

# Nuclear Division News

● Vol. 12, No. 14 ● July 16, 1981

## Some employees happily missed savings payoff

"I didn't get a savings plan check and I'm just as happy as the people who did." This statement could be made by any one of more than 4,000 Nuclear Division employees who participate in the Personal Investment Account (PIA) portion of the Carbide Savings Plan.

In the last issue of *Nuclear Division News*, discussion centered on distribution of the General Savings Fund, that part of the Plan with which employees are most familiar. A variety of ways in which employees would spend or had spent their savings was listed.

Distribution of this fund occurs every odd-number year and is referred to by some as the "big payoff." The excitement and anticipation starts to build almost before the distribution years begins. By the end of June practically the entire community — employees and merchants alike — is anxiously awaiting the checks. Then finally, June 30 rolls around!

But the euphoria may last only a few weeks, or until vacations are over, the new car has gotten dirty and those special purchases have been made. This is probably the point at which those employees who felt a twinge of regret when they did not receive a check on June 30 get a smug look on their faces. Because, even though the PIA doesn't generate nearly as much excitement in the short term, it provides an excellent mechanism for long-range personal planning.

### General Savings Fund

This article will discuss the Carbide Savings Plan in general, with special emphasis on the Personal Investment Account.

Carbide employees are eligible to join the General Savings Fund after they have been with the Company for a year. Up to seven-and-a-half percent of the employee's regular earn-

ings may be invested in this fund. The Company adds 10, 20 or 30 cents to each dollar of the basic deduction, depending on the employee's years of company service credit. Company payments are as follows: 1 to 2 years' service - 10 cents; 2 to 3 years - 20 cents; and 3 or more years — 30 cents.

The payoff every other year includes the employee's contribution, the Company's contribution (after the first plan period) and interest accrued on both.

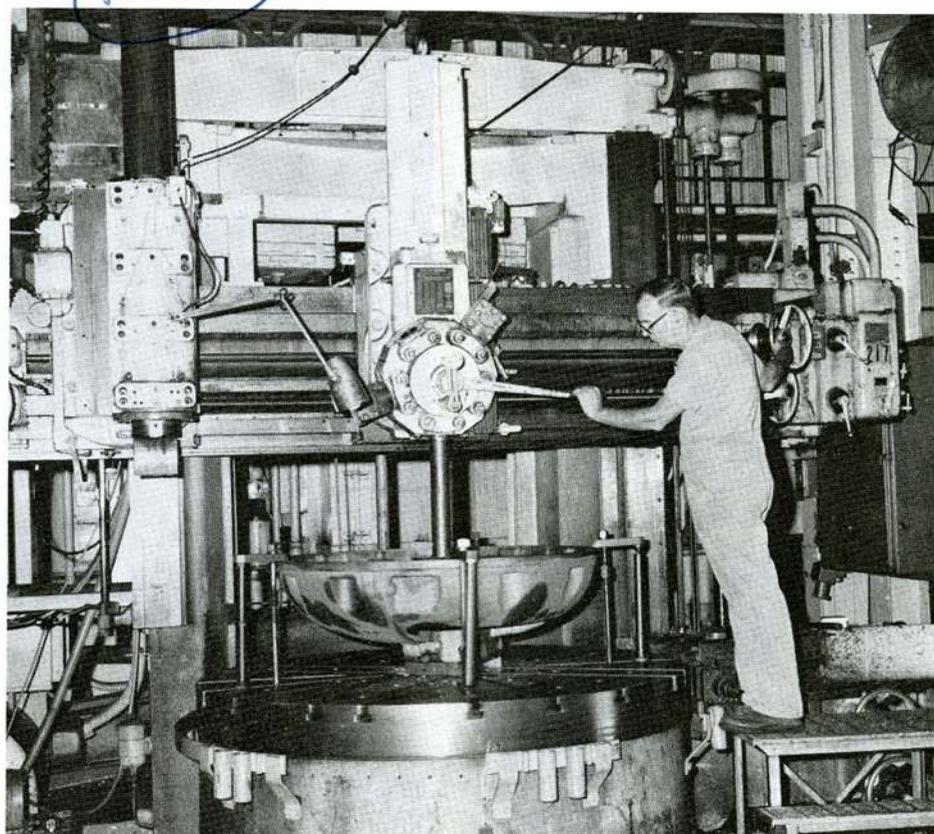
More than 15,100 Nuclear Division employees currently participate in this short-term savings program. Monies in the fund are invested by the Corporate Trustee in bonds and other securities, or in trusts that are maintained for collective short-term investment. A return of two percent, compounded annually, is guaranteed by the Corporation.

### Other options

After an employee has acquired three years of company service, he/she has the option of continuing in the General Savings Fund, joining the PIA or participating in both.

To participate in both plans, the employees allocate their contribution and the Company's addition in 25 percent steps. They may put 100 percent in either plan; 50 percent in each; or 25 percent in one and 75 percent in the other. This allocation can be changed at any time by simply filling out a form.

Supplemental deductions of up to five percent of an employee's regular earnings may be put into the PIA only. No contribution from the Com-



James L. Hengstler, ORGDP Maintenance Division, has put eight-and-three fourths percent of his income into the Fixed Income option of the PIA "since the contributory retirement plan was discontinued."

pany will be made to this additional money, but it is invested for the employee and earns interest and dividends the same as other deductions.

### The PIA

Unlike the General Savings Fund, the PIA is designed for long-range financial planning. All monies — employee and company contributions, interest dividends, etc. — are normally held until the employee retires or otherwise leaves the company.

With the PIA, employees are given four investment options:

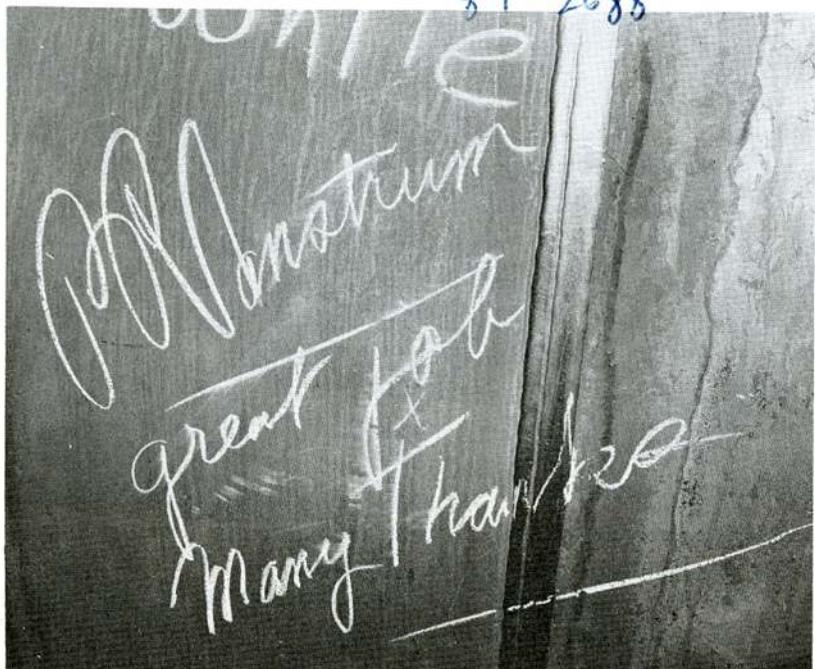
- 1) U.S. Savings Bonds
- 2) Union Carbide Common Stock
- 3) A Fixed Income Fund, or
- 4) An Equity Investment Fund

Deductions and company contributions may be divided among those options in 25-percent steps, in any combination which suits the employee. He may designate 25 percent to each option; 75 percent to UCC stock and 25 percent to fixed income; or any other combination.

● U.S. Savings Bonds offer safety for your investment and nine percent interest per year (effective May 1, 1981), if held to maturity.

Beth (M.E.) Adams, Separations Systems Division at ORGDP, has been investing 100 percent of her PIA in savings bonds for the past eight years. "Like everyone else, I'm saving for retirement," she said.

(Please see page 8)



## In this issue...

**GRAFFITI ON THE COMPRESSOR? —** No, it's Paul R. Vanstrum's commendation to employees who have been involved in the CIP/CUP programs. Both Nuclear Division Vice Presidents participated in plant appearance inspections at ORGDP recently. A complete story appears on page 2.

### Other features:

- Bostock, Bewley appointments. Page 3
- ANFLOW dedication in Knoxville Page 4
- Other promotions..... Page 5
- Medicine Chest..... Page 7
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"The PIA will be especially useful in planning for a supplementary income during my retirement," said Cliff W. Johnson, Y-12 Accounting and Budget.

# ORGDP plant appearance committee completes inspections

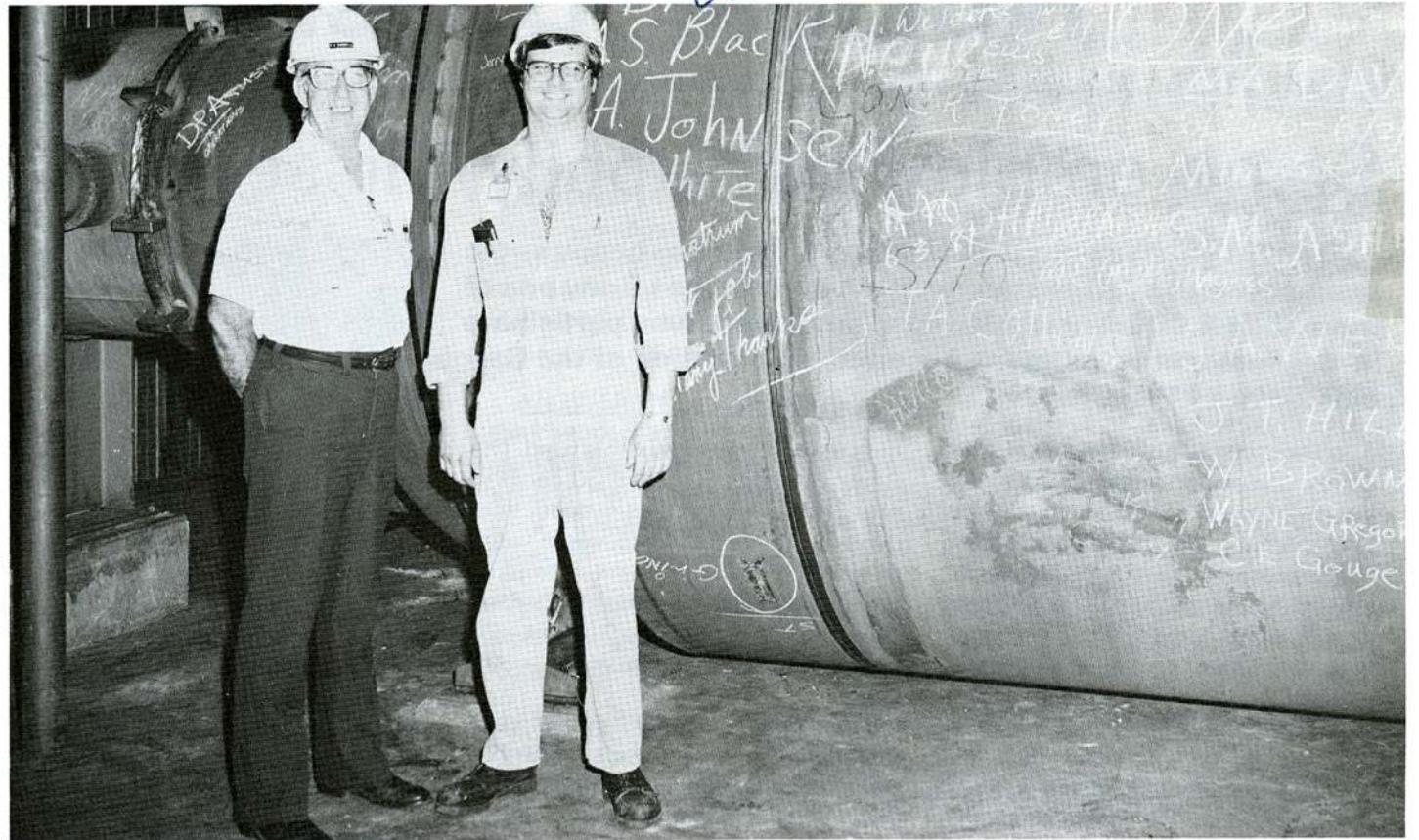
The ORGDP Plant Appearance Committee has completed first and second quarter inspections of the plant. The Committee reports indicate that no significant deterioration occurred in overall appearance, but that some isolated areas need continued attention.

All nine areas into which ORGDP is divided received either superior or outstanding ratings from the inspection teams.

Although employees from throughout the plant are encouraged to participate in the Plant Appearance Program and may be asked to serve on one of the inspection teams, this year's efforts got an extra boost. Nuclear Division Vice Presidents George Jasny and Paul Vanstrum, who serve as ex-officio members of the committee, accompanied the inspection teams to various areas of the plant.

While touring Building K-31 during the second quarter inspection, the group witnessed a historical milestone in the CIP/CUP Programs. The last "00" converter associated with the program, begun in the mid 1970's to increase production capacity and efficiency, was being installed.

The committee has a long list of objectives for the 1981 campaign year. One major thrust of the program is to improve the plant's appearance by removing and/or replacing obsolete, duplicated or



**CIP/CUP MILESTONE** — Inspection team members got a chance to "autograph" the last "00" converter to be installed in Building K-31 as part of the CIP/CUP programs. (A closeup of Vanstrum's signature appears on page one.) Shown with the converter are Paul K. Sherrill and Wendell C. White, Maintenance Division.

faded traffic and building signs. This effort was the subject of a recent bulletin.

Other objectives include improving overall appearance through specific efforts both inside and outside buildings and in the parking lots.

## Anniversaries

### ORNL

35 YEARS

Thomas E. Cole, Engineering Technology; Rasho H. Winget Jr., Plant and Equipment; John C. Posey, Operations; Don E. Ferguson, Chemical Technology; and George R. Wilson, Analytical Chemistry.

30 YEARS

James V. Harris, Finance and Materials; Ronald L. Hickey, Chemical Technology; Raymond K. Adams, Instrumentation and Controls; Herman L. Lloyd, Plant and Equipment; and Dale G. Noe, Industrial Safety and Applied Health Physics.

25 YEARS

Lawrence A. Harris, Darrell E. Copeland, Gerald G. Bakalar, William R. Ridenour and Jackie G. Rogers.

### Y-12

40 YEARS

Philip S. Lewis Jr., Development Division.

35 YEARS

Athla H. Dow, Accounting and Budget; and Eugene W. Woodward, Buildings, Grounds and Maintenance Shops.

30 YEARS

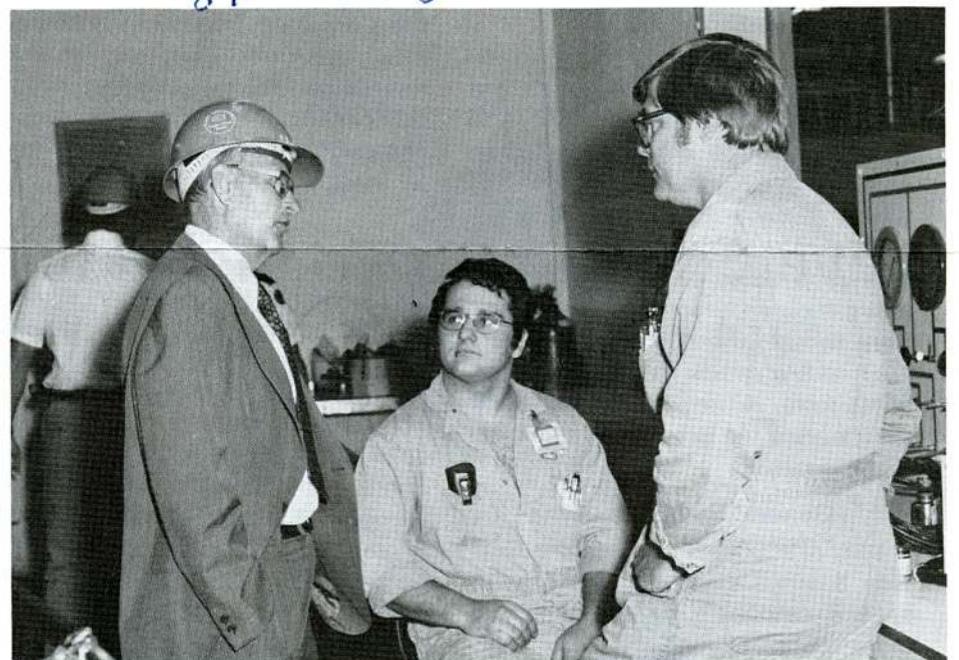
Raymond D. Bass, Materials Forming; Paul Surber, Guard Department; Robert B. Smith, Stores Department; Agnes D. Gracey, Plant Laboratory; Richard E. Sladky, Development Operations; Clon H. Felker Jr., Process Maintenance; Dexter N. Williams, Process Maintenance; Bobbie A. Cooper, General Shops; James R. Ownby, Process Maintenance; Thomas E. Todd, Production Scheduling; Thomas H. Barton Jr., Plant Laboratory; Edward E. Dunn, Engineering; and Willie T. Wright, Nondestructive Testing.

25 YEARS

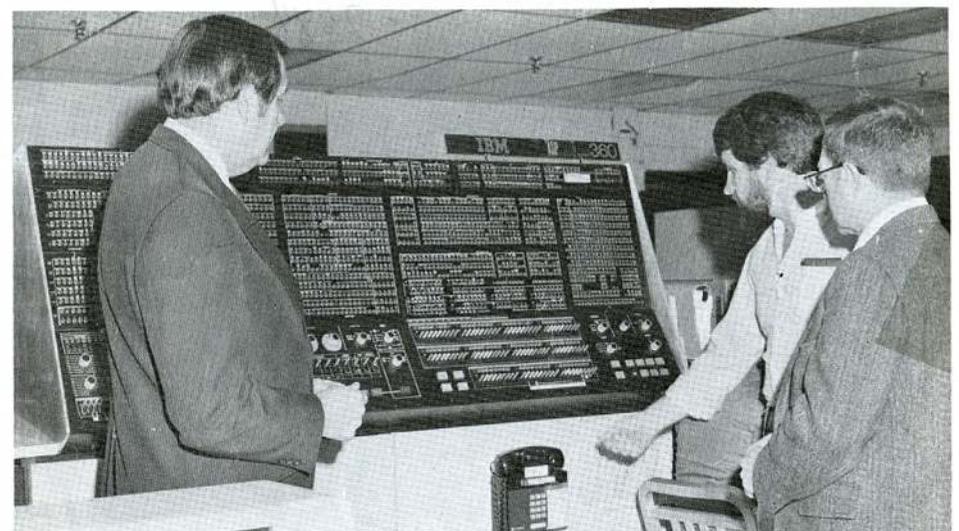
Dean H. Pierce, J. C. Potts, William S. Porter Jr. and James E. Pickell.

## Energy Facts

According to DOE statistics, Americans use more than 30 times the energy they used 100 years ago, but the population has increased only sevenfold. This means that each American is using about four times more energy than his or her grandparents.



**SHOP TALK** — During the inspection tour of the instrument maintenance shop in Building K-31, Nuclear Division Vice President Paul R. Vanstrum discussed operations with Instrument Mechanics Rodney L. Graves and David Rogers.

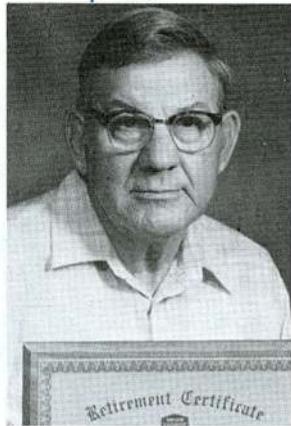


**INSPECT COMPUTER AREA** — Computer Sciences Division Director Harvey P. Carter (left) and Nuclear Division Vice President George Jasny (right) discuss appearance of the computer areas with Gary L. Phillips, EDP technician. Their tour was part of the first-quarter plant appearance inspection.

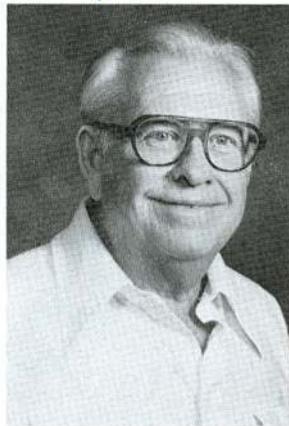
# RECENT RETIREMENTS



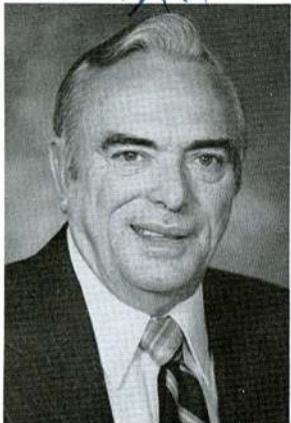
**J. C. Sexton**  
Barrier Manufacturing  
ORGDP  
36 years service



**Thurman W. Noe**  
Buildings, Grounds &  
Maintenance Shops  
Y-12  
30 years service



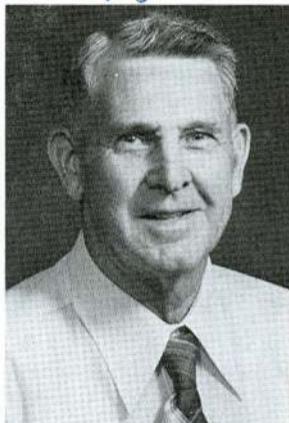
**James E. Miles**  
Alpha 5 West Shop  
Y-12  
35 years service



**Ralph L. Pritchard**  
Plant and Equipment  
ORNL  
35 years service



**Donald L. Anfinson**  
Engineering  
Y-12  
30 years service



**Willard A. McFarland**  
Electrical, Electronics  
Y-12  
28 years service

# Bostock heads Capital Projects; Bewley over Technical Services

Two major appointments have been announced by Jack Case, Y-12 Plant manager. D. Jeffrey Bostock, manager of the Assembly Division, will head the new Y-12 Capital Projects organization. He is succeeded by H. Dale Bewley, who currently is Technical Services manager at the Paducah Plant.

In making the announcement, Case said: "During the 1980's, a large number of capital projects designed to provide new capability for advanced defense systems, as well as restore worn-out equipment and utilities, will be undertaken in the Y-12 Plant. The magnitude of these undertakings has created the need for an organization which will coordinate all Y-12 activities associated with capital projects."

In his new position, Bostock will report to Gordon G. Fee, manager of Product Engineering, Finance and Materials. Reporting to Bostock will be the Capital Assets Management group.

Bostock is a native of Bethesda, Md. He received his bachelor's degree in engineering from Pennsylvania State University and his master's degree in industrial management from the University of Tennessee.

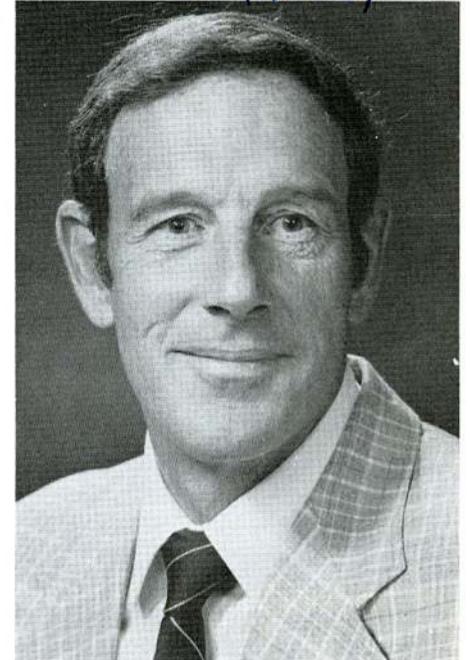
Bostock joined the Nuclear Division in 1957 in the barrier manufacturing operation at the Oak Ridge Gaseous Diffusion Plant. In 1960, he transferred to the Y-12 Plant, where he held positions in dispatching, management systems and production control. He became head of the Metal Preparation Division in 1976 and was appointed Assembly Division manager in 1980.

Bostock and his wife, Dorothy, live at 925 West Outer Drive, Oak Ridge. They have three children.

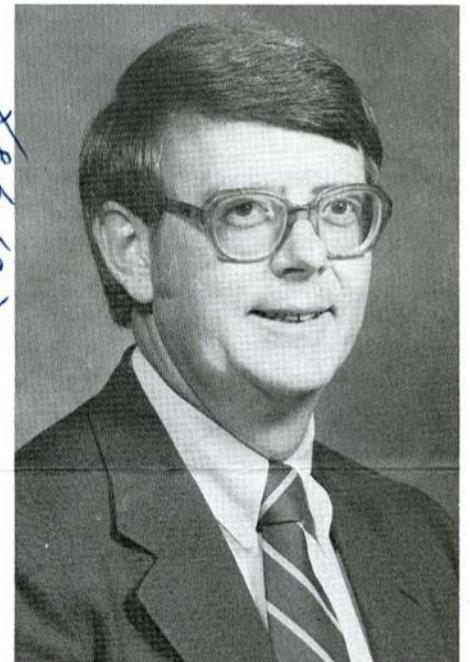
Dale Bewley was raised in Central Kentucky near Fort Knox. He received BS and MS degrees in metallurgical engineering from the University of Kentucky and earned his MBA from Murray State University in 1975.

Bewley joined the Paducah Plant's Laboratory (now Technical Services) Division as a metallurgical engineer in 1967 and became a section head in the technology department three years later. He was appointed project engineer for the Cascade Improvement Program in 1973, transferring to the Engineering Division. In 1976, he was promoted to his present position as Technical Services manager.

He is a member of the American Nuclear Society, American Society of Metals and the Kentucky Society of Professional Engineers, for which he is chairman-elect of the standing committee on Energy and Environment. He also served on the Governor's Advisory Committee for



**D. Jeffrey Bostock**



**H. Dale Bewley**

Energy and the Environment from 1978 to 1980.

Bewley and his wife, Marian, live on Lutes Road, Paducah, with their two daughters. They will move to the Oak Ridge area in the near future.

The Oak Ridge Y-12 Plant has major missions related to the national defense. Current activities include: production of nuclear weapons components; processing of source and special nuclear materials; and providing support to DOE's weapons design laboratories and other Nuclear Division facilities and federal agencies.

## Save Energy/Share the Ride

### ORGDP

CARPPOOL OR RIDE wanted from Sevierville, 7:45-4:15 or 8-4:30 shift, Portals 1 or 2. Call Rick Phillips, work phone 4-8435; home phone 453-8972.

CAR POOL MEMBERS from West Knoxville, Kingston Woods, West Hills, Crestwood sections, to Portals

2 and 4 (others considered), 7:30-4:15. Earl J. Tullos, plant phone 6-0032, or Ed Denny, 6-0244.

CARPPOOL OR RIDE wanted from Salem Road (West End), Oak Ridge, to Portal 2, 7:45-4:15 shift. Call Stephanie, work phone 4-8180; home phone 482-2628.

UNION CARBIDE

## Nuclear Division News

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### PADUCAH

Darlene M. Mazzone, Bell 208

Published every other week for employees such as:



**Robert L. Whittaker, a foreman in Y-12's Maintenance Division.**

INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS



"Bank on quality assurance — it pays dividends." (Submitted by B. I. V. Bailey, ORGDP.)

4317-81

# ANFLOW system installed at Knoxville treatment plant

Maxine Savitz, DOE deputy assistant secretary for conservation; Representative John Duncan; and Knoxville Mayor Randy Tyree joined ORNL Director Herman Postma, Associate Director Murray Rosenthal and other officials July 1 for ceremonies dedicating the \$150,000 ANFLOW Research and Development Pilot Plant at Knoxville's Loves Creek Sewage Treatment Plant.

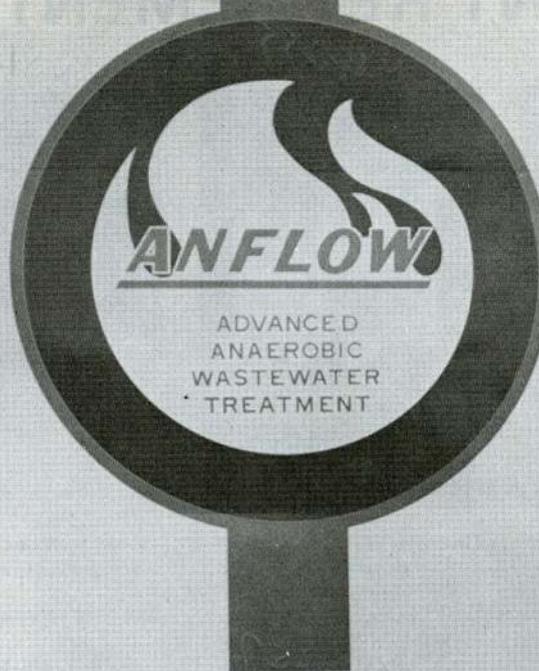
The 190,000-liter-per-day (50,000-gallon), pilot-scale treatment plant will be used during the next two years to evaluate the performance and wider application of ANFLOW, an energy-conserving, lower-cost approach to municipal and industrial wastewater treatment. During its operation, the ANFLOW system will augment the existing 11.3-million-liter-per-day (3-million-gallon) Loves Creek facility.

The ORNL-developed ANFLOW system is based on a biological fermentation process that uses micro-

organisms to break down and consume pollutants in liquid waste. This process produces significantly less sludge than conventional systems and a valuable fuel gas, methane, as a byproduct. It takes place in an oxygen-free, or anaerobic, chamber called a bioreactor. As sewage flows up through the bioreactor, the microorganisms, attached to plastic packing material, convert the waste into methane, carbon dioxide and water. The name ANFLOW refers to its anaerobic, upflow operation.

The potential of ANFLOW has been successfully demonstrated on a smaller scale during a three-year period at an Oak Ridge sewage treatment plant. The Loves Creek pilot facility represents a further step toward design and commercialization of ANFLOW systems in the 3-to-4-million-liter-per-day capacity, which would include more than 85 percent of the existing municipal treatment systems in the U.S.

3368-81



CITY OF KNOXVILLE, TN.



4319-81



### CLOCKWISE FROM TOP RIGHT:

Maxine Savitz, DOE deputy assistant secretary for conservation, addresses the audience during dedication ceremonies for Knoxville's ANFLOW sewage treatment pilot plant. Behind her on the podium (left to right) are Representative John Duncan, ORNL Assistant Director Murray Rosenthal, Mayor Randy Tyree and ORNL Director Herman Postma.

Savitz and Tyree talk with ORNL Energy Conservation Program Director Roger Carlsmith.

The 14.5-metric-ton ANFLOW bioreactor, a steel cylinder five meters (16 feet) in diameter and six meters (20 feet) high, is transported to the Loves Creek Sewage Treatment Plant in Knoxville, where it is lifted from the truck and installed on a concrete pad at the research and development pilot plant.

3369-81



3370-81





McKinley



White

## General Accounting promotes James McKinley, Gene White

Two promotions have been announced by Gary Riser, manager of General Accounting. James I. McKinley Jr. has been named manager of Telecommunications, and Clarence E. (Gene) White is Payroll manager. Both organizations provide Nuclear Division-wide services.

McKinley, who was born in Knoxville, served four years in the U.S. Air Force. He received his BS degree in accounting from Tennessee Wesleyan College and has attended the University of Tennessee.

He joined Nuclear Division Auditing in 1969, and most recently was a supervisor in the systems and procedures department of General Accounting. He was previously employed by Eaton Corporation and Severance & Sharp Accountants.

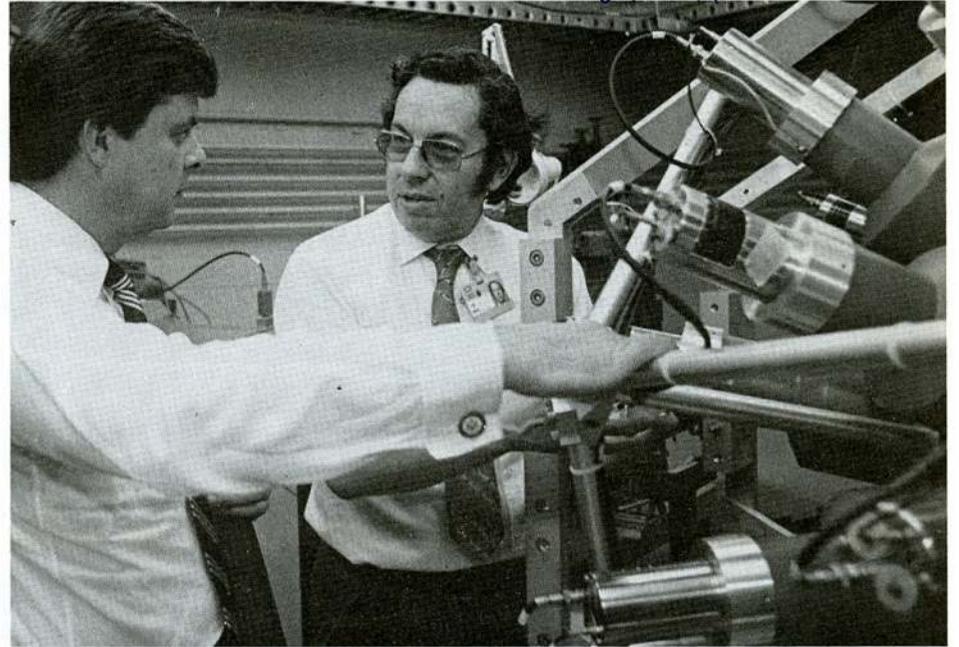
McKinley is a member of the Knoxville Chapter, National Association of Accountants. He and his wife, Linda Scarbrough McKinley, live at Lechmere's Point in Concord, with their sons.

Gene White succeeds Marvin W. Mills, who will retire following 37 years of service to the company.

White, a native of Vonore, Tenn., is a U.S. Army veteran. He attended the University of Tennessee and joined the Nuclear Division in 1954. He has worked in Payroll throughout his tenure, and most recently was head of the payroll and financial services section.

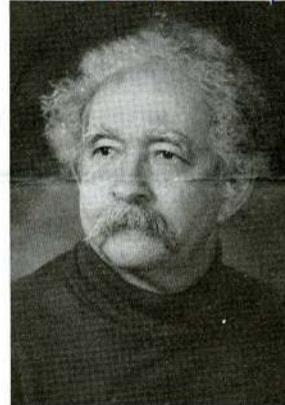
White and his wife, Lottie, live in Harrison Hills, Lenoir City, with their sons.

## Jim Sasser visits Oak Ridge



During a June visit, Tennessee Senator James R. Sasser (left) addressed senior research managers throughout the Nuclear Division on the topic, "Congress and Science." He also toured ORNL facilities in the conservation, fossil, nuclear and basic research areas. At the Holifield Heavy Ion Research Facility, HHIRF Director James B. Ball described the new "spin spectrometer," a spherical array of gamma-ray detectors to be used in experiments with the new 25-million-volt tandem electrostatic accelerator.

## Willey promoted to engineer



Willey

He joined Union Carbide as an engineering draftsman in 1951 and helped design research equipment for various projects, including the "lunar contingency sampler" used in the manned space program. He has participated in research design for hot cells, the high-temperature gas-cooled reactor and the ORMAK fusion energy experiment.

Willey's contributions to the design and development of the continuous-ring particle blender-dispenser helped the apparatus earn an "I-R 100" award in 1980. The awards, given annually by *Industrial Research/Development* magazine, recognize the year's 100 most significant advances in "new technology."

Willey and his wife, the former Virginia Stacy, live at 304 Live Oak Lane, Knoxville. They have two sons.

Melvin G. Willey has been promoted to engineer in the Engineering Division at ORNL.

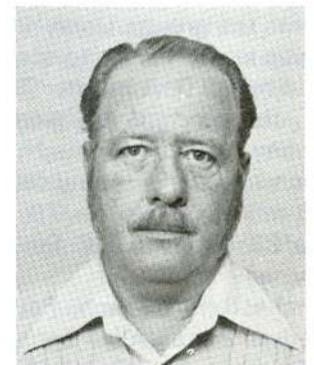
A native of Wisdom, Mont., Willey attended the University of Nebraska, the University of Maryland and the University of Tennessee.

## Nuclear Division Death

Ernest L. Henson Jr., Y-12 Product Certification, died at a Knoxville hospital June 30. A native of Knoxville, he joined Union Carbide in 1954, after working with Fulton Sylphon and serving in the U.S. Army. The Henson home is at Route 4, West Beaver Creek, Powell.

Survivors include his wife, Betty Wilson Henson; sons, Robert R. and Ernest L. Henson III; a daughter, Cynthia Henson; parents, Mr. and Mrs. Ernest L. Henson Sr.; two grandchildren; and sisters, Thelma Cosson and Jane Ellen Chance.

Funeral services were held at McCarty Chapel with interment in Highland Memorial Cemetery, East.



Mr. Henson

In lieu of flowers, the family has requested that memorials be in form of contributions to the American Cancer Society.

## O. R. summer concert set for July 19



**GALVESTON** — Comprised of talent from the local area, Galveston includes seven members drawn from various former bands. Pictured front row from left are Judy Kellar, Parker O'Shell and Vickie Frazier. In the back row are Chuck Finger, Jack Finger and Charlie Finger. O'Shell is a technician in ORGDP's Enrichment Technology Division. Not pictured is keyboard man Rick Lane.

The musical group, Galveston, will appear Sunday, July 19, as part of the 1981 Oak Ridge summer concert series co-sponsored by the Nuclear Division, the Arts Council of Oak Ridge and the City Recreation Department.

The seven-member band will present a program of country music outdoors at the Performing Arts Pavilion behind the Oak Ridge Civic Center at 7:30 p.m. In case of rain, the concert

will be in the Shep Lauter Room of the Civic Center.

A relatively new group, Galveston draws its members from bands that have entertained extensively in the East Tennessee area. The group offers a unique sound in contemporary country music, as well as in the more traditional favorites.

Persons attending the July 19 concert should bring their own lawn chairs or blankets.



**DAY AT THE PARK** — Employees of the Engineering Division at Oak Ridge enjoyed a balmy day at Clark Center Recreation Park recently, with a full day of activities both for young and old.

Activities for adults and children alike filled the day for the Engineering Division's annual picnic recently. The kids were delighted with a merry-go-around and a puppet show. Prizes and toys found their way into eager young hands.

The more hearty adults were involved in a road run, tug-o-war, canoe race and the slippery greased pole climb. Mechanical Engineering employees retained their title as the

tug champions. Unfortunately, the traditionally fierce softball championship battle was cancelled due to unplayable field conditions.

The stage shows were hits too. These included a production by the Oak Ridge Playhouse and performances by cloggers and square dancers. The main attraction, the Early Morning String Dusters, kept everyone entertained.

## June greens tournaments...

### Y-12 golf...

John Baker fired a hot 69 score to take a two-point victory over Jim George at Wallace Hills, as Y-12ers went to the greens. John Hamilton's 72 was low in handicap scoring, followed by W. D. Burnette, 76.

In the second division, J. N. Anthony carded a 75, as Hugh Henderson totaled 80. Handicap honors went to Wayne Groppe, 79; and T. L. Rhea, 82, tied with E. C. Smith and F. Mary.

In the third division, Pat Howard added an 84; as Allyn Zerby and W. M. Boles scored 86. Handicap lows went to John Sewell, 84; and Reid Adkins and Ralph Vaughn, each with 86.

Golf balls for the winners are available at the Recreation Office, Building 9711-5.

### ORNL golf...

Bays Mountain was the scene for ORNL duffers, as J. Connatser mastered a powerful 69 score. G. Holton and W. Miller followed, each with 74. Handicap lows went to J. Anglin, 76; and D. Dutton, 74.

In the second division, J. Jackson tallied a 77 and G. Plante took a 79. Handicap lows went to H. Harshaw, 77; and C. Ray, 79.

In the third division R. Gammage grabbed the 10 golf balls for an 84; followed by P. Cooper, 89. Handicap lows were registered by W. Shumate, 90; and W. Porter Sr., with 96. Winners may find their booty from Debbie Walker, J-108, 4500N.

### ORGDP golf...

ORGDP golfers hit Cedar Hills in late June, as B. H. Thomas led the

## Fishing rodeos...

### ORGDP winners ...

In the January through June contest for fishing at ORGDP, the winners are:

Smallmouth Bass	
J. D. Loy	6 lbs.
M. J. Shelton	5 lbs. 7 ozs.
B. Price	4 lbs. 15 ozs.

Largemouth Bass	
J. Ailey	7 lbs.
R. F. Hyland	6 lbs. 9 ozs.
D. C. Howard	6 lbs. -1 oz.

Striped Bass	
H. E. Walters	3 lbs. 11 ozs.
L. Stokes	2 lbs. 8 ozs.

Walleyed Pike	
A. R. Walters	4 lbs. 13 ozs.
N. O. Rathborne	4 lbs. 6 ozs.
L. P. Keaton	4 lbs. 4 ozs.

Crappie	
W. B. Oliva	1 lb. 12 ozs.
J. D. Herrin	1 lb. 9 ozs.
J. D. Hart	1 lb. 8 ozs.

Sunfish	
J. O. McCullough	15 ozs.
F. R. Sanders	11 ozs.

Trout	
M. O. Bowers	10 lbs. 2 ozs.
D. J. Tevault	1 lb. 10 ozs.
R. T. Beasley	1 lb. 8 ozs.

Muskie	
R. Gaylor	15 lbs. 4 ozs.

Rockfish	
P. H. Brandon	38 lbs. 9 ozs.
D. C. Chamblee	15 lbs. 9 ozs.
L. K. Barding	12 lbs. 9 ozs.

Rough fish	
D. Hayes	1 lb. 8 ozs.

### Y-12 winners...

Y-12 announces winners in its semi-annual rodeo for fish caught in local waters. Winners are:

Smallmouth Bass	
J. D. Willocks	6 lbs. 3 ozs.
A. L. Everett	5 lbs. 8 ozs.
R. M. Walker	3 lbs. 4 ozs.

Largemouth Bass	
G. L. Bowers	8 lbs. 4 ozs.
R. N. Mowery	7 lbs. 12 ozs.
C. E. Oakes	6 lbs. 4 ozs.

Striped bass	
G. H. Gaylor	2 lbs.
R. G. Sitterson	1 lb. 10 ozs.

Walleyed pike	
J. M. Brown	6 lbs. 6 ozs.
G. A. West	5 lbs. 3 ozs.
S. P. Eubanks	4 lbs. 12 ozs.

Sauger	
J. R. Campbell	5 lbs. 2 ozs.
R. Harris	4 lbs. 8 ozs.

Crappie	
D. Campbell	2 lbs. 10 ozs.
E. R. McCulloch	1 lb. 13 ozs.
S. Howard	1 lb. 10 ozs.

Sunfish	
J. Lay	1 lb. 6 oz.
F. Blair	1 lb. 1 oz.
W. J. Winston	1 lb. ½ oz.

Trout	
R. C. Boals	3 lbs. 4 ozs.
J. P. Stanley	2 lbs. 14 ozs.
B. O. Green	2 lbs. 11 ozs.

Rough fish	
L. M. Denman	7 lbs. 8 ozs.

Rockfish	
W. A. Kramer	12 lbs. 12 ozs.

### Hi Power Rifle...

Don Kiplinger, ORNL, took the fourth match of the High Power Rifle League with a 752 out of a possible 800. Hugo Bertini, also of ORNL, came in second with a 716; as Harold Fell, Y-12, scored a 693.

Other scores were: P. L. Glover, ORNL, 637; M. A. Baker, ORNL, 639; and A. Beasley, Y-12, 543.

### Monday Mixed...

The CP's and JW's are deadlocked for a tie in the lead of the UCC Monday Mixed Bowling League. They are only one point ahead of the Lucky Strikes.

T. H. Peek fired a 234 scratch game recently, totaling a 626 series. On the women's side it was C. Womack with a 246 single, 567 series.

pack with a 74. Waldo Galliher's 78 was second low for the day. In handicap scoring it was Bill Schwab, 81; and Bruce Vaughn, 79.

In the second division, Mike Ambrose tallied a 78; while C. E. Searcy scored an 81. Handicap honors were picked up by R. W. Lynn, 80; and Charlie Hale, 83.

The third division belonged to J. D. Worth, 88, and D. G. Richardson with an 89 card. Handicap laurels went to Chuck McClusky, 92; and Carroll Lawson, 93.

Winners may pick up their prize golf balls from Peggy Collier, Room 136, K-1001.

## ORNL winners...

Winners from ORNL in the six-month period ending June 30 are:

Smallmouth Bass	
W. J. Martin	7 lbs. 4 ozs.
B. DeBakker	4 lbs. 12 ozs.

Largemouth Bass	
T. L. Miller	4 lbs. 11 ozs.

Striped bass	
H. M. Johnson	4 lbs. 1 oz.
L. E. Thompson Jr.	2 lbs.

Walleyed pike	
G. A. West	4 lbs. 4 ozs.
M. G. Ryon	2 lbs.

Sunfish	
C. R. Schaich	1 lb. 7 ozs.
G. E. Testerman	12 ozs.

Trout	
D. Cottrell	1 lb.

Rough fish	
J. M. Hackworth	15 lbs.
L. R. Loop	8 lbs. 8 ozs.

### Family Mixed...

The Oops team has grabbed the lead in the Carbide Family Mixed Bowling League at mid-season. Tillie Plaza's sizzling 217, 244 single; 568, 685 series were high recently; as Richard Sampson scored a 244 single scratch, upped to a 55 handicap. His 590 scratch series was high; but Bill Johnson nosed out his high handicap series, as Johnson put a 635 on the boards.

## UW committee named at ORNL



**ORNL COMMITTEE** — Members of the ORNL 1981 United Way committee include, from left, Margaret E. Carmody, assistant to the chairman; C. Robert Sherlin, treasurer; Janice M. Blanton, chairman; Wilbur D. Shults, cochairman; Barbara K. Lyon, publicity chairman; and Jackie W. Sims, materials manager. Norman L. Beeler, associate chairman for Atomic Trades and Labor Council; Gerald C. Johnson, associate chairman for International Guards Union of America; Gerald F. R. Johnson, associate treasurer; George L. Joseph, solicitor training director; and Norma F. Callahan, meeting/transportation coordinator, are not pictured.

## New test organization formed

The establishment of a new test director organization within the Separation Systems Division at ORGDP has been announced by Ernest C. Evans, division manager.

Edwin F. Babelay has been named coordinator for the organization, designed to increase the assurance that key tests of the operation, performance and reliability of equipment to be used in the Gas Centrifuge Enrichment Plant (GCEP) are carried out.

GCEP is currently under construction at the Portsmouth Gaseous Diffusion Plant. Limited operation of the facility, which will increase U.S. enrichment capacity by about 60 percent, is scheduled to begin in 1985.

Babelay, who joined the Nuclear Division in 1944, has served for several years as senior consultant and associate technical director of the Separation Systems Division. Although he worked during the early days on the gaseous diffusion process, he has been involved in centrifuge research and development since the late 1950's.

His initial efforts also included developing liquid centrifuges which separated out impurities from the various vaccines, resulting in purer vaccines and reducing fatality rates among children and older adults.

Babelay is credited with building and operating the first gas centrifuge machine in Oak Ridge. Many of the key concepts and designs of the machines that will be operated in GCEP resulted from his work.



Babelay

A graduate of the University of Tennessee, Babelay was a flight instructor in the U.S. Army Corps during World War II. He has served as special technical advisor to the Department of State and DOE (and its predecessors) on the exchange of gas centrifuge technology between the U.S. and the United Kingdom. In 1979, he was designated a "Corporate Engineering Fellow" by Union Carbide Corporation.

The new organization reports to F. M. Tench, test and operations manager.

## Patents

Cressie E. Holcombe Jr., Louis Kovach and Albert J. Taylor, all of Y-12, for "Lanthanum-Hexaboride Carbon Composition for Use in Corrosive Hydrogen-Fluorine Environments."



## Medicine Chest

### Blood use and waste

by T. A. Lincoln, M.D.

**QUESTION:** "I've heard that doctors in this country give many more blood transfusions than European doctors. Is this true? Do we waste blood?"

**ANSWER:** Yes, we use much more blood in the United States than in Europe. And, yes, we waste blood. The use of donor blood rose 76 percent between 1971 and 1979. Approximately 10 million units of banked blood are processed in the United States each year, and about 8 million are administered. During the summer months, blood donations decline, accidents increase and many hospitals become desperately short of blood. During recent years, hundreds of thousands of units of blood have been purchased from Europe (through a program called Euroblood), where a surplus usually exists.

#### Unit-for-unit replacement

The reason for our overuse is that surgeons in the United States have been trained to be generous with blood. Cost has not been considered. It has been widely believed that replacing amounts of blood approximately equal to those lost in accidents and surgery is necessary for optimum recovery. However, such unit-for-unit replacement is seldom necessary.

Autotransfusion is a technique that probably could save several million units of blood each year. The patient's blood is collected before surgery and, when necessary, is given back to the patient during surgery. Blood lost through bleeding due to injuries or during surgery also can be collected and returned in this manner.

#### 'Banking' blood

When patients are scheduled for surgery, they may begin donating blood up to eight weeks prior to their operations. During the first week, one unit is withdrawn and banked. One week later, while two units are withdrawn, the first unit drawn the previous week is transfused back into the patient. The following week, three units are withdrawn and two are put back. This "piggy-back" process continues for eight weeks, with one extra unit being gained each week, so that, at the time of surgery, eight extra units are available. If, during this process, the red blood cell level falls too low, the patient receives extra iron. Most patients are able to replace the blood remarkably fast.

Persons with rare blood types can donate blood, and their red blood cells can be frozen with glycerol.

Thus, blood is available if the patients need it during surgery. Another technique now being used in some hospitals in cases of coronary bypass surgery is to withdraw one or two units of blood before surgery and replace it with crystalloid or colloid, substances that maintain blood volume. After the bypass, the patient's blood is returned. This procedure has the important advantage of providing fresh, whole blood at room temperature. This blood has all the necessary clotting factors with none of the risks associated with blood from other donors.

#### Reusing lost blood

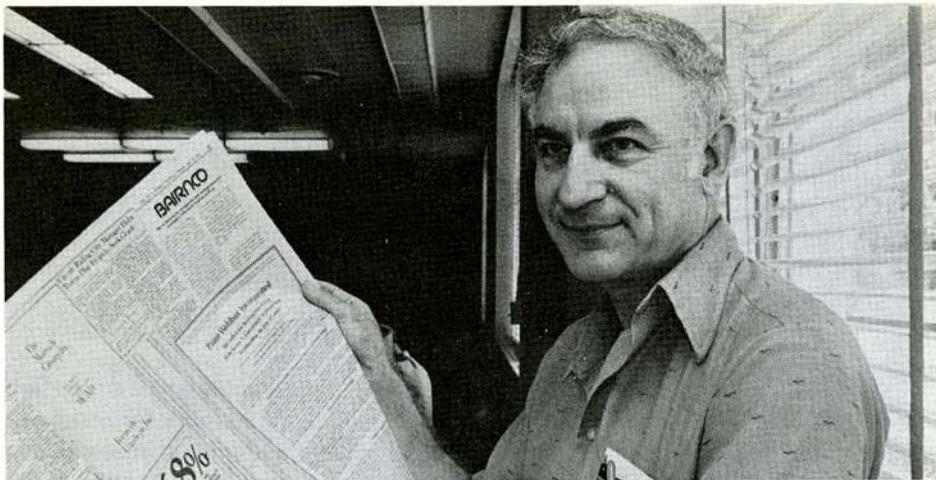
During surgery and following major injuries, such as gunshot or knife wounds to the chest, lost blood can be salvaged and immediately reused. The blood is drawn into a filtering system and given back to the patient. In cases of severe chest wounds, many units of blood can be salvaged and returned to the patient. This procedure is safer and more effective than using donated blood. President Reagan did not have the benefit of this technique after he was shot, however. With the new filtration techniques being used, there have been no reports of air injection or blood damage during the process. Whenever there is concern that the blood has been damaged or contaminated, it can be collected and washed, and the unharmed red blood cells can be resuspended in saline and readministered.

Patients undergoing cancer surgery, however, cannot reuse blood lost during surgery for fear that cancer cells might be transferred. Further study is needed in this area, because some feel that this hazard does not exist, or, if it does exist, that the cells might serve as a stimulus to the immune system.

#### Reducing waste

Much less transfused blood should be used. There is no justification in giving a transfusion of only one unit, since the body's ability to replace lost blood is remarkable. Several million units of blood could be saved each year if autotransfusion techniques were widely used. Only a few hospitals, many of them in the Boston area, regularly save blood this way. During the past four years, some 20,000 patients have been autotransfused using the latest technique, and no adverse reactions have occurred. Millions of dollars could be saved by the wider use of autotransfusion. Unfortunately, however, resistance to this method of saving blood is widespread.

4345-81



"I'm using my contribution to the plan as a tax shelter," explained Daniel J. Horen of ORNL's Physics Division, who said he has been a participant for about eight years.

## 'Missed savings payoff'

(Continued from page 1.)

• Union Carbide common stock investors receive all rights and privileges of regular stock holders, although their stock is held by the Trustee of the Plan. Dividends are automatically used to buy additional shares of stock.

The value of UCC stock depends on the Company's performance — sales, costs, income — as well as other factors beyond its control. Employees may order the sale of stock at anytime and reinvest the proceeds in other PIA options.

• The Fixed Income Fund is managed by Metropolitan Life Insurance Company. Money put into this fund is held as part of Metropolitan's general assets, consisting mostly of investments like bonds and mortgages. The principal, guaranteed by Metropolitan, also earns a guaranteed effective rate of interest which is announced at the beginning of each calendar year. The 1981 rate is 9.75 percent, compounded and credited monthly.

William M. Harvey, Technical Services at ORGDP, has put 100 percent of his PIA into the fixed income fund since 1974, because it "offers deferred income tax and good interest."

elect to put 100 percent of their deductions into one or more of the PIA options, others choose to split theirs between general savings and the PIA. To use a familiar expression, they are "having their cake and eating it too."

In addition to being a "fringe benefit," the Carbide Savings Plan encourages employees to save for the future. There are penalties associated with early withdrawals from either the general savings or PIA. These are explained on pages 18-19 of your "Savings Plan" booklet.

Besides the obvious reasons — saving for retirement and taking advantage of deferred income tax options — there are several other advantages to participating in the PIA. One of the biggest factors in some employees' decision to participate is that the plan is already established and is administered by experts. Therefore, they can just let their money grow and not worry about it. The table below shows how employee investments can grow with a minimum interest rate of nine percent per year, compounded quarterly.

"There is a rapid buildup in your

Your Monthly Basic Deduction	Amount of Company Contribution	Value of Your Account After 10 Years	Value of Your Account After 20 Years
\$ 25	\$ 7.50	\$ 6,219	\$21,364
\$ 50	\$15.00	\$12,438	\$42,728
\$ 75	\$22.50	\$18,657	\$64,902
\$100	\$30.00	\$24,877	\$85,456

• The Equity Investment Fund is also managed by Metropolitan Life, but money in this fund is invested primarily in common stock and other equity-type investments. The value of the fund can vary with investment experience of the account. While this creates a greater element of risk, there is also a possibility of greater growth.

Currently, 4,170 Nuclear Division employees participate in the PIA. Carbide stock is purchased by 1,105 persons, while other PIA options were chosen by 3,065 employees.

While most of the participants

account after you have been in the plan for a period of time and the monies and interest accumulate. I feel it is an excellent way to save toward retirement," explains Athala H. Dow of Y-12's Accounting and Budget Office.

Richard B. Gallaher, ORNL Engineering Technology Division, has been contributing to the plan for some eight years, ever since his children graduated from college. "I guess I'll continue to participate until I retire," Gallaher added. "The income tax would eat me alive if I didn't."

## Question Box

### Late charges when portals were blocked?

QUESTION: In our department, supervision told us that we would be charged with personal time off for being late on the day the strikers blocked the portals. In talking with employees in other departments, their supervision told them they would be charged the same as if they had been on the job. Why are some employees being charged with personal time off and others not?

ANSWER: If employees got to their work places as soon as the circumstances would permit, the time should have been shown as work time. Corrective action has been taken.

QUESTION: What is Nuclear Division policy on assigning the title of "engineer" to persons who do not

have engineering degrees? This appears to be a common practice in the Construction Engineering Department.

ANSWER: It is Nuclear Division policy to assign job titles to employees which are generally descriptive of their normal duties. Any employee who is performing duties of a particular position is assigned the official job title for that position.

Most employees in a professional classification (including Construction Engineering classifications) have relevant academic training at the BS level or above. However, Nuclear Division management recognizes that some employees are able to achieve the required level of capability through a combination of training and long experience.

## Safety Scoreboard

Time worked without a lost-time accident through July 9:

Y-12 Plant.....	290 Days	9,946,000 Employee-Hours
ORGDP .....	28 Days	753,601 Employee-Hours
ORNL .....	424 Days	10,065,635 Employee-Hours
Paducah.....	345 Days	3,201,849 Employee-Hours



Since Gwen S. McLaughlin, Operations Analysis and Planning, became eligible four years ago, she has split her contribution and the Company's addition 50/50 between the General Savings Fund and the PIA. "This way I get both short-term and long-term benefits from the Savings Plan," she explained.

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