score and Suzie McDougal for lowest net score.

Volleyball Leagues...

First standings in from the three-league volleyball competition show the Prime Time Players, the Manipulators and Milk Duds on top of their respective leagues.

Complete league standings follow:

CARBON LEAGUE - NORTH DIVISION		
Team	Won	Lost
Prime Time Players	27	3
Net Profits	26	4
Environmental Disasters	22	5
Lucky Spikes	24	9
Condensed Matter	23	10
Med Flies	17	10
Beech-Nuts	19	17
Zoo Crew	16	17
Killer Bees	16	17
Solid Gold	15	21
P O I	9	24
Otto	8	22
Absolute Zeros	7	20
Nasties	9	30
Carriers	7	29

CARBON LEAGUE - SOUTH DIVISION		
Team	Won	Lost
Manipulators	33	3
W. G. A. S.	23	7
Chemical Operations	20	7
Mug Huggers	22	8
Possum Watchers	23	10
Fightin' Possums	20	10
Streakers	21	12
Evil Spirits	18	12
Skunks	16	11
Short Circuits	18	15
U. S. A.	17	19
Super Suds	8	22
Volunteers	7	23
Odds & Ends	6	27
Mustangs	5	28
Lemmings	4	26

Sweetheart Dance

The annual ORNL Instrumentation and Controls Division Sweetheart Dance will be held Saturday, February 27, at 6:30 p.m. at the Oak Ridge Elks Club.

Entertainment for the dinner/dance will include performances by the "Free Spirit" band. The cost is \$15 per person, and reservations may be made by calling Anna Belle Snellings (4-5675) or Lorry Ruth (4-5771). Division retirees are expressly invited.

NUCLEAR LEAGUE		
Team	Won	Lost
Milk Duds	26	4
Confusion	29	7
Dirty Half Dozen	21	12
B. C. Spikers	12	24
Artie's Army	6	21

Safety Scoreboard

Time worked without a lost-time accident through February 10:

Y-12 Plant	26 Days	858,000 Employee-Hours
ORGDP	244 Days	6,417,423 Employee-Hours
ORNL	642 Days	14,954,114 Employee-Hours
Paducah	561 Days	4,932,000 Employee-Hours

News About People

White named program chairman



White

Calvin White, staff researcher with the ORNL Metals and Ceramics Division, has been elected 1982 program chairman of the Materials Science Division of the American Society for Metals. In this position, he is responsible for coordinating all MSD-ASM-sponsored symposia at two national meetings in 1982. These meetings are jointly programmed by MSD-ASM and the Metallurgical Society of the American Institute of Mining, Metallurgical and Petroleum Engineers.

To LSU's hall of distinction

Murray W. Rosenthal, associate director for advanced energy systems at ORNL, has been elected to the Louisiana State University Engineering Hall of Distinction. Rosenthal, who received a bachelor of science degree in chemical engineering from LSU in 1949, was inducted in ceremonies held recently in Baton Rouge.

He is one of 11 members of the Hall of Distinction, established in 1979 to honor LSU engineering alumni, faculty and friends "whose distinguished careers and professional achievements have made major contributions to the engineering profession," according to Richard A.



Rosenthal

Matula, dean of the College of Engineering.

Corporate world ...

UNITS FOR THE RECOVERY of krypton and xenon gases at three of its existing air separation plants operated by the Linde Division have been announced by Union Carbide Corporation.

These projects will provide for the addition of crude krypton-xenon recovery distillation columns in Burns Harbor, Ind.; Lakeside, Ind.; and Brownsville, Tex. In addition, Linde is building a rare gas refinery at its specialty plant in East Chicago, Ind.

These facilities will establish Union Carbide as the largest producer of these rare gases at a time when they have become scarce because of increasing worldwide demand. These facilities for the recovery and refining will have a combined annual capacity of approximately 5 million gaseous liters of research-grade krypton and 400,000 liters of xenon.

Dividend declared

The board of directors of Union Carbide Corporation has declared the company's 259th consecutive dividend, in the amount of 85¢ per share on the outstanding capital stock of the corporation, payable March 1, to stockholders of record on February 5.

This is the same dividend per share paid on December 1, 1981.

The major use for krypton is as an inert atmosphere for retarding filament evaporation in halogen lamp bulbs. The use of krypton as an insulator in dual pane windows is also a rapidly growing application. Xenon is used in specialized stroboscopic and bactericidal lamps, high energy lasers and medical instruments. Two potentially large growth applications for xenon are as an insulator and as a breathing mixture in conjunction with X-ray scanners.

Paducah dance

Paducah is staging a 'denim dance' for its spring frolic, set for Friday, March 5.

Featuring a local band, 'Slim Pickens,' the dance will be held at St. Mary's High School.

Tickets are available throughout the plant from any dance committee member.

DEER SAFETY TIP

ORGDP Retiree C. D. Edmundson, who returned recently from hunting in Wyoming, says the best way to "unfreeze" a deer who stops in the path of your car and is hypnotized by the headlights, is to change from low to high beam or vice versa. This will enable the deer to see and move out of the highway.

'Nuclear power a safe, solid system'... Anderson

Strong support for the nuclear option was expressed by Warren M. Anderson, Chairman of the Board of Directors of Union Carbide, during a recent visit to Paducah.

While in Paducah, he visited the gaseous diffusion plant and was the principal speaker at a meeting of the Paducah Area Chamber of Commerce.

"Our challenge is not to turn our back on the promise of technology, but to see to it that all of us come to understand its workings and its promises," he said. "Our task is to intensify efforts to master nuclear energy and to eliminate any questions of its safety and reliability."

He added that nuclear power is a safe, solid system. "It would be a tragedy if nuclear power were not included as one of the options for our energy requirements."

Turning to other subjects, Anderson said that the remainder of the decade bodes well for the Nuclear Division and for the Corporation as a whole. He said that beginning this year he expects a gradual improvement in the nation's business and economy.

The invitation to visit PGDP came at a safety awards banquet held in Oak Ridge last summer. At that meeting, Anderson expressed his desire to congratulate Paducah employees for their outstanding safety accomplishments. As the keynote speaker at the Paducah Area Chamber of Commerce annual meeting, he took

the opportunity to do just that.

"Not only has the Paducah plant achieved an exceptional safety performance, it has also set the standard for the Corporation," he noted. In his address, Anderson added that an exemplary safety program is of primary importance, particularly in the nuclear industry. "No one has a right to make light of peoples' concerns about the engineering and safety of nuclear power plants. But I think it fair to suggest that there is something more to the concerns expressed about them. What is being questioned, and in some cases doubted, is the achievement and promise of modern science and technology across the board," he said.

This reluctance to embrace a future based on technological advancement comes at a most inopportune time, Anderson suggested. "Because we are debating the merits and possible flaws of a technology still in its infancy," he said, "we are losing a whole generation of would-be nuclear scientists who might build the energy base of our future. And we are rapidly losing our leadership in nuclear technology to the Europeans and Japanese who, lacking our riches in oil and gas and coal, cannot afford the luxury of waiting."

Anderson predicted a period of stability at the plant following the current layoff with an upturn in production expected in the late 1980's. With respect to his visit, Anderson said he was delighted with the plant and the people he met. "When you come through the front gate, you get a feeling that everything is under control," he commented.



Anderson

Anniversaries

ORGDP

35 YEARS

Virginia M. Brown, Operations; and Horace G. Stanley, Engineering.

30 YEARS

Howard L. Fore, Engineering; Lonnie M. Fussell, Maintenance; Luther H. Hampson Jr., Maintenance; Arthur Hopson, Engineering; Charles L. Jackson, Atomic Isotope Separations; Joe E. Keene, Maintenance; Ralph P. Lukat, Separation Systems; Billie E. Martin, Technical Services; Isao K. Namba, Engineering; Richard W. Nichols, Enrichment Technology; and James T. White, Technical Services.

25 YEARS

Robert E. Graham, Robert A. Jago and Elsie G. McCarthy.

20 YEARS

Patsy D. Black, William M. Hilton, James L. Luttrell, Glenn A. McDonald and James W. Rhew.

Y-12

30 YEARS

Bill I. Leinart, Chemical Services; Bruce F. Hayes Jr., Electrical and Electronics; James D. Sweeney, Utilities Administration; Earl L. Taylor, Beta 2 Expansion Assembly; Talmadge C. Hudson, Stores Department; Harry L. Woodard, General Shops; Norman J. Roberts, Dispatching; and Lillian F. Williams, Maintenance Division.

25 YEARS

Lloyd S. Sheffield.

20 YEARS

Lester Branham and Bennie F. Hendrickson.

Next issue...

The next issue will be dated **March 4**. The deadline is **February 24**.

'Energy for the 80s' is WATtec conference theme

WATtec '82 officers, speakers and panelists from the Nuclear Division represent the largest number of officials and invited participants from a single company at the ninth annual Energy Conference and Exhibition, scheduled February 24-26 at Knoxville's Hyatt Regency.

"Energy for the 80s — A Call for Leadership" is the theme for this year's conference. More than 90 specialists from throughout the country will speak at the 25 half-day technical sessions. Charles H. Fox, assistant director of engineering at the Clinch River Breeder Reactor Plant project office, is general chairman.

WATtec began in 1974 as the Welding and Testing Technology Exhibition and Conference (hence the acronym), sponsored by the Oak Ridge chapters of the American Welding Society and the American Society for Nondestructive Testing. Today, the sponsors list includes 31 Oak Ridge/Knoxville area chapters of 28 technical and professional societies.

W. Kenneth Davis, deputy secretary of the U.S. Department of Energy and immediate past president of the American Institute of Chemical Engineers, will be the featured speaker at the WATtec-Engineers Week banquet on February 26.

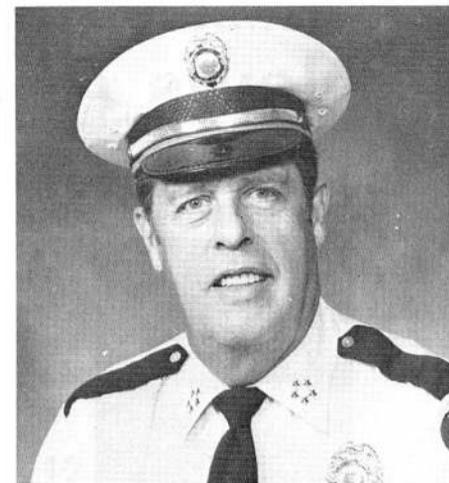
Sen. Howard H. Baker Jr., is the keynote speaker for the Public Awareness luncheon. Others headlining this year's public awareness panel are Dixy Lee Ray, former chairman of the Atomic Energy Commission and former governor of Washington; Bob Swift, Minister (Commercial), Embassy of Australia; Thomas Buffenbarger, Grand Lodge Representative of the International Association of Machinists, Cleveland, Ohio; George Lawrence, president of the American Gas Association, Washington, D.C.; Lee L. Morgan, chairman and chief executive officer of the Caterpillar Tractor Company, Peoria, Ill.; and Clark Gibbs, vice-president for nuclear activities, Middle South Services, Inc., New Orleans. The Public Awareness Symposium moves across the street this year to the Knoxville Civic Auditorium to accommodate increasing numbers of participants.

Serving on the WATtec executive committee are Joel W. Garber (secretary/treasurer), Paul F. Boyer, Gordon Fee, George Jasny, Ed H. Krieg, Finis S. Patton, Herb E. Trammell and Susan Whatley.

Chairing operating committees are Ed T. Stickle, Larry A. McDonald, Jim White and Martin M. Brown.



Donnie W. Burney



Clebert C. Roberts

New fire, guard chiefs at Y-12

Donnie W. Burney has been named fire chief in Y-12, and Clebert C. Roberts has been promoted to guard chief, both in the Security, Plant Protection and Utilities Division. Burney replaces Emmett Moore and Roberts replaces James H. Shoemaker, both retiring recently.

Burney, a native of Nashville, attended the Tennessee Institute of Electronics and the University of Tennessee before joining Carbide in 1968. He worked briefly with Modine Manufacturing and Magnavox Corporation before coming to Y-12.

He is a member of the Roane County Fire Board Advisory Committee, and the Blair Volunteer Fire Department. He served in the Ten-

nessee Army National Guard from 1963 until 1969.

Mrs. Burney is the former Linda J. Goodman, and the couple lives at Oliver Springs in the Mt. Pisgah Community. They have a daughter.

Roberts, a native of Wildersville, Tenn., came to ORGDP in 1945 after working with Procter and Gamble. He was in ORGDP's Guard Department for more than 16 years before transferring to Y-12 in 1961. He was named a lieutenant in the Fire and Guard Department in 1969 and promoted to captain in 1975.

He and his wife, the former Georgia Hatch, live at 8337 Ball Camp Pike, Knoxville. They have two daughters and two sons.

Engineering Week begins February 20

This year's theme for National Engineers Week, Feb. 20-26, is "Engineers: Pioneering America's Revitalization." The activities are sponsored by the National Society of Professional Engineers, with a membership of over 80,000 engineers from all disciplines of the profession.

The purpose of the week, which was first observed in 1951, is to familiarize the public with the work of engineers and to honor outstanding members of the profession. The week of George Washington's birthday is chosen for the observance because our first president, educated as a civil engineer, was a land surveyor and a designer of roads, fortifications and other structures.

National Engineers Week programs, which are held throughout

the U. S., involve thousands of professional engineers in industry, government, construction, private practice and education. Activities in the Oak Ridge area include a paper airplane design contest at the American Museum of Science and Energy (Feb. 19-20), engineering heritage exhibits at Jackson Plaza (Feb. 20-22), Career Day at Oak Ridge High School (Feb. 23) and special engineering exhibits at the American Museum of Science and Energy (Feb. 22-26). Knoxville events will be highlighted by the annual WATtec Conference at the Hyatt Regency Hotel (Feb. 24-26).

For more information on National Engineering Week activities, contact Steve M. Gantt at 6-5208.

Tips for avoiding driving fatigue

Excessive fatigue behind the wheel can be a killer. When fatigue and drowsiness reach the point that a driver notices them, fatigue has reached the acute stage. If you have to fight to keep your eyes open, you can bet you'll lose the fight. Here are some suggestions from the National Safety Council for fighting fatigue while driving:

1) Stop at the first safe place. Get out and walk around. Have a cola drink or coffee.

2) If you still get drowsy at the wheel, stop, roll down windows slightly, and sleep, if possible, for 30 minutes or more.

3) When you resume driving, keep some windows open, play the radio, chew gum, sing and keep your eyes moving.

4) Stop for a night's rest at the first opportunity.

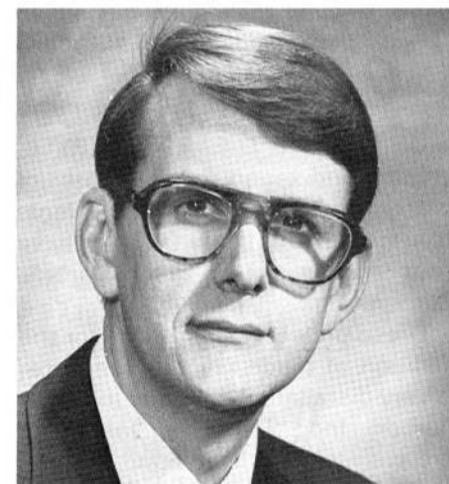
5) If fatigue is unusual for you, suspect an exhaust leak.

Sykes named CO manager

William E. Sykes has been promoted to manager of the Cascade Operations at the Paducah Plant. He will have the responsibility of the plant's enrichment operation along with engineering and production planning groups related to the production process.

Sykes has a BS degree from the University of Missouri, Rolla. A native of St. Louis, he joined Union Carbide in 1967 as a chemical engineer and has held numerous supervisory positions in the Cascade Operations Division, most recently as supervisor of the Operations Planning Department.

He and his family live on Rushing Road, Paducah.



William E. Sykes



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NUCLEAR DIVISION
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