

# NUCLEAR DIVISION NEWS

UNION  
CARBIDE

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

Vol. 1 — No. 18

OAK RIDGE, TENNESSEE

Thursday, October 8, 1970



**NASA APOLLO AWARDS**—Receiving their Appreciation Certificates from the National Aeronautics and Space Administration are, from left, W. E. Wampler, Jr.; F. D. Mundt; C. L. Matthews; H. S. Corey, III; R. C. Rosvinge; R. F. Greene; G. B. Lockhart, and P. E. Wilkinson. M. F. Schwenn, Manager of Administration at Y-12, makes the presentation.

## Achievement Awards

### 20 Nuclear Division Men Honored for Apollo Work

Twenty staff members of the Nuclear Division have received NASA Apollo Achievement Awards. The awards were presented recently in Oak Ridge.

The Apollo Achievement Award consists of a certificate and a commemorative pin. The certificate reads: "In appreciation of dedicated service to the nation as a member of the team which has advanced the nation's capabilities in aeronautics and space and demonstrated them in many outstanding accomplishments culminating in Apollo 11's successful achievement of man's first landing on the moon, July 20, 1969."

The Nuclear Division facilities have made several contributions to the NASA program. In addition to performing many significant studies, Division facilities designed and manufactured several vital pieces of equipment, including much of the equipment used by NASA to bring moon samples back to earth.

The recipients of the Apollo Achievement Awards include:

**Oak Ridge Gaseous Diffusion Plant**—M. C. Martin.

**Oak Ridge National Laboratory**—J. S. Eldridge, R. J. Fox, J. L. Kolopus, K. J. Northcutt, R. T.

Roseberry, T. F. Sliski, R. E. Wittenberg, E. S. Cantrell, V. A. McKay, G. D. O'Kelley and R. A. Weeks.

**Oak Ridge Y-12 Plant**—H. S. Corey III, R. F. Greene, G. B. Lockhart, F. D. Mundt, R. C. Rosvinge, P. E. Wilkinson, C. L. Matthews and W. E. Wampler, Jr.

Participating in the award ceremonies were S. R. Sapirie, Manager of the Atomic Energy Com-  
(Continued on Page 6)

## National President Presents Local ASME Section Charter

Allen F. Rhodes, National President of the American Society of Mechanical Engineers, will present the charter to the newly established Oak Ridge section of ASME. He will be the dinner speaker at the meeting October 12, at the Oak Ridge Country Club. Rhodes is Vice President, Research and Engineering, of the Rockwell Manufacturing Company, Pittsburgh.

The public is invited to Monday's meeting. A social hour is set for 7 p.m., with dinner at 7:30. Reservations may be made through plant extensions 3-1271, 3-3429, or 3-5168.

## Almost Half Billion Dollars

### AEC Signs More Toll Enrichment Contracts

The Atomic Energy Commission has signed five additional agreements with United States firms for providing uranium enrichment services in support of the nuclear power industry. The contracts will result in revenue to the Government of almost half a billion dollars over the life of the contracts.

The most recent contract signed, representing the largest single uranium enrichment agreement signed to date by the AEC, is with the Pacific Gas and Electric Company of San Francisco, Calif.

S. R. Sapirie, Manager of the AEC's Oak Ridge Operations, who signed the agreement for the AEC, said that over the 30-year duration of the contract, the AEC will provide the company with up to \$225,439,136 in enrichment services dependent upon the company's requirements for its nuclear generating units.

#### For Next 30 Years

Other agreements signed in recent weeks and the value of the contracts are: Commonwealth Edison Company, Chicago, Ill., \$186,339,192; Kerr-McGee Corporation, Oklahoma City, Okla., \$7,709,182; Maine Yankee Atomic Power Company, Westboro, Mass., \$2,338,356; and Babcock and Wilcox Company, Lynchburg, Va., \$5,992,246.

These five contracts, totaling \$437,818,112, bring to 46 the number of uranium enrichment agreements signed by the AEC, 29 of which are with organizations abroad. During the next 30 years, the AEC will be supplying these customers with a total of \$1.7 billion in uranium enrichment services.

#### For California Plants

Uranium enrichment under the AEC's toll enrichment program began in January of 1969, and is an arrangement whereby

privately owned uranium is enriched in Government plants. The customer furnishes uranium feed material to the AEC, pays an enriching charge and, in turn, receives uranium enriched in the U-235 isotope.

Under the contract with Pacific Gas and Electric, uranium will be enriched for use in the company's Humboldt Bay (Calif.) Power Plant, Unit 3; and Units 1 and 2 of the Diablo Canyon (Calif.) Nuclear Power Plant.

Uranium provided under the contract with Commonwealth Edison Company will be used in the fabrication of fuel elements for two nuclear reactors in the company's Zion Nuclear Power Plant near Zion, Illinois. Commonwealth Edison, with three contracts total \$401,525,956, currently is the AEC's largest toll enrichment customer.

#### Duke Power Supply

Kerr-McGee's contract provides for enrichment services required for the initial core loading of the Three Mile Island Station, Unit 1, in Middletown, Pa., to be owned and operated by Metropolitan Edison Company of Reading, Pa. This is the second contract signed with Kerr-McGee; the first being the AEC's initial domestic toll enrichment contract signed in 1968 for \$9,525,932.

The latest contract with Babcock and Wilcox provides for enrichment of uranium to be used in the manufacture of fuel for Duke Power Company's Oconee Nuclear Power Station, Unit 2 at Seneca, S. C. Babcock and Wilcox has another \$5,279,794 toll enrichment contract with the AEC, signed in March of 1969.

Under the contract with Maine Yankee, uranium will be enriched for use as fuel in the company's Maine Yankee Atomic Power Plant at Wiscasset, Maine.

## Mincy Speaks Tonight

Homer F. Mincy, superintendent of the Oak Ridge school system, will present his annual "state of the schools" address tonight (October 8) at 8 at the Oak Ridge High School Auditorium. The meeting provides an excellent opportunity for the Oak Ridge community to find out about current school plans and programs. The public is urged to attend.

## Major Step for Nuclear Industry

### ORGDP System Cuts Radioactive Gas Exhaust

In a major step toward the nuclear industry's goal of meeting energy needs with minimum effect on the environment, the Oak Ridge Gaseous Diffusion Plant has successfully tested a system designed to eliminate essentially all radioactive gases from the air exhausted from nuclear plants.

This process also is a promising method for treating the gaseous effluents from spent nuclear fuel chemical processing plants for the removal of radioactive krypton.

The development was announced in a recent ORGDP technical report, "Removal of Radioactive Krypton and Xenon From Contaminated Off-Gas Streams," by co-authors J. R. Merriman, M. J. Stephenson, J. H. Pashley, and D. I. Dunthorn. All four are chemical engineers with ORGDP's Process Systems Department, Gaseous Diffusion Development Division.

#### 'Near Zero' Possible

J. R. Merriman presented the paper at a recent Atomic Energy Commission scientific meeting held at Richland, Wash.

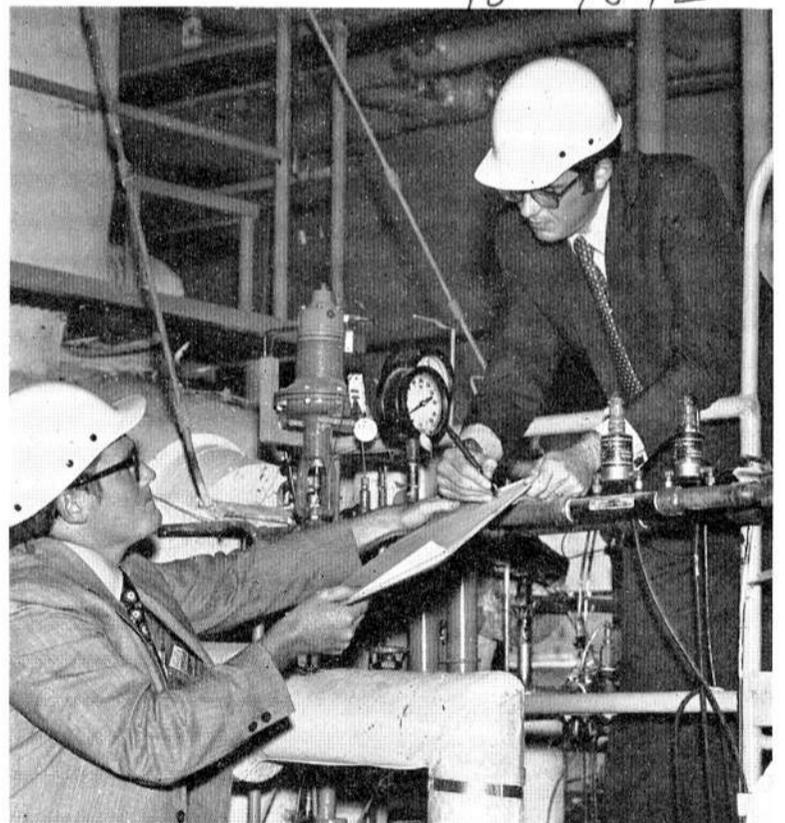
Through the new system, isotopes of krypton and xenon—the principal radioactive gases presently emitted from the stacks of operating nuclear power plants—can be separated from gas process streams, concentrated, and then removed for storage.

The new process will enable nuclear plants to cut radioactive gaseous emissions to "near zero." Control systems have existed in fuel processing plants for another

radioactive gas, iodine, for some time. But until now, although methods other than the ORGDP process have existed for krypton and xenon removal, these rare

gases have been discharged to the atmosphere at levels far below safe limits.

The authors acknowledged that  
(Continued on Page 6)



**DISCUSSING DATA**—M. J. Stephenson, left, and J. R. Merriman discuss data taken from a pilot plant used to demonstrate a system for removing radioactive krypton and xenon from nuclear plant off-gases. The development is an important step in the nuclear industry's efforts to provide energy with minimum effect on the environment.

# 1970 United Way If WE Don't Do It, It Won't Get Done!



**ORGDP UNITED FUND COORDINATORS** — Shown are: seated, from left, H. M. Benton, Guards and co-chairman; Lee Porter, Engineering; W. E. Rooks, ORGDP Chairman; W. H. Byrd, Finance and Materials; and H. J. Mayberry, publicity; standing, from left, W. J. Grunst, Operations Analysis; N. V. Shamblin, Engineering; B. H. Thompson, Shift Operations and Security; J. W. Arendt, Laboratory; C. H. Peterson, Operations; D. E. Hendrix, Gaseous Diffusion Development; N. N. Landay, Fabrication and Maintenance; and C. L. Johnson, Industrial Relations. Evelyn Cole, Separation Systems; S. F. Finch, Fabrication and Maintenance; and R. M. Gamble, Treasurer, were not available for this picture.



**GETTING READY**—General Staff Division coordinators receive their supplies. Shown here, from left, are H. C. Wright, Purchasing; R. O. Green, Computing Technology Center; J. C. Moore, General Accounting; H. R. Gregg, General Chairman for the General Staff functions; W. L. Irwin, Treasurer; B. M. McNeely, Auditing; and E. C. McFaddin, Law and General Industrial Relations. Faye Smartt, AECOP, is not in the picture.



**Y-12 LEADERS**—Helping in the Y-12 Plant drive are, from left, Frank Carringer, H. F. Smith, Jr., G. F. McPherson, B. W. Hensley, and Johnnie Riddle.



**UNITED TEAM**—Leaders throughout the Nuclear Division have joined together for the United Fund drive. These are some who attended an early organizational meeting at Y-12. They include, from left, front row, Floyd E. Clevinger, John Sinclair, Ralph Norman, R. E. Mellon, and B. B. Coulter; second row, Jack Williams, George Beasley, John Welch, R. C. Christman; and third row, R. L. Wesley, John H. Boyd, Jr., T. C. Wilson, D. E. Floyd, and Dan D. Stroud.

## Do Your Part

# Freddie Personifies UF Care For Youth By Many Agencies

**EDITOR'S NOTE:** This is the third of a series of articles on the United Fund. The drive is currently under-way at all three Nuclear Division plants in Oak Ridge, Tenn. This article features "Freddie"—the personification of all youth served by UF agencies.

"Batter up!"  
Freddie looks around at the coach who motions him into the game. He hitches up his jeans and runs, bat in hand, toward the plate.

Eagerly Freddie awaits the pitch — so eagerly that he swats at the first pitch even if it is low and outside. Chagrined by the huge miss, he watches the second pitch go by and hears "Strike two."

### Freddie 'Is' 1,400 Boys

Freddie breathes deeply, squares his shoulders and stares intently at the pitcher. The ball is hurled. Freddie hesitates, then swings with all his might. A sharp crack and Freddie is off for first. The first baseman lunges but narrowly misses the catch. Freddie pulls up at first. His face is one big smile. He is a member of the team. He belongs.

Freddie is a composite of many of the 1,400 boys served by the Boys' Club of Oak Ridge, and Freddie's hit with variations has happened numerous times. The coach and umpire could be your next-door neighbors. They are men who care enough to give their time and leadership to these boys through daily activities at the Boys' Club.

### Could Be Any Boy

Freddie might be from a normal middle-class family or he might be from a poor fatherless family. Whatever his background, he is learning cooperation, making friendships, and gaining confidence in himself — all very important ingredients of his character development.

The Boys' Club is one of several groups which receive a substantial amount of their support through United Fund giving. These agencies all measure up to the United Fund standards of being non-profit and providing necessary programs of health, recreation, and welfare, etc.

Other United Fund agencies which serve youth are the Boy Scouts, Camp Fire Girls, Girl Scouts, the YMCA and the YWCA.

United Fund support to these agencies insures professional lead-

ership in planning and maintaining their programs. The youth service agencies have common goals — to promote good character development and to foster good citizenship attitudes. Each agency, however, reaches different groups of youth and varies widely in programs and activities.

### The 'Human Resource'

"Learn-by-doing" is the technique most often used by these agencies. In addition to sports activities, crafts, and individual activities, useful skills like sewing, cooking, knitting and carpentry are also learned.

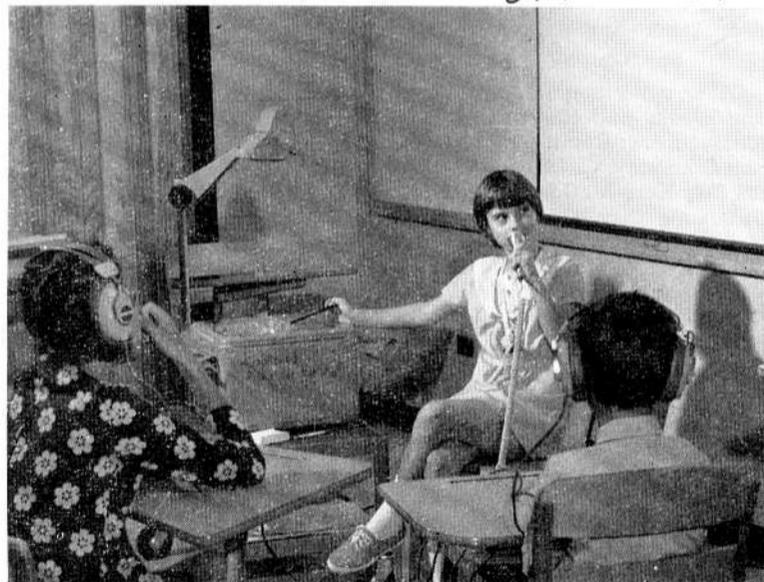
These UF agencies which serve youth all have a hand at shaping the most valuable resource — the human resource. Give generously. A contribution to brighten the life of youngsters has an immeasurable return. The United Way approach to youth services is easy and effective. "If YOU don't do it, it won't get done."

## Nuclear Division UF Drive Begins

The 1970 United Way campaign has begun at all three Oak Ridge plants operated by Union Carbide's Nuclear Division.

General chairman W. H. Hildebrand and co-chairman Marion H. Randolph have assembled an outstanding team of labor and management leaders to raise the record total of \$297,000. The funds will go to support UF agencies primarily in five counties—Anderson, Knox, Roane, Loudon, and Morgan.

Leaders include general chairman, Hildebrand; assistant general chairman, Randolph; treasurer, J. A. Corn; co-chairmen at Oak Ridge National Laboratory, N. L. Beeler and H. E. Seagren; co-chairmen at the Oak Ridge Y-12 Plant, B. W. Hensley, G. F. McPherson and H. F. Smith, Jr.; and co-chairmen at the Oak Ridge Gaseous Diffusion Plant, H. M. Benton, E. C. Clevenger, H. B. Gunter, and W. E. Rooks. Co-chairman for the general staff is H. R. Gregg.



**HELPS OTHERS, TOO**—United Fund dollars help the boy next door by providing activities for recreation and personal development. But it also helps those with special problems, such as these youngsters with hearing difficulties. The group shown is being treated at Daniel Arthur Rehabilitation Center.

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**JOINT PATENT EFFORT**—Paul E. Trent, left, and James E. Miner, center, received \$1 patent letters for a joint effort, 'Discontinuous Fiber Graphite Composites.' George Marrow, Materials Engineering Development superintendent, presented the Y-12ers their honorarium recently in his office.

## Luther Hargis Rites Held in Knoxville

Luther C. Hargis, Sr., Buildings, Grounds and Maintenance Shops, died in Knoxville September 2. He came here February 2, 1957.

Surviving are his wife, Mrs. Mildred Donahue Hargis, 1609 LeConte Drive, Knoxville, and a son, Luther C. Hargis, Jr. His parents also survive, Mr. and Mrs. Horace D. Hargis; two sisters, Mrs. Lois



Hargis

Brown, and Mrs. Edith Shankles, all of Knoxville.

Mr. Hargis was a veteran of the U. S. Navy and was a member of the Knox County Rescue Squad.

Services were held at Stevens Chapel September 5, with the Revs. Henry Chiles, Julian Anders and Lloyd Jones officiating. Burial followed at Roseberry Cemetery, near Mascot.

## Young Y-12er Dies In Highway Mishap

Dennis R. Wigginton, Quality Assurance, suffered fatal injuries in an automobile accident September 26. He had hired in recently after attending Cleveland State Community College.

He is survived by his parents, Mr. and Mrs. Hubert L. Wigginton, 101 East Magnolia Lane, Oak Ridge; and a brother, Jimmy Wigginton, who attends East Tennessee State University. The youth's father is also employed here, working in Metallurgical Development.

Funeral services were held September 28 at Martin Funeral



Wigginton

## Lab's Joe Stewart Earns UT Degree



Joseph H. Stewart, Jr.

The August graduation at The University of Tennessee saw Y-12er Joe Stewart receive his M.S. degree in chemistry.

He came here July 2, 1951, and has been pursuing off and on his education ever since on the Carbide Educational Assistance plan. He graduated from Western Kentucky State College, Bowling Green, before coming here.

"A lot of credit to my wife and son," Stewart admits. He is married to the former Martha Helen Garrison, and the couple has a son, Joe, III. They live at 171 North Seneca Road, Oak Ridge. He also was quick to praise the EAP. "Assistance with tuition is a real incentive!"

Stewart is a laboratory department supervisor in Production Analysis, where he is over the new electron probe laboratory.

He is a member of the Electron Probe Analysis Society of America, the American Chemical Society, and the National Section of the Analytical group in the ACS.

Home, with the Revs. Lee Morris and W. C. Summar officiating. Burial followed in Oak Ridge Memorial Park.



A host of Y-12ers mark important dates with Union Carbide Corporation early in the Fall. Congratulations.

### 25 YEARS

- Ira J. Shotts**, Timekeeping Department, September 11.
- Herman L. Menchhofer**, Machine Maintenance, September 19.
- Connie W. O'Neil**, Beta Two Chemistry, September 29.
- Greer E. Valentine**, Material Specimen Shop, October 2.
- Herman C. Letellier**, Mechanical Inspection, October 3.
- Millard N. Wilkerson**, Guard Department, October 9.
- Frank E. Morrow**, Beta Two Chemistry, October 9.
- Martin L. Sullivan**, Guard Department, October 10.
- William E. Green**, Guard Department, October 10.
- Aubrey J. Jeffers**, Guard Department, October 10.
- Elwood B. Cox**, Utilities Administration, October 11.

### 20 YEARS

- Jack D. Barnette**, Utilities Administration, September 21.
- Claude L. Westmoreland**, Buildings, Grounds and Maintenance Shops, September 21.
- David R. Baldwin, Jr.**, Area Five Maintenance, September 22.
- James R. Wells**, Alpha Five West Shop, September 25.
- Wiley A. Herrell**, General Expediting and Auxiliary Services, September 25.
- Foraker Lambdin, Jr.**, Materials Engineering Development, September 25.
- Nevil F. Bush**, Buildings, Grounds and Maintenance Shops, September 26.
- William L. Griffith**, Process Analysis, September 27.
- William A. Coker**, ORNL Chemical Services, September 27.
- Ralph Lawson**, 9766 Machine Shop, September 27.
- John H. Boyd, Jr.**, Instrument Engineering, September 28.
- Frank H. Pitzer**, Rover Fabrication, September 28.
- Thomas E. Reed**, Beta Two Chemistry, September 30.
- Marvin E. Short**, Facilities Engineering, October 2.
- John E. Williams**, Casting Department, October 2.
- William E. Humphreys**, Research Services, October 2.
- Ernest M. Neal**, General Shop Job Liaison, October 2.
- Charles F. Chandler**, Electronics and Electrical, October 2.
- Louis B. Gillis**, General Plant Tooling Coordination, October 2.

### 15 YEARS

- Charles E. Mills**, Alpha Five Processing, September 21.
- Arlin M. Stephens**, H-1 Foundry, September 21.
- Carroll C. Price**, Chemical Services, September 21.
- Glen W. Ballew**, Alpha Five Processing, September 21.
- William W. Ivey**, Research Services, September 26.
- Mildred K. Lister**, Engineering Division, September 26.
- Dorris B. Pitkanen**, Medical Department, October 3.
- John K. West**, Alpha Five Processing, October 5.
- Van Vail, Jr.**, H-1 Foundry, October 5.

## 3 New Foremen Named

Three recent appointments were announced in Y-12, as Elmer D. Bryant, James C. Parton and William B. Rutherford, Jr. were made foremen.

Bryant has been named an inspection foreman in Dimensional Inspection. He came here January 9, 1963 after working at Fulton-Sylphon, Knoxville Utilities Board, in Knoxville, and the Gabriel Co. and Thompson Products, Cleveland, Ohio.

A native of Knoxville, Bryant lives on Abrams Drive, Concord. Mrs. Bryant is the former Johnnie Wayman. They have two children, Teri, who attends Farragut High School, and Elmer, Jr.

### James C. Parton

A native of Sevier County, James C. Parton came here December 31, 1952. He served in the U.S. Army from 1945 until 1946 and worked with J. C. Penney Co. before coming to Y-12. He farmed before entering service.

He is married to the former Rosemary Dunlap and they have a daughter, Janet, who attends The University of Tennessee. The Partons live at 2901 Shropshire Boulevard, Powell.

Parton was named a process foreman in Beta Two Forming.

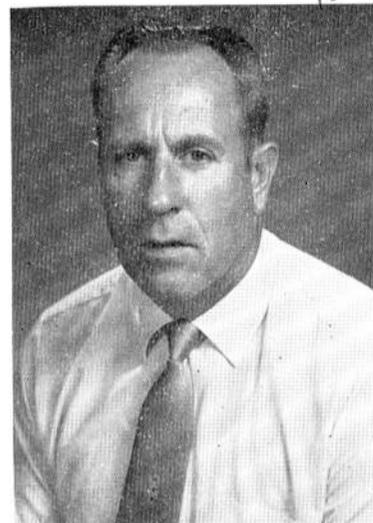
### William B. Rutherford, Jr.

Named a machining foreman in A-2 Shops, 9212, was William B. Rutherford, Jr.

He is a native of Knoxville, and lives there at 2590 Sanderson Road.

He served in the U.S. Army from 1945 until 1947. He worked at Gray Knox Marble Co., Miller's, and as a lathe operator at Myers-Whaley Co., before coming here April 19, 1954.

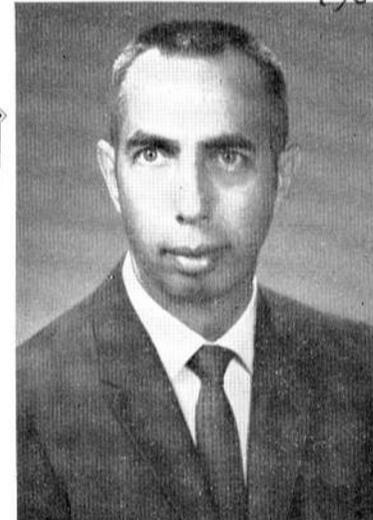
Married to the former Betty Heinz, Rutherford has a daughter Brenda, who lives in Alcoa.



Elmer D. Bryant



James C. Parton



William B. Rutherford, Jr.

## W. S. Akers to Speak At Secretaries' Meet

W. S. Akers, Jr., conference leader in Y-12's Training Department, will speak at a dinner meeting of the Oak Ridge Chapter of the National Secretaries Association at the Holiday Inn, Oak Ridge, October 12.



W. S. Akers

Akers will talk on "Communications Concepts, Barriers and Experiences."

He came with Union Carbide in 1958, and has conducted numerous management training programs in the Nuclear Division plants here and recently led a training seminar at the U. S. Atomic Energy Commission Laboratory in New Brunswick, N. J.

Akers holds a degree in business administration from East Tennessee State University and is taking graduate courses at The University of Tennessee. He lives in Knoxville.

### BADGE EXCHANGE

Y-12ers have until next Wednesday, October 14, to exchange their old last quarter badges.

The new Fall badges have yellow-bottomed borders. They may be picked up at the self-service racks at the portals of entry.

## Amputation of Finger Charged to Lost Time

A chargeable lost-time accident occurred in Y-12 October 21. An employee in Machine Maintenance was removing a die from the table of a 300-ton hydraulic power press. A channel in one side of the die apparently caught on the edge of the press table, flipped over catching the employee's hand between the heavy die and the table of the press. A tip of the right middle finger was lost.

Although no time was lost, when loss of bone occurs a lost-time accident is charged.

The accident free hours ended at approximately 264 days or 8,748,000 man-hours.

### Y-12 Veterans Retire; Long Service Records



L. H. Davis      W. R. Duff



W. W. Ring      C. R. McCabe

Y-12 marked the retirement September 30 of five veterans with more than 108 years of Union Carbide Corporation service.



Mrs. Martin

Retiring were Lonnie H. Davis, Buildings, Grounds and Maintenance Shops; Walter R. Duff, Dispatching Department; Mrs. Rosie L. Martin, Building Services Department; Claude R. McCabe, H-1 Foundry; and Wallace W. Ring, Process Maintenance.

### Rippers Hold Big Reins Among Classic Bowlers

Travis Craig, Screwballs, rolled a big 256 game in the Classic Bowling league last week, to cop honors for the first three or four weeks of rolling.

The Rippers stand tall among the troops, losing four to the Swingsters week before last, for their only loss of the young season. They have season highs thus far in handicap scoring, with a total score of 3083.

Team	W	L
Rippers	16	4
Swingsters	15	5
Playboys	13	7
All Stars	12½	7½
Cubs	12	8
Bumpers	11	9
Has Beens	11	9
Splinters	11	9
Rebels	11	9
Eightballs	9	11
Eagles	8	12
Rojo's	8	12
Screwballs	7½	12½
Markers	7	13
Tigers	4	16
Smelters	3	17



Will join car pool from Broad-acres subdivision, Clinton Highway, to Pine Ridge Portal, straight day. Barbara Williams, plant phone 3-5896, home phone Knoxville 947-6800.

Ride wanted or will join car pool from Gresham Road, Fountain City, to Bear Creek Portal, J Shift. Alfred Gose, plant phone 3-5121, home phone Knoxville 688-2084.

Ride wanted from UT area, Knoxville, to North or Central Portal, straight day. Jay Winget, plant phone 3-7767, home phone Knoxville 524-7668.

Car pool member wanted from Alice Bell, Spring Hill, North Hills sections of Knoxville to North or East Portal, straight day. J. A. McKenzie, plant phone 3-7705, home phone Knoxville 525-1593.

Riders wanted from Concord-Farragut area, via Lovell Road, to any portal, straight day. J. C. Taylor, plant phone 3-7510, home phone Concord 966-5163.

Ride wanted from Magnolia Lane, Oak Ridge, to either East or North Portal, straight day. Eric Hirst, plant phone 3-7841, home phone Oak Ridge 483-1535.

Ride wanted or will join car pool from LaFollette to Bear Creek Portal, straight day. J. P. Clark, plant phone 3-5156, home phone LaFollette 562-5287.

Will join car pool from Midway subdivision, Oliver Springs, to North Portal, straight day. W. R. Jago, plant phone 3-5935, home phone Oliver Springs 435-7187.

One rider wanted from Broadway section, Knoxville, to any portal, straight day. David Bullen, plant phone 3-5807.

### Uranium Recovery

The Atomic Energy Commission has awarded a \$204,153 contract to Nuclear Fuel Services, Inc., Erwin, Tenn., for processing uranium metal.

Ralph Elson, Director of the Contract Division of AEC's Oak Ridge Operations, said that under the contract the firm will process scrap metal to recover some 973 pounds of uranium valued at approximately \$4,000,000 for reuse in AEC programs.

### Jaguars Assume Slim Lead on C's Alleyways

The Jaguars stand high in initial standings in C Bowling, as they rode roughshod over the Instrument Engineers and Purple Pygmies in the first two weeks of rolling. Last week, they won only one from the Fireballs.

The Rollmasters' Len Hart put a 239 game on the boards the first week; Don Branson a 244 the second week; and Dick Huber bested the best with the 246 last week!

The Big Five rolled a 3177 handicap series September 21, for what looks like a long-standing team record.

League standings follow:

Team	W	L
Jaguars	9	3
Royal Flush	8	4
Rounders	8	4
RollMasters	8	4
Big Five	8	4
Fireballs	6	6
Instrument Engineers	6	6
Badgers	6	6
Parbusters	4	8
Anodes	4	8
Purple Pygmies	3	9
Sunflowers	2	10

### Mee-Wright Take Golf Crown From Foes in Kingston Play

The second half of the Southwest Point Golf League ended in a tie with the team of Mee and Wright and Stanton-Henderson having the same number of points.

Mee-Wright continued their late winning streak to down the Stanton-Henderson twosome, thus winning the league's second half. They then faced the first half winners, Bolt and Pelfry.

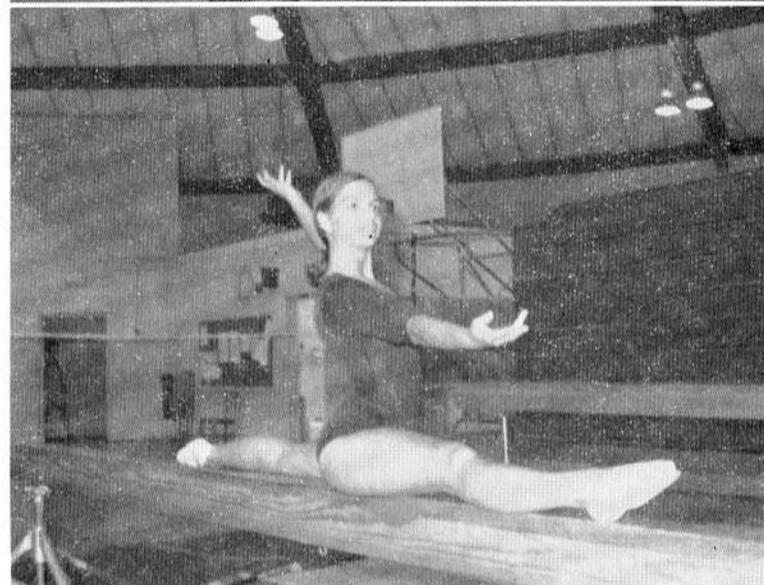
In the championship match, Mee-Wright's skill and luck held out; and they became the league champs. The final wrap-up stands: Bolt-Pelfrey — League runner-up; Jones-Morgan — 1st Half Runner Up; Henderson-Stanton— 2nd Half Runner Up.

### Roses 'n Thorns Grab Early Bowling Steam

The Roses 'n Thorns moved ahead by two points last week as Mixed Bowlers got down to business. The R'nT crowd downed the Rollers for three points.

Hot action recently saw the Friskies' Frank Adams roll a 233. Fred Hammond, Goofers, galloped through a 223 game on September 23.

Team	W	L
Roses 'n Thorns	13	3
Rollers	11	5
Goofers	10	6
Friskies	8	8
Hits & Misses	8	8
Twisters	7	9
Alley Cats	5	11
Cougars	2	14



SHAPING UP—Two Y-12 children are seen on the "bars" executing difficult maneuvers for the Gymnastic Club. In the top photo, Eric Rosenvinge, son of Rolf (Engineering), dismounts from the parallel bars. In the lower picture, Pat Fortenberry, daughter of Morris (Scheduling), demonstrates a difficult split on the balance beam.

### Gymnastics Club Holds Tryouts Weekly At Girls Gym for Boys and Girls Teams

Shape Up . . . or Ship Out, says the Oak Ridge Gymnastics Club. Not really, but the organization is opening doors to the youth of this area to tryout for the club.

Area boys and girls from six through 17 are eligible if they can pass the entrance requirements. To qualify, you must do 10 push-ups, a headstand held for 30 seconds, a cartwheel, and a diving forward roll, all executed in good form. Instructions will be given in these requirements during the

test runs. Regular sessions for gymnastics club members began October 7, at 7:30 p.m., for children ages six through 12; and at 8:30 for ages 13 and older. Tryouts will be held each Wednesday in October at the Oak Ridge High Girls Gym.

### Raiders Keep Top Starlite Spotlight

The Raiders claim a perfect record in the Carbide Starlite Bowling League with four nights of laurels over the Woodpeckers, Comets, Pin Splitters and the Rollers.

Dave Mosely, Raiders, rolled a 233 single game . . . only to be topped by Jack Holt, Mix Ups, who rolled a 234 last week!

League standings follow:

Team	W	L
Raiders	12	0
Mix Ups	11	1
Latecomers	9	3
Woodpeckers	8	4
Pin Boys	6	6
Marauders	6	6
Wildcats	5	7
Pin Splitters	1	11
Rollers	1	11
Comets	1	11

### SAFETY SCOREBOARD

The Y-12 Plant Has Operated 13 Days Or 456,000 Man-Hours (Unofficial Estimate) Through October 4 Without A Disabling Injury SAFETY AT HOME, AT WORK, AT PLAY



MULTIPLE EFFORTS — 'Controlled Thickness Machining Device,' a joint development has brought a patent application to four Y-12 men. At left, Fred Jones, Fabrication Systems Development, presents Robert W. Schede his \$1 patent

application letter, along with Robert E. Hewgley and Leonard A. Abattiello. At right, David L. Mason presents M. W. 'Bill' Moyer his letter, as L. E. Burkhart, Laboratory Development Superintendent, looks on.

# THE CARBIDE COURIER

Thursday, October 8, 1970

Page 3

## Geraldine Davis and Melvin Wagner Mark Early Retirement Dates Recently



Mrs. Davis M. M. Wagner

Two employees left on early retirement status during September — Geraldine Wilson Davis and Melvin McKinley Wagner.

Mrs. Davis has been an audit clerk in the Accounts Payable Department. Her continuous service date is Jan. 26, 1948. She had worked at ORGDP for a short time in 1945 as an operator. Between 1945 and 1948, Mrs. Davis worked for the Atomic Energy Commission.

Mrs. Davis was born in Morgan County and attended public school in Coalfield. Mrs. Davis and her husband, Frank, live at 907 Eagle Bend Road, Clinton.

### M. M. Wagner

Wagner, a barrier operator in the Operations Division, terminated on September 22. He had been employed here since March 16, 1945. Prior to that time, he worked for Stone and Webster and for the Crambride Coal Company in Oak Ridge.

A native of Stainville, Tenn., he attended school in Briceville. He is married to the former Roxie Barnes. They have three married daughters and one son. The Wagners live on Route 5, Clinton.

## Charlie Frye, Sy Levin Win K-25 Tennis Battle

Charlie Frye and Sy Levin emerged the winners in the recently completed ORGDP tennis tournament. This was a double elimination tournament. Frye beat Hunter Foreman to win the championship flight and Levin won over Paul Pickrell in the consolation flight.

## Samuel A. Keith Dies At Lenoir City Home

Samuel A. Keith, 54, ORGDP Reproduction Services, died suddenly at his home at 1311 East Third Avenue, Lenoir City, on September 26.

He had been employed here since April, 1946. He served in the U. S. Army from January, 1944, until March, 1946. Prior to his Army service, he had worked for the Tennessee Valley Authority.

Mr. Keith was born and attended public schools in Rockwood. He is survived by his wife, the former Beatrice Easter of Martel Community; a daughter, Deborah Gay; and a son, Samuel Gregg, at the Keith home.

## Fabrication and Maintenance Show Cost Reduction Gains

More than \$103,000 has been saved in operating expenses by Fabrication and Maintenance employees since the start of the Division's cost reduction program the first of this year. The program includes a careful review of drawings, bills of materials, use of proper equipment and the use of new and innovative techniques to produce high-quality work at reduced price.

Through August, a total of 95 reports has been recorded. While the cost savings on some of the individual reports have been small, the sum total of all the reports reflects good alert savings accomplishments.

## Capt. Johnson Gets Advanced Degree In Care of Injured



W. R. Johnson

Capt. W. R. Johnson, Plant Protection Department, Shift Operations and Security, has received the graduate certificate of the Committee on Injuries of the American Academy of Orthopaedic Surgeons for completing the "Advanced Practical Course on Emergency Care of the Sick and Injured," at the University of Kentucky.

Award of the certificate was made at the conclusion of the comprehensive four-day course of lectures and work practice demonstrations held in cooperation with the University, Lexington-Fayette County Civil Defense, and Lexington and Fayette County police and fire departments.

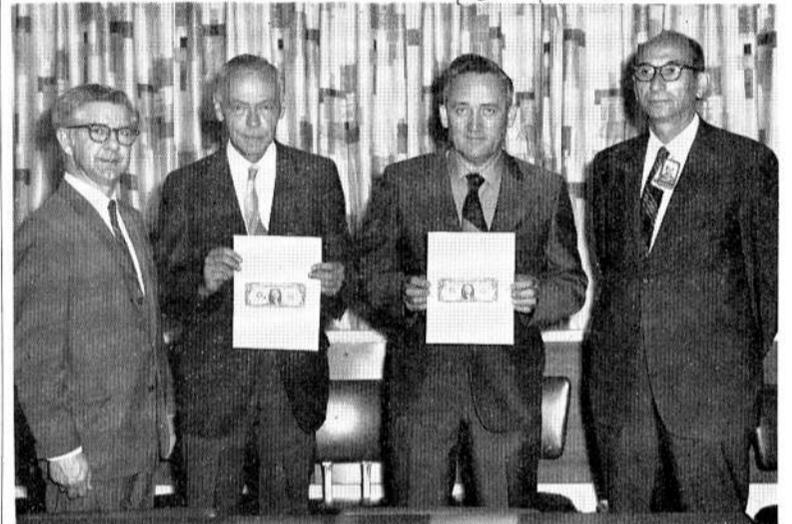
The advanced training was given to experienced first aid experts interested in instructing others in emergency care techniques.

Dr. William K. Massie, assistant professor of orthopaedic surgery, University of Kentucky Medical Center, was chairman of the committee of physicians and health and rescue authorities directing the course.

Captain Johnson is a graduate of the American Red Cross First Aid Instructor Trainers Course and has worked with first aid instructors for the Roane County School System, the Oak Ridge Fire Department, and the Anderson County Civil Defense organization and the Anderson County Ambulance Drivers and Attendants.

## THE CARBIDE COURIER

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Editor ..... H. J. Mayberry  
K-1002 Building, Tel. 3-3097



**PATENT AWARD RECIPIENTS**—George Petit and Ralph Wright received their patent application transmittal letters from J. C. Barton, Superintendent of the Laboratory. From left are C. W. Weber, Petit, Wright, and Barton.

## George Petit and Ralph Wright Earn Seventh Patent Application at ORGDP

George Petit and Ralph Wright, Chemical Analysis Department, Laboratory Division, have each received his seventh patent award. This is the third award received by them in 1970.

The patent application is for the deposition of electroless nickel onto uranium metal. Uranium is one of the most difficult metals to plate because of the ready tendency of the metal surface to oxidize and become passive. The novel preplate treatment used in their process prevents this oxidation of the uranium metal, thereby permitting excellent bonding of the deposited nickel to the uranium metal.

This work was done in the field

laboratory at K-1420 with the cooperation and support of R. A. Koteski and R. L. Newton of the Operations Division.

Petit and Wright are members of the Special Problems and Trouble Shooting Group in the Chemical Analysis Department.

Petit served with the 91st Division in Italy during WW II. He graduated from the University of Kentucky in June 1952 and was employed at ORGDP the following week. Petit and his wife, the former Jane Powers, a former Y-12 and K-25 employee, live at 139 W. Madison Lane in Oak Ridge.

Wright, a native of Alabama, has been employed at ORGDP since January, 1945. He and his wife, the former Ethel Webb, live at 8011 River Drive, Oak Ridge, with their children, Carl, 17, and Frances, 22 years old.

## Ingram's 61 Low Tally On Lakeside Golf Greens

Ed Ingram shot a sizzling net 61 to win the recent 18 hole K-25 S.S. Golf Tournament held at the Lakeside Golf Course in Kingston. Six of the twenty-three entries shot net scores below the course par of 70 for 18 holes:

Ed Ingram	61
Walt Wendolkowski	64
Ralph McGill	67
Ed Powell	68
Norm Teasley	69
Lee Bradley	69

## Women's Bowling

Doris Wood and Mary Foley shared Bowler-of-the-Week honors in the September 23 session of the K-25 Women's League. Doris had a 232 handicap single game and a 655 handicap series score. Mary had a 202 scratch game, tied Doris' 232 handicap score, and had the best scratch series score with a 525.

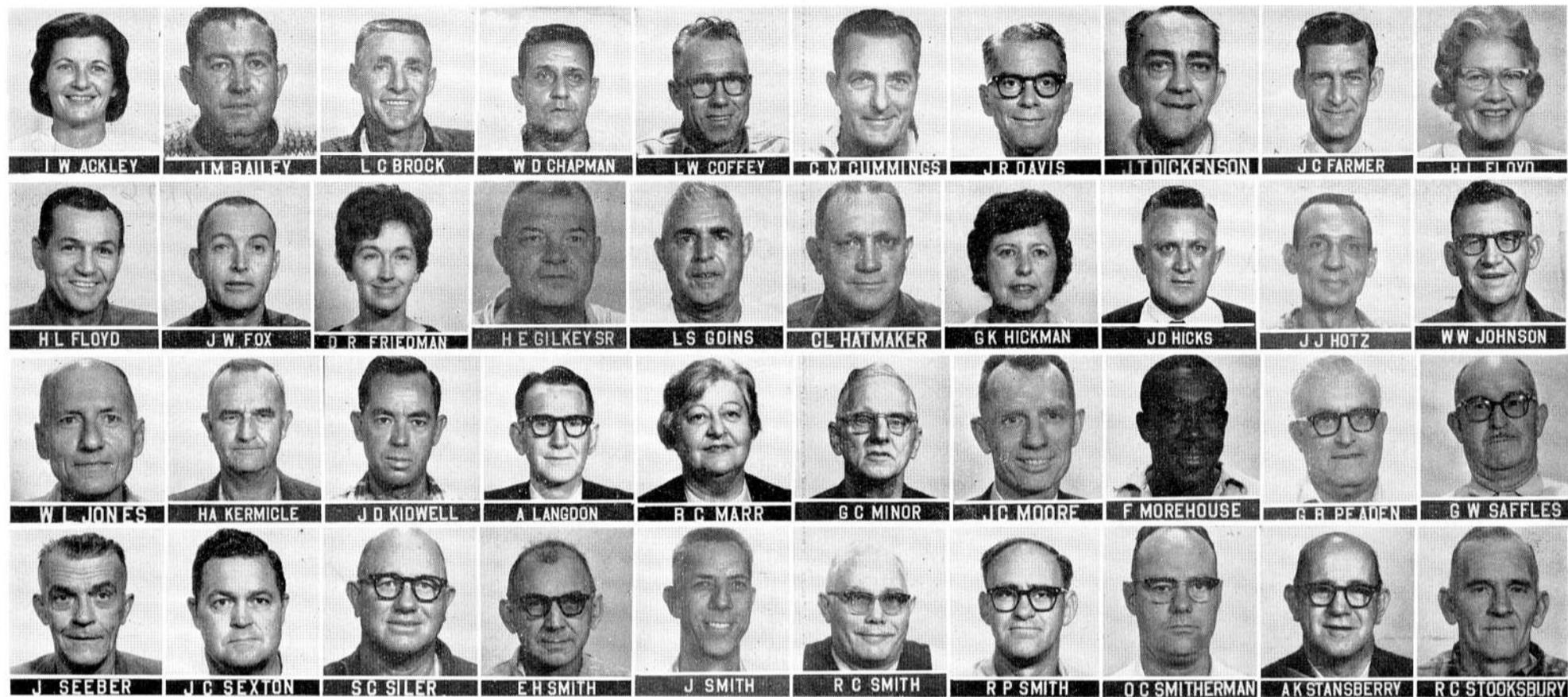
### Standings

Up-Towners	8	Spotters	4
Hotshots	6	Pay-Offs	2
Wood Bees	6	Pin-Ups	2
Bowlettes	4	Hits & Misses	0



**FIRST CLASS MECHANICS**—More achievement awards are presented in the Helper Training Program. Holding their awards in the front row are, from left, L. C. Fussell, machinist; K. R. Shrull, painter; W. B. Wilson, welder; J. F. Boyd, electrical mechanic; and E. B. Brewster, maintenance mechanic. In the back row are C. R. Abercrombie, Carpenter and Paint Shop Foreman; W. E. Rooks, Field Maintenance Superintendent; and L. A. Studinger, Fabrication and Maintenance Division Superintendent. Fussell and Boyd live in Oak Ridge, Shrull in Lake City, Wilson in Powell, and Brewster in Philadelphia, Tenn.

# Employees Who Reached 25 Years' Service In September



## August Uranium Shipments Total 223,000 Pounds

The Oak Ridge Gaseous Diffusion Plant shipped approximately 223,000 pounds of enriched uranium during August for use in nuclear reactors.

The uranium, which was enriched at a charge of more than \$9.8 million, filled orders authorized under two Atomic Energy Commission programs—Toll Enrichment and "Lease and Sale."

Under the Toll Enrichment Program, approximately \$8.9 million worth of separative work was performed for customers in Japan, Switzerland and West Germany, as well as in the states of Illinois, Massachusetts, South Carolina and Virginia.

Customers are charged for the services required to separate from natural uranium the desired percentage of the uranium-235 isotope, which is the fissionable material used in nuclear reactors.

Under the "Lease and Sale" program, reactors in Maine and Michigan received government-owned enriched uranium valued at approximately \$875,000.

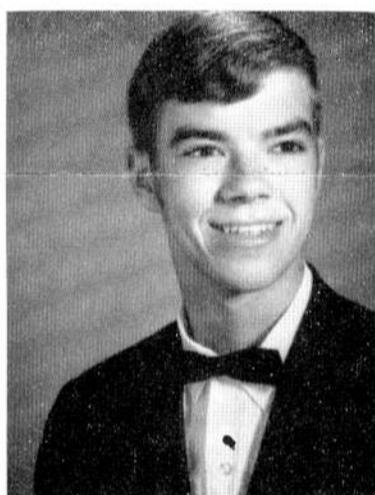
### Wednesday

## Bowling League

There were some extra high scores at the start of the season in this league. Ray Rinehart bowled a fantastic 281 handicap game and a 714 series to lead the first session. Jim Qualls had the best scratch scores with a 234 single and 592 series. Floyd Huskey and Frank Manning had the best scores in the second session. Floyd had a 245 handicap game and Frank had both series highs with 569-650. Tex Thrower won all of the Bowler-of-the-Week laurels in the September 23 session with single scores of 235-275 and series totals of 556-676.

Lab Demons	10	Feezers	5
Pirates	9	Mix-Ups	4
Sandbaggers	8	Planners	3
Rookies	7	Amps	2

## Reynolds Son Earns Physics Scholarship



Howard Reynolds

Howard Reynolds, son of Mrs. T. H. (Hilda) Reynolds, a K-25 nurse some 20 years ago, and the late Thurston H. Reynolds (assistant supervisor of Accounts Payable until his death last year) has accepted a scholarship to attend Abilene Christian College this fall where he will major in physics. Larry Reynolds, Howard's brother, is employed in the Computing Technology Center.

Howard was graduated in June from Farragut High School where he was valedictorian of his senior class with a perfect 4.00 grade-point average. He was vice-president of the National Honor Society, copy editor of Crow's Nest (school paper), a member of the chorus and Student Council, was named "Most Likely to Succeed" by his classmates, and listed in Who's Who Among American High School Students.

Howard was a National Merit Scholarship winner. His non-academic interests include swimming, playing the piano, and listening to classical music.

## 10 Years' Service

P. G. Baker	9/12/60
J. B. Mankin, Jr.	9/26/60
E. B. Harrison	9/27/60

## Bowling Tuesday League

The bowlers in this league appear to be in mid-season form. In the first session, Millard Gibson rolled a 214-233 game and Bart Simcox had a 540-594 series. Charley Hale and Al Mallett shared Bowler-of-the-Week honors in the second session. Charley had a scratch singles 222 game and Al had the best handicap scores, 264 singles and 680 series. Ray Fraser rolled the best single game scores in the September 22 session, a 223-251. H. G. Stanley rolled a 571 scratch series and Dwight Hatch had the high series handicap score with 650.

### Standings

City Slickers	8	Double X	6
All Stars	8	Possibles	5
Atoms	6	Full House	3

## 20 Years' Service

W. H. Adams	9/25/50
B. M. Timmerman	9/25/50
J. E. Brewer	9/27/50
R. C. Wallace	9/28/50



**IN AIR FORCE**—William H. Burnett, son of W. C. Burnett, Machine Shop, is stationed at Keesler Air Base where he is enrolled in the U. S. Air Force Electronics School. Burnett will complete his studies about December 15.



**FORM AND BALANCE**—Pam Goforth, daughter of Preston Goforth, Operations Division, demonstrates both form and balance as she executes a swan in her routine on the uneven bars while practicing at the Gymnastic Club.

## Gymnastics Club Holds Tryouts Weekly At Girls Gym for Boys and Girls Teams

The Oak Ridge Gymnastics Club will hold tryouts on every Wednesday evening in October from 6:30 to 7:30 p.m. at the Oak Ridge High School girls' gymnasium. Area boys and girls from 6 years through 17 are eligible to join if they can pass the entrance requirements. These include 10 pushups, a headstand held for 30 seconds, a cartwheel, and a diving forward roll, all executed in good form. Instructions will be given in these requirements each evening of the tests.

Regular sessions for gymnastics club members will begin October 7 at 7:30 for children ages 6 through 12, and 8:30 for ages 13 and older.

## 15 Years' Service

### SAFETY SCOREBOARD

OUR PLANT  
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Through October 1

Since last disabling injury on August 31

D. L. Sharp	9/01/55
R. B. Bible, Jr.	9/06/55
E. H. Gift	9/08/55
R. D. Hobson	9/19/55
E. E. Stout	9/21/55
M. P. Jones	9/28/55
V. H. Bullock	9/30/55

136490

**'Legalize' Another Drug?**

**Pot or Booze -- A Choice?**

By T. A. LINCOLN, M.D.

Young people who advocate "legalization" of marihuana argue that it is a harmless weed. When Mom and Dad lecture their son on the hazards of "blowing grass," they often do so with a cocktail in one hand and a cigarette in another. Mom pops tranquilizers into her mouth at the slightest increase in tension and Dad takes a sleeping pill two or three nights a week. Since the "establishment" has its legal drugs, why can't young people have their own, much safer kind? They rail at their parents' hypocrisy.



Dr. Lincoln

Marihuana advocates tend to compare smoking an occasional reefer with end-stage alcoholism. In such a comparison, marihuana looks good. What is needed is another comparison of the overall effects of both and then to decide if our society is willing to take on the responsibility of adding another "legal" drug to our bursting medicine cabinets and liquor lockers.

Young people are absolutely right. Alcohol is by far this country's most serious drug problem. The death rate from alcoholism has almost doubled in the last 20 years (from about five per 100,000 to almost 10 per 100,000 per year). The increase in alcoholism as a disease has been about 30 percent in white and 90 percent in black people in the same time period. In New York and California, there are more than 8,000 alcoholics per 100,000 population. In California, alcoholism is the tenth leading cause of death.

**'Empty' Calories of Alcohol**

In some large cities, the average family spends about five percent of its total expenditure on alcohol. In the USA, over \$12 billion is spent each year on alcoholic beverages. That is a pretty fantastic drug bill when one considers that the nutritional value of most alcoholic beverages is virtually nil. True, they provide calories, but they are empty calories.

Over 50 percent of the fatal automobile accidents can be blamed on alcohol. In many locations, from 30 to 40 percent of arrests made by the local police force are for some form of drunkenness.

Alcohol in moderation may be benign, but a surprising number of medical articles have appeared in the past two to three years on the toxic effects of alcohol on the heart, brain, muscles and, of course, the liver. It is not clear whether or not there is a threshold in alcohol's toxic effect.

It has been estimated that about 10 percent of the adult population, and 25 percent of high school students have tried marihuana at least once. In a number of studies performed on college students, it has been difficult to find volunteers who have never tried it. About 30 percent of American soldiers in Vietnam smoke pot.

Marihuana is not as benign as some young people think. Toxic psychoses have frequently been reported. These may occur primarily in the predisposed, but who knows who is predisposed? "Flashbacks" similar to the acute effects have occurred days and weeks after use. Consistent physiological changes include an increased pulse rate, a dry mouth, an increased vascularity of the conjunctiva of the eye, the so-called red-eye, and increase in appetite; not dangerous in themselves but evidence of considerable physiological effect.

Psychomotor testing shows that simple tasks are not greatly affected, but complicated tasks are impaired. Subjects also overestimate elapsed time. This "stretchout" of time is appealing to many users. Studies on a driving simulator indicate that alcohol has profound effects on reaction time and judgment errors, but marihuana produces no consistent effects.

**Marihuana Linked with Increase in Crime**

Marihuana has been associated with increased crime and accidents, but the evidence is inconsistent. The biggest hazard seems to be a personality change, which often occurs with chronic use. Such individuals become introverted, less ambitious, concerned only with present pleasure rather than planning for future achievement. They seem to withdraw from the challenge of life. Here, again, predisposition is important, but if such an escape were not available, some would try to



**ENJOYING THEMSELVES**—Taking a break after a session of the Seminar for Career Secretaries are, from left, Roger Hibbs, president of the Nuclear Division; Juanita Godfrey, executive secretary to the vice president, Shook and Fletcher Insulation Company, Birmingham, Ala.; Martha Lyle, president of the Oak Ridge Chapter of the National Secretaries Association; Rachel Slover, president of the Tennessee Chapter, NSA; and Dr. William H. Bonner, head of the department of business administration at Tennessee Technological University. Miss Godfrey, Hibbs, and Bonner were speakers at the recent conference.

**Folk Dancers**

The Oak Ridge Folk Dancers began their 1970-71 season Tuesday, and will continue each Tuesday, at 8 p.m. at Elm Grove School gym.

These two-hour sessions will feature international folk dances including basic steps of the polka, waltz and schottische. Soft, rubber-soled shoes such as tennis shoes are to be worn for the gym floor finish. Newcomers as well as experienced dancers are welcome. More information may be obtained from Ken Warren, Oak Ridge telephone 483-3572.

**Brewster, Comolander, Van Hull Hi Skeeters**

Y-12 marksmen swept the boards in the September Skeet meet, held the 13. Joe Comolander claimed first place with a 49.461 score; Alan Van Hull, second, with 49.021; and Charlie Asmanes, third, with 48.878.

October's firing is set for Sunday, October 11, at 1 p.m. at the Oak Ridge Sportsmen's Association range.

Firer	H*Cap Score
Carl Brewster, Y-12	48.042
Bob Allstun, Y-12	48.442
Charlie Asmanes, Y-12	48.878
Ben Etheredge, Y-12	48.068
Jack Case, Y-12	48.654
Leon Bray, Y-12	47.947
Ken Bahler, Y-12	48.298
Joe Comolander, Y-12	49.461
Bobby Powers, Y-12	48.442
Robert McNabb, Y-12	48.400
Alan Van Hull, Y-12	49.021
Fred Welfare, ORNL	48.313
Perry Bullard, Y-12	47.915
Bill Weathersby, Y-12	48.068
Will Davy, Sr., ORGDP	47.920
George Kwiecien, ORNL	47.920
Will Davy, Jr., ORNL	48.070
Hemma Comolander, ORNL	46.000
Dave Dry, ORNL	47.033
Vernon, Raaen, ORGDP	47.920

meet the challenge and might succeed. Graduation to other drugs also seems to be a common hazard.

Both alcohol and marihuana are potentially dangerous and debilitating drugs. In countries where alcoholism does not occur because of strong religious taboos, there are "skid rows" based on marihuana. Our country has failed miserably in combating alcoholism. Is there any reason to believe we would do any better with marihuana if it were legalized? The repeal of prohibition was not associated with any decline in alcoholism.

**Winter Sports Signal Hoisted by Recreation**

Basketball and volleyball teams should begin forming for entry into the 1970-71 season.

Teams are urged to call the Recreation Office (3-7109 in Y-12; 3-3097 in K-25) with the following information: Team name, captain, building number and telephone extension, with the same information on an alternate captain.

Teams should be entered in both leagues by the end of October so that schedules may be made for practice to begin early in November. Play should begin in both volleyball and basketball the latter part of the month, or in early December.

**NEWS**

Published Bi-Weekly For The Employees Of UNION CARBIDE CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG ..... Editor



International Association of Business Communicators

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**Fire Prevention Month Begins**





**DEDICATED SERVICE**—'In appreciation of dedicated service to the nation as a member of the team which has advanced the nation's capabilities in aeronautics and space' reads M. C. Martin's Apollo Achievement Award. He receives his plaque from R. G. Jordan, right, Superintendent of the Oak Ridge Gaseous Diffusion Plant.

## ND Testing Meet Set for October 13

Birney R. Fish, Oak Ridge National Laboratory Health Physics Division, will speak October 13, on "Environmental Monitoring of Air."

The meeting of the Oak Ridge Section of the American Society for Nondestructive Testing is set to begin with a social hour at 6:30 p.m. Tuesday, at the Oak Ridge Country Club. Fish's talk will begin at 7:45.

Fish is a research staff member at ORNL, and was recently appointed to the Tennessee State Health Planning Council by Gov. Ellington. He is a member of the Health Physics Society, American Association of Contamination Control and American Pollution Control Association. He is also vice chairman of the Knox County Air Pollution Control Board, and is an instructor at The University of Tennessee. He has edited a book, "Surface Contamination."

Reservations may be made through Wilma Curtis, extension 3-5413, or Red Clowers, Knoxville telephone 687-7110.

## Camera Club's Salon Will Open October 17

The Carbide Camera Club announces its 1970 Salon, set to open at the Oak Ridge Art Center, Saturday, October 17. In addition to the Center's regular daytime hours, the Salon will have special evening hours from 6 to 9 p.m. through October 25.

Judging for some 80 black and white slides and some 100 color prints will take place at 2 p.m., October 11, at the Alexander Motel, Oak Ridge. Club members may come by and observe the judging.

The Carbide Camera Club is made up of camera enthusiasts from the Nuclear Division.

### THE COST OF FIRE

Fire's cost to the United States economy last year was about \$2.4 billion. These losses resulted from some 2.4 million fires.

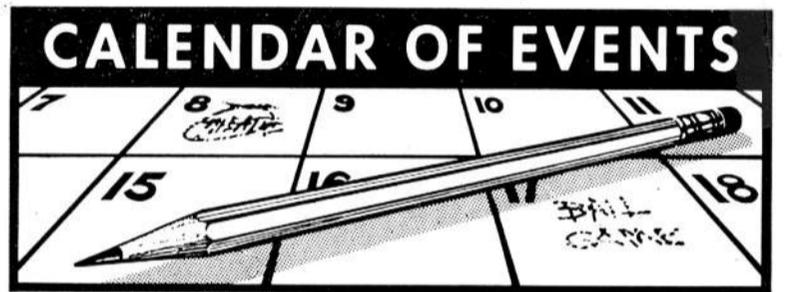
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### TECHNICAL

#### October 9

Physics Division Seminar: "High Resolution Elastic Scattering Experiments," E. G. Bilpuch, Duke University. East Auditorium, Building 4500N, 3 p.m.

Biology Division Seminar: "The Properties and Function of Lysosomes," Christian de Duve, The Rockefeller University. Large Conference Room, Building 9207, 3 p.m.

#### October 12

The American Society of Mechanical Engineers Dinner Meeting: Oak Ridge Country Club. Social hour 7, dinner 7:30 and meeting 8:30 p.m.

#### October 12-15

Analytical Chemistry Conference in Nuclear Technology: Mountain View Hotel, Gatlinburg.

#### October 12-13

Chemistry Division Annual Information Meeting. ORNL.

#### October 13

American Society for Nondestructive Testing, Oak Ridge Section. Birney R. Fish, ORNL Health Physics Division, "Environmental Monitoring of Air." Oak Ridge Country Club, social hour beginning at 6:30 p.m.

Country Club, social hour beginning at 6:30 p.m.

#### October 14-16

Chemical Technology Division Annual Information Meeting. ORNL.

#### October 15

Biology Division Seminar: "DNA Replication," F. J. Bollum, University of Kentucky. Large Conference Room, Building 9207, 3 p.m.

#### October 20-21

MSR-GCR Semi-Annual Information Meeting. ORNL.

## Film Club's Series Tickets Go on Sale

The Art Center Film Club has announced its 1970-71 season schedule.

A Czech film, "Loves of a Blonde," will open the series October 18. Thought by some critics to be the best of the brilliant though tragically short-lived Czech "New Wave," the film will be accompanied by a short film from Czechoslovakia, also, entitled "A Boring Afternoon."

November's film will be shown November 15. It is a farcical romp from England with Peter Sellers, Ralph Richardson, Michael Caine and John Mills, called "The Wrong Box."

On December 20 "An Evening with Laurel and Hardy" will feature five of the best of the "Middle Period" of the famous pair.

January 17's film will be "The Doves," a tale of perversion, filmed in 1968, called "an air of tranquil elegance."

On February 21, Riefenstahl's famous Nazi propaganda film, "Triumph of the Will," will be shown. Here the frightening power of the camera is demonstrated.

The Swedish film, "Hunger," will be shown March 21, a story in which Per Oscarsson stars. The role brought him the Cannes Best Actor Award in 1966.

The Japanese "She and He" will be shown April 18. And the Italian "Love Root" will complete the series May 16.

All films are shown at 8 p.m. at the new Jefferson Junior High School, Fairbanks Road, Oak Ridge.

Season tickets are available from Raquel Ferrari, 114 Newridge Road, Oak Ridge, telephone number 483-0012. Tickets sell for \$5 a membership; \$3.75 for students. Single admission is \$1 and \$0.75 for each performance.

## Apollo Awards

(Continued from Page 1)

mission's Oak Ridge Operations; Roger F. Hibbs, President of the Nuclear Division of Union Carbide; P. R. Vanstrum, Vice President-Production, Nuclear Division; R. G. Jordan, Superintendent of the Oak Ridge Gaseous Diffusion Plant; F. L. Culler, Deputy Director, Oak Ridge National Laboratory; and M. F. Schwenn, Manager of Administration, Oak Ridge Y-12 Plant.

## Single Adults

Single adults, in the average age range of from 19 to 30, are invited to participate in the Volleyball Group, which gathers at 8 p.m. at Willowbrook Gym every Tuesday.

An outgrowth of the Geneva group at the First United Presbyterian Church, the loosely-formed organization welcomes all unattached males and females for volleyball and other activities. A fee of 25c is asked for gym rental.

## Radioactive Gas

(Continued from Page 1)

the process is a result of years of research and development by many other scientists and engineers, especially those associated with the AEC. For example, Meyer Steinberg did the original laboratory work at Brookhaven National Laboratory.

The ORGDP process—called "continuous selective absorption"—is based "on the selective dissolution of krypton and xenon in a fluorocarbon solvent," the report states. In experiments, up to 99.4 percent of krypton passing through the system has been removed from a stream of air.

In the pilot system, gases are channeled through a series of three functional sections—the absorber, the fractionator, and the stripper—under controlled pressure and temperature. The absorber uses a refrigerant solvent to dissolve krypton and xenon; the fractionator enriches the concentration by removing other gases such as oxygen and argon; and then the stripper releases (by heating) the enriched gas, also cycling the solvent back to the absorber. The purified gases can then be permanently stored.

### Prospects 'Promising'

Several alternative processes were considered before the absorption process was selected for an intensive two-year testing program.

The authors state that the outlook for efficient and economical isolation of both gases for nuclear power plant operation is very promising. "The design, construction, and operation of such a plant are relatively straightforward," they report, "and the process lends itself well to nuclear appli-

cations where a high degree of reliability is essential."

The overall project has been directed by J. H. Pashley, with J. R. Merriman and M. J. Stephenson as principal investigators. D. I. Dunthorn coordinated experimental data analyses, and D. L. Burkett has been in charge of operating the experimental facility.



**LITTLE CHANGE**—The Administration Building in Y-12 has kept its original lines through the years. Above are seen Y-12ers re-entering the building after a fire drill back in the dim, dark days of 1945. Note the absence of paving of streets at the east end of the building. The old photo is a good reminder that this is Fire Prevention Month!