

NUCLEAR DIVISION NEWS



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

Vol. 2 — No. 1

OAK RIDGE, TENNESSEE

Thursday, January 14, 1971

Can Man Farm Plenty of Food From the Sea?

By GLENN T. SEABORG
Chairman

U.S. Atomic Energy Commission

Did it ever occur to you that we humans are very conservative creatures when it comes to our eating habits? Well, the same is



Dr. Seaborg For his first million years or so hungry man was strictly a predator, stalking game, catching fish, and eating the fruit of wild plants. Only some 10,000 years ago did he begin to develop agriculture and turn to animal husbandry. Today we may be beginning a similar shift to an "agriculture of the seas" — which more aptly has been called "aquaculture."

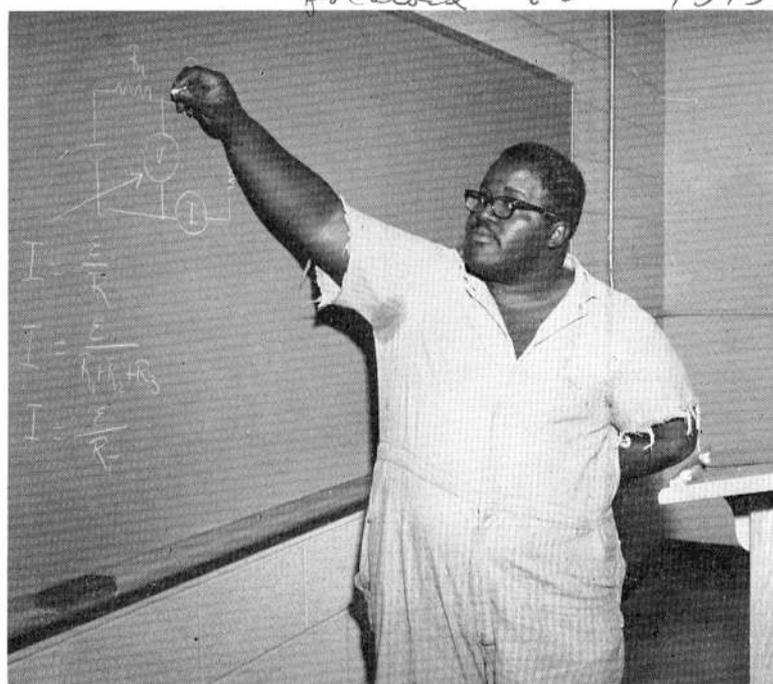
'Aquaculture'

Aquaculture is the scientific and systematic cultivation of fish and other aquatic life in the sea and in inland bodies of water. The possibilities are varied and quite promising. One significant factor in increasing the production of some marine life seems to be water temperature. In Idaho's Snake River Valley, trout farming is being carried on in spring-fed ponds where a thousand tons of trout can be raised each year on every 100 cubic feet of flow of this naturally warm water. In Scotland the water used to cool an atomic energy plant was fed into troughs where sole and plaice were raised. Both species grew to marketable sizes in six to eight months as compared to the three or four years naturally needed. Warm water from a Long Island power plant has promoted the rapid growth of oysters and clams raised in a lagoon. Of course, excessively warm water can have a detrimental effect on marine ecology and, therefore, much research is going on in the study of thermal effects on our water systems.

Interesting Possibilities

Various schemes also have been considered to increase our conventional catches by fencing sections of shallow offshore waters, seeding them with desirable species, weeding them of predators, and thus being able to harvest enormous catches of that select species.

It has even been suggested that greater food production in the seas might be stimulated by raising nutrients from the ocean bottom toward the surface where the sunlight can produce the photosynthesis necessary to make food. It is just possible that someday nuclear power stations on the ocean floor might serve such an interesting and productive purpose.



TAT SPINOFF—R. W. Byas, Jr., a graduate of the Training and Technology Program and now employed at Y-12 was a leader in organizing a special prevocational course in basic electronics being offered by Knoxville's Opportunities Industrialization Center. The Knoxville classes began last month, with the assistance of the TAT Program. Those who complete the program will be considered for more advanced training in TAT.

UF Fund Approved For Awareness House

The Anderson County United Fund has allocated \$500 per month for Awareness House starting on March 1, 1971, if the new organization is ready for operation, and continuing four months up to July 1, 1971.

After July 1 the situation will be reexamined, both in terms of the fiscal needs of Awareness House and of available United Fund funds.

"We very much wanted to show our support for Awareness House and help them get started," a UF Board spokesman said. Before further funds can be allocated, however, other considerations must be made, including an examination of the needs of existing United Fund agencies.

Before the 1970 drive, budgets of several agencies were cut by the Board's Budget Committee, in some cases with the understanding that their needs would be re-evaluated if the drive raised more than the goal. To date, the 1970 United Fund contributions total some \$298,000, about \$15,000 over the goal of \$283,000.

Of this \$15,000, \$5,000 has been tentatively committed for multi-services association, a new United Fund agency already in operation, which was established to provide tutorial service in the Scarboro community.

The general proposal to support Awareness House was formulated in a meeting last month attended by United Fund representatives Harwell Smith (Y-12), Norman Beeler (ORNL), W. W. Grigorieff (Oak Ridge Associated Universities), L. O. Gilpatrick (ORNL), and Ted Shapiro (ORGDP) and Awareness House representatives Alvin Weinberg (ORNL), William Pollard (ORAU), and Charles Davis, guidance counselor at Jefferson Junior High School.

During this meeting, the Awareness House budget was examined.

Charges Changed

Toll Enrichment Bill Signed by President

The Atomic Energy Commission has submitted to the Joint Committee on Atomic Energy proposed new uranium enrichment services criteria based on provisions of the omnibus bill which was signed December 19 by the President.

At the same time the Commission stated that the charge for enriching services on the basis of the amended criteria will be set at \$32 per kilogram unit of separative work. An increase in the recently established charge of \$28.70, which will go into effect on February 22, 1971, is necessary because of increases in the projected costs of separative work, principally the cost of electrical power.

Omnibus Bill

Enrichment of uranium involves the separation of the fissionable U-235 isotope, which makes up only seven tenths of one percent of natural uranium, from the more abundant uranium 238.

The omnibus bill provides that the charge for uranium enrichment work should be established on the basis of assuring recovery of appropriate Government costs for work done in existing Government plants.

Date Effective

Under the Atomic Energy Act, the proposed new criteria are required to be submitted to the Joint Committee on Atomic Energy for consideration during a period of 45 days while Congress is in session before they may be established by the Commission. Following expiration of this period the Commission expects to establish the new criteria and give formal notification of the new charge by publication in the Federal Register. The new charge would then go into effect 180 days after such publication.

AEC's Financial Impact Shown On Area in Year-End Report

The Atomic Energy Commission's investment in plants and equipment located in the State of Tennessee rose to \$1,658,600,000 during Fiscal Year 1970 — higher than for any of the other 28 states where AEC facilities are located.

In Tennessee, AEC facilities are centered at Oak Ridge and support broad programs of production, research, education and training in the field of atomic energy. More than 15,000 Tennesseans earn their living from the AEC's program at Oak Ridge.

S. R. Sapirie, Manager of the AEC's Oak Ridge Operations, a major field office of the Commission which is responsible for the operation of facilities in Tennessee, four other states and Puerto Rico, said "figures released in the AEC's 1970 Financial Report indicate again the strong influence of our operations on the economy of Tennessee."

"While our programs benefit the development of atomic energy around the world," according to Sapirie, "specifically in Tennessee our programs result in an annual payroll of \$150,000,000 and purchases from Tennessee firms which have totaled more than \$90,000,000 in the past three years."

Tennessee Is Third

AEC facilities in Oak Ridge are operated by private firms under contract to the Commission. The largest contractor at Oak Ridge is Union Carbide Corporation, which operates Oak Ridge National Laboratory (ORNL), the Y-12 Plant and the Oak Ridge Gaseous Diffusion Plant (ORGDP). According to the 1970 Financial Report, Union Carbide ranks first in a listing of 321 industrial contractors in the amount of work performed for the AEC.

The AEC's total costs in Tennessee during Fiscal Year 1970 totaled \$235,369,000, third highest in the United States.

Of the Commission's 11 national laboratories, ORNL ranked third in completed plant investment which stood at \$363,696,000 during the past Fiscal Year. Approximately 4,700 Tennesseans are employed at ORNL in programs for development of the peaceful applications of atomic energy.

Y-12 Employment High

The Oak Ridge Y-12 Plant, which is engaged primarily in programs for national defense,

leads all Oak Ridge facilities in total employment with 6,700 as of December 1, 1970.

The third large facility at Oak Ridge is the Oak Ridge Gaseous Diffusion Plant, representing a current investment in plant and equipment during Fiscal 1970 of approximately \$832,000,000—higher than for any other single AEC facility in the United States.

As of December 1, some 2,100 persons were employed at the ORGDP where enriched uranium is produced for use as fuel in nuclear power plants around the world. During 1970 the orders placed under the AEC's program for providing uranium enrichment services to the nuclear power industry passed the two billion dollar mark.

Animal Studies

The AEC's second largest contract in Oak Ridge is Oak Ridge Associated Universities (ORAU) which operates educational, training and research programs for the AEC. ORAU employment now totals approximately 280.

The University of Tennessee is the AEC's third major contract in Oak Ridge. With a staff of some 115 persons in Oak Ridge UT operates the AEC's Agricultural Research Laboratory where nuclear energy is being used in studies involving plants and animals.

Direct Government employment in Oak Ridge, as represented by the AEC's Oak Ridge Operations staff and other AEC offices, stood at approximately 800 in December.

Credit Unions Set Annual Meetings

Nuclear Division Credit Unions are planning annual meetings, all three set for this month.

Y-12's Credit Union, the first in line, holds its meeting next Wednesday, January 20, at 7:30, at the Robertsville Junior High School building. To be elected are two directors. Two color television sets and 25 canned hams will be given away as door prizes.

The Oak Ridge Gaseous Diffusion Plant's Credit Union has set its big meeting for Monday, January 25, at 7:30 at the Union Hall in Grove Center. Three board members and two members of the credit committee are to be named. There will be the usual array of door prizes.

The Oak Ridge National Laboratory's Credit Union will also hold its annual meeting January 25, at 7 p.m. at the Oak Ridge High School auditorium. A portable television set, some smoked hams, and at least 1,200 gifts for attendees will be given away, officials at the ORNL Credit Union state. They too have members of the board of directors to name.

The credit organizations provide financial services for the Division's some 14,000 employees. Assets for the three credit groups are in excess of \$20,000,000.

Allowable Deductions For 1970 Income Taxes

May be used only if you itemize your deductions

Hourly - Special Medical	Month	Annual
Family	2.99	35.88
Single	1.15	13.80

Salary - Major Medical	Month	Annual
Family	2.86	34.32
Single99	11.88

Honored by Magazine

Burney Guides Oliver Springs To Growth After 1967 Floods

By JOHN HAFHEY

A lot of water has flowed under the bridge since Oliver Springs' Mayor J. H. Burney (Guard Department, Oak Ridge Gaseous Diffusion Plant) took office in May, 1967.

But thanks to close cooperation among the Mayor, other Oliver Springs citizens and leaders, and the Tennessee Valley Authority (TVA), there has not been and probably will never be a repeat performance for the costly floods which staggered the community some three years ago.

Impressive flood-control measures have been implemented but, perhaps even more important, dramatic progress has also been made in industrial development, urban renewal, recreation areas, and general services.

Featured in Article

Oliver Springs' "bounce back" from the 1967 floods was praised in a recent issue of **Tennessee Town and City**. The official publication of the Tennessee Municipal League. All in all, the article states, the city can date its recent history as "either B.F. or A.F.—before or after the 1967 floods."

Actually there were two floods

—one resulting from 11 inches of rain July 5-7, 1967, and then another 9 inches, just when people were beginning to recover, on July 10 and 11.

Undoubtedly the worst flood ever to hit Oliver Springs, the waters stood four to eight feet deep in some buildings, and 300 persons had to evacuate their homes. Total flood damage was estimated to be in excess of \$850,000.

Steep Challenge

But rather than permanently setting the community back, the floods catalyzed a unified effort to build a better Oliver Springs. As **Tennessee Town and City** described it, the floods were "only the beginning" — the beginning of an impressive community comeback.

Mayor Burney, who had been in office only a short while, recognized that there were three essential elements to initiate the recovery program.

"We needed a channel to alleviate the threat of future floods, public housing for the flood victims who lost their homes, and a sanitary sewer system to serve the public housing," he recalls.



THREE YEARS AGO—Mayor J. H. Burney wades through 1967 flood waters in the yard outside Oliver Springs High School. During the peak of the rains, the water level had reached the mark indicated by the arrow. Since then, effective controls and other dramatic improvements have been made under the leadership of Mayor Burney, who is employed at the Oak Ridge Gaseous Diffusion Plant.

Results Came Fast

Today, the channel, complete with three new bridges, is complete. Some 75 units of housing have been funded, with 27 already occupied and the others under construction. The new waste water plant is already in operation, and by Summer 1971 a sewer system will be completed for the entire city.

How was so much done in such a short time under such adverse conditions? Mayor Burney attributes the success to close cooperation from the start by Oliver Springs with federal, state, and local agencies, particularly TVA.

TVA inspected the flood damage, and the community was subsequently declared a natural disaster area by the federal government. From that point on, TVA, Oliver Springs, and state officials worked together to implement a broad-scale program addressed not only to the flood program but to the myriad of other community problems. The program concept was basically an expansion of TVA's conventional local flood control project (as employed in many Valley communities) into a multi-level planning program designed to revitalize the whole town.

City Wins Award

One of the important early events was the formation of a Oliver Springs Planning Commission and the assignment, by TVA, of a full-time planner and coordinator for the redevelopment program.

In announcing an Achievement Award for Oliver Springs, the magazine also cited other progress achieved under Mayor Burney — fire hydrants and street lights in the areas annexed since 1965; a new fire station; adoption of a budget for the first time in the city's history; and various public works equipment purchases.

Even with all this progress, still on the drawing board are plans for a \$140,000 swimming pool and park development, water system improvements costing \$665,000, and an urban renewal plan that may go as high as \$1 million.

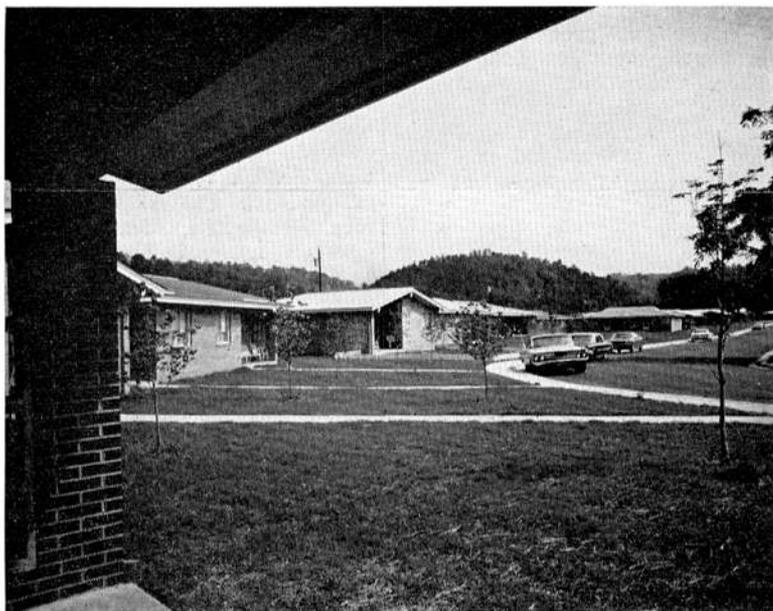
Through it all, Mayor Burney has been the quarterback. When the city needed a new fire hall, he supervised the building of it and did some of the labor himself. And when the 1967 floods threatened to drown the community's spirit, the Mayor made the right decisions, called on the right resources, and changed Oliver Springs' temporary adversity into a period of growth and promise.

Thoreau Opus Set Next at Playhouse

Henry David Thoreau is known to almost everybody as the fellow who turned his back on civilization and went out to live by Walden Pond, to "do his own thing."

Actually, the poet was at Walden for only two years, and the rest of his eventful life was spent deeply involved with family, friends, enemies and causes.

Jerome Lawrence and Robert E. Lee recognized that Thoreau was about to become the man of the hour and set about to write an exciting, humorous, entertaining play about a vigorous man of 1842 with a mind which was far in advance of his time. The play is called "The Night Thoreau Spent in Jail," and opens January 15 at 8:20 p.m. at the Oak Ridge Playhouse. Additional performances are January 16, 22, 23, 29 and 30.



NEW HOMES—Seventy-five units of housing were funded for two separate Oliver Springs sites. Today, 27 units are occupied, 19 of them by families who lost their homes in the floods. Construction of 48 more units began this month.



GRAPHIC ARTS SEMINAR—Jean Bourges of the Bourges Color Corp., New York, recently presented a seminar for all Oak Ridge illustrators and graphic artists. Representatives from the three Nuclear Division installations, AEC, ORAU, and ORTEC were present. It was the first time that a meeting, strictly for graphic artists and illustrators, had been held in this area. From left to right are R. E. Seyfried, ORGDP Graphic Arts, who coordinated arrangements for the meeting, Miss Bourges, W. C. Colwell, Jr., ORNL Graphic Arts; and W. N. Tillery, ORNL Photography.



OLD SOLDIERS NEVER DIE—Zola Hill, Legal Department, spotted this old veteran of the early days recently up in the mountains near Walland. It's an old Corps of Engineer bus marked North Portal, Y-12 only. It is being used up in the hills as a storeroom. Those things in front are not nests, according to Miss Hill, but flower boxes with dead petunias in them. Busses in the old days were free, according to reports from old-timers.

NEWS

Published Bi-Weekly For The Employees Of UNION CARBIDE CORPORATION NUCLEAR DIVISION

JAMES A. YOUNG Editor

Member  Appalachian Industrial Editor's Association

International Association of Business Communicators
OFFICE
Post Office Box Y
Oak Ridge, Tenn. 37830
Telephone 3-7100 or 3-5345

6-14859



PATENT APPLICATION—Victor M. Hovis, Metallurgical Development, center, receives a patent application for his development, "Method of Forming a Metallic Coating." William J. Hulse, left, presents Hovis his one dollar letter, while William H. Dodson, right, looks on.

Highway Toll Claims Two Additional Y-12ers

Laymon H. Johnson, a new employee in Buildings, Grounds and Maintenance Shops, was killed in an auto accident December 17, on here in Y-12, his way to work.



Johnson

He was a native of Maynardville where he lived. Mr. Johnson is survived by his wife Mrs. Shirley L. Johnson, son, Greg; mother, Mrs. Margaret Johnson, all of Maynardville; father, Vivian T. Johnson, Knoxville; sister, Mrs. Laverne Carey, Knoxville; brothers, Joe and Gene Johnson, Knoxville, Maynard Johnson, Maynardville, Doyle Johnson, Corryton; grandmother, Mrs. Jennia Ellis, Knoxville.

Funeral services were held Sunday, December 20, at Union Baptist Church. Burial followed in the Loyston Memorial Cemetery.

Funeral services for Mrs. Del W. Goins were held December 26 at the Solway Missionary Baptist Church. Mrs. Goins, Chemical Services, was killed in an automobile accident near Oak Ridge Christmas Eve.



Mrs. Goins

The former Del Walker, Mrs. Goins came to Y-12 in the early days of 1945. Her husband Pledger B. Goins was a former guard here in Y-12. In addition to her husband, she is survived by her father, Baxter Walker, Greeneville; brothers, Milton and Jack Walker, also of Greeneville, and Robert Walker, Plant City, Fla., and Louis Walker, Bonita, Ga. A sister, Mrs. Elizabeth Blankenship, Greeneville, also survives.

Burial was in Oak Ridge Memorial Park.



Riders wanted from West Village, Oak Ridge, to North or Biology Portal, straight day. Max Whitley, plant phone 3-7564, home phone Oak Ridge 483-3450.

Ride wanted from Norwood, Merchant Road section, Knoxville, to East Portal, straight day. Joan Clouse, plant phone 3-5968, home phone Knoxville 689-4874.

Ride wanted, riders wanted, or will join car pool from North Hills section, Knoxville, to any portal, straight evening shift. H. A. Hanna, plant phone 3-5283, home phone Knoxville 522-0587.

Ride wanted from 319 East Drive, Oak Ridge, to North or Central Portal, straight day. Alice Hager, plant phone 3-7295, home phone Oak Ridge 482-4581.

Riders wanted, or car pool members wanted, from West Haven, Cumberland Estates areas, Knoxville, to any portal, straight day. R. C. Whitehead, plant phone 3-5095, home phone Knoxville 525-8903.

Chemical Society Paper Is Given in New Orleans

A Union Carbide chemist at Y-12 presented a technical paper at a recent meeting of the American Chemical Society in New Orleans, La.



McIntyre

J. M. McIntyre, Development Division, presented a paper entitled "The Kinetics of the Thermal Decomposition of Lithium Hydroxide." The information was developed in support of U. S. Atomic Energy Commission programs here.

Long-Time Y-12 Secretary Hazel Z. Lane Succumbs

Funeral services for a well-known Y-12 secretary, Mrs. Hazel Z. Lane were held Saturday. She died after a long illness, January 5, in a Knoxville hospital.

Mrs. Lane came to Y-12 April 15, 1944, and worked many years in Industrial Relations. She was in Ceramics and Plastics Development at the time of her death. She was a native of Chicago.



Mrs. Lane

Surviving are her husband, Donald E. Lane, Electrical and Electronics Department; daughters Karyl Hall, Powell; and Patricia Lee, Winterhaven, Fla.; six grandchildren; sister Mrs. Jeanne Z. Brown; and step-mother Mrs. Ethel A. Zingerman.

Burial was in Highland Memorial Cemetery. Memorial contributions may be made to the American Cancer Society.

Ed Fleischman Rites Are Held Here December 31

Graveside services were held December 31 for Edwin F. Fleischman, at the Oak Ridge Memorial Park. Mr. Fleischman came to Y-12 December 13, 1954, after working with Standard Oil, Linden, N. J., and in Argentina. He was a graduate of Pratt Institute, and did graduate work at New York University.



Fleischman

The Fleischman home was at 603 West Vanderbilt Drive, Oak Ridge, where his wife Mrs. Marion Syarc Fleischman and daughter, Marie Ann, survive. He is also survived by a son, Edward F. Fleischman, Jr., Huntsville, Ala.; his father Frank Fleischman, Houston, Tex.; and a sister, Edith Fleischman, Houston.

Mr. Fleischman died the victim of cancer at the Oak Ridge Hospital on December 29.

December Retirees Close 226 Years with Carbide

Twelve Y-12ers retired last month with a total of 226 years company service.

From Maintenance Andy T. Goodwin, Process Maintenance; and Walter N. Reed, Electrical and Electronics, retired.

Taking early retirements were Kenrith M. Adkins, General Metal Fabrication Shop; Otto O. Boles, Area Five Maintenance; Roscoe F. England, Sr., M-Wing Shop; Harry L. Garrett, Area Five Maintenance; Ardill Griffith, Laundry; Harry L. Hunter, Machine Maintenance; John S. Irving, Process Maintenance; Frank E. Morrow, Chemical Services; Lucille W. Pruitt, General Can Fabrication Shop; and Milas L. Turner, Area Five Maintenance.

All 12 Y-12ers retired December 31.

Two Well-Known Carbiders Assigned to New Positions

Two Y-12 veterans have been reassigned into new positions. Robert T. Cantrell, well-known director of Recreation, has been transferred into Retirement Counseling to add emphasis along with T. A. Burkett in furnishing a service designed to assist employees in more adequately preparing for retirement.

Emmett L. Moore has been named Recreation Director, transferring from the Utilities Department.

Active in Community

Cantrell, a native of Alexandria, Tenn., came here November 17, 1943, after working for four years with Foster and Creighton in personnel work. He was with the Civilian Conservation Corps from 1934 until 1939. He worked in Employment here in Y-12 for almost 15 years before being named recreation director.

Mrs. Cantrell, executive director of the local YWCA, is the former Kathryn McLain, and they live at 114 East Pasadena Rd., Oak Ridge. They have two children, Mrs. Mary Underwood, and Robert T., Jr., in theology school at Emory University. Cantrell has been very active in church and community circles, and still is on the executive board of the Oak Ridge Chapter of the American Red Cross. He is a member of the Oak Ridge Human Relations and Resources Board, and has held practically every lay office in the First Methodist Church of Oak Ridge. The Cantrells have one grandson.

Emmett L. Moore, well-known Utilities foreman, becomes the new Recreation director. He was formerly a fire and guard officer in the plant.

Marine Corps Veteran

Moore is a veteran of the U. S. Marine Corps, serving during World War II. He worked for Tennessee Eastman Corporation, Kingsport, before entering service. He worked with the Marion Bottling Co., Marion, Va., before coming here. His continuous service date is February 16, 1947.

The Moores live at 211 North Purdue Ave., Oak Ridge, where they are active members of Grace Lutheran Church. Mrs. Moore is the former Virginia Johnstone. They have one son, David, at home, who is a junior at Oak Ridge High School, where he is a quarterback on the Wildcats' squad. They also have two daughters, Rebecca Wolfe, Huntsville, Ala.; and Patricia Burgess, Ft. Sill, Okla.; and three other sons: Emmett L., Jr., Ft. Worth, Tex., Larry, Alcoa, and Rodney, who



Robert T. Cantrell



Emmett L. Moore

live in Oak Ridge. There are eight grandchildren, too.

Avid Sportsman

Moore is a member of the Refrigeration Services Engineering Society. He is an avid sportsman in countless areas.

Recreation and Retirement Counseling are in Industrial Relations Division. Both Cantrell and Moore report to W. S. Porter in their new positions.

Twisters Take Mixed Bowling League Half

The Twisters, not content with taking the Mixed Bowling League's first half crown, now come charging back to claim the lead in the initial stages of the season's second half. They took the first half, a comfortable three points ahead of the Roses 'n Thorns.

C. R. Lively, Rollers, recently rolled a 214 single scratch game, and Fred Hammond, Goofers, gained a 219 one last week.

Current standings follow:

Team	W	L
Twisters	7	1
Goofers	6	2
Rollers	6	2
Alley Cats	4	4
Friskies	4	4
Cougars	3	5
Roses 'n Thorns	1	7
Hits & Misses	1	7

UNEMPLOYED YOUTH

About half the unemployed youth aged 16 to 21 are functionally illiterate, (a term commonly used with reference to those who have completed only the fourth or fifth grade in school).

SAFETY SCOREBOARD

The Y-12 Plant Has Operated 23 Days Or 690,000 Man-Hours (Unofficial Estimate) Through January 10

Without A Disabling Injury

SAFETY AT HOME, AT WORK, AT PLAY



WEDDINGS



Mr. and Mrs. James Anthony Ridley III

RIDLEY—PATTERSON

Barbara Lee Patterson and James Anthony Ridley, III, were married November 26 at the First Presbyterian Church, Gallatin, Tenn. Rev. Charles Moffat officiated at the rites.

Teresa Ann Bomar was her sister's maid-of-honor, and James Anthony Ridley, Jr., served as his son's best man.

A reception honored the couple at the groom's parents home in Gallatin after the ceremony.

The bride attended Middle Tennessee State University and The University of Tennessee. (She is the daughter of James D. Bomar, Beta Four Forming). The bridegroom attended Vanderbilt University and graduated from UT Law School. He is employed by Judge Robert L. Taylor as a law clerk.

The couple is living at 1567 Coleman Road, Knoxville.



Mr. and Mrs. Ralph Edward Stevens

STEVENS-BOYD

Brenda Jones Boyd and Ralph Edward Stevens were married in October at the Chapel-on-the-Hill, Oak Ridge. The Rev. Donald Goodwin officiated at the rites.

Mrs. Stevens, employed in Process Maintenance, is the daughter of Mr. and Mrs. Claude E. Jones, Tacora Hills, Clinton. The bridegroom is the son of Mr. and Mrs. Clarence L. Stevens, Sr., 115 Niagara Lane, Oak Ridge. He is also employed in Y-12, in the Metal Preparation Division.

The father of the bridegroom retired from Y-12 recently.

The bride is a graduate of Clin-

Rollmasters Take C's Half Crown

The Rollmasters rolled their way into victory prior to the holidays, taking the C League's big crown for the first half by a three point margin over their nearest opponents the Rounders. Actually, the Rounders rolled four past the Rollmasters, but the big team was out front by seven, so the league was all over on December 14, for practical purposes.

On December 28, the league began second half rolling. Billy Sise, Big Five, bowled a 236 scratch, 257 handicap game.

Last week, Jay Sewell posted a big 246 scratch, 263 handicap game!

New standings follow:

Team	W	L
Instrument Engineers	8	0
Badgers	7	1
Sunflowers	7	1
Jaguars	5	3
Anodes	5	3
Rollmasters	5	3
Big Five	5	3
Purple Pygmies	2	6
Fireballs	2	6
Rounders	1	7
Parbusters	1	7
Royal Flush	0	8

Markers Take Laurels In Classic First Half

The Markers, not content with winning the Classic Bowling League during the first half's rolling, they came charging back last week to plaster the Swingsters for the full count. They outdistanced the Swingsters for the league half-crown by four and one-half points.

Charley Baxter, Screwballs, rolled a 239 game on December 17 . . . Harold Zang, Markers, zoomed one in last week to the tune of 235!

League standings follow:

Team	W	L
Markers	4	0
Has Beens	3	1
Playboys	3	1
Rippers	3	1
Bumpers	2½	1½
Eagles	2½	1½
Screwballs	2	2
Cubs	2	2
Rebels	2	2
Smelters	2	2
All Stars	1½	2½
Tigers	1½	2½
Rojos	1	3
Splinters	1	3
Eightballs	1	3
Swingsters	0	4

Mix-Ups Grab Slim Starlite Alley Lead

The Mix-Ups moved into the lead of the Starlite Bowling League last week, with some fancy bowling from Mel Strickland. He rolled a 225 game, a 606 series to lead the pack into first place.

J. D. Ball, Wildcats, posted a 216 game, a 597 series, the week before the holidays. The League did not roll during Christmas.

League standings follow:

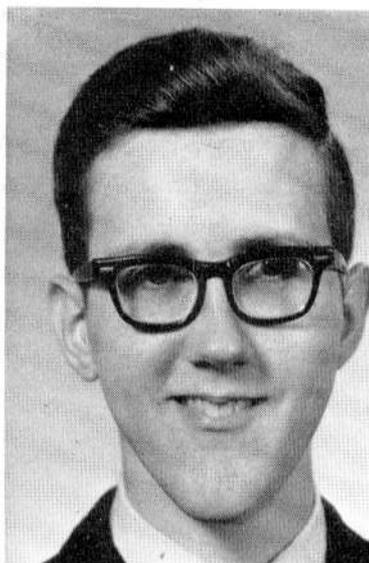
Team	W	L
Mix-Ups	34	11
Raiders	33	12
Wildcats	26½	18½
Woodpeckers	26	19
Latecomers	26	19
Marauders	23	22
Pin Boys	20	25
Comets	19	26
Splitters	9½	35½
Rollers	8	37

ton High School and Knoxville Business College. Mr. Stevens graduated from Oak Ridge High School in 1962, where he played on the varsity basketball squad the year the team won the State Championship Title. He attended Middle Tennessee State University and spent four years in the U. S. Air Force, one of them in Vietnam.

The couple is at home at Route 3, Tacora Hills, Clinton.

Common sense is one's capacity to think far enough ahead to remain silent at the right time.

Duncan Son is Tapped For Engineering Honors



Michael Gary Duncan

M. J. Duncan, General Plant Tooling Coordination, has recently learned that his son Michael Gary had been elected to Tau Beta Pi, national engineering honor society at The University of Tennessee.

Tau Beta Pi represents the highest honor to be attained by an engineering student. Membership is awarded on the basis of high scholarship and outstanding character.

Young Duncan is a student in electrical engineering. He is a junior at UT, and a 1967 graduate of Clinton High School.

The Duncans live at 300 Walnut Street, Clinton.

Battery Contracts

Contracts totaling approximately \$50,000 have been awarded to three firms by the Atomic Energy Commission for batteries to be used in the plants and laboratories here.

The companies and the value of each contract are: R. P. Mallory and Company, Inc., \$31,604; Burgess Battery Division of Clevite Corporation, \$11,993; and Consumer Products Division of Union Carbide Corporation, \$6,316.

The batteries will be used in equipment and instruments at the three AEC plants here in Oak Ridge.



CROWNED QUEEN — Vicki Sims, Karns High senior was crowned homecoming queen recently at the Karns-Webb School football game. She is the daughter of W. J. Sims, Buildings, Grounds and Maintenance Shops. The Sims have a son also, Alan, a freshman at Tennessee Polytechnic University.



Early 1971 finds more Y-12ers marking important dates with Union Carbide Corporation. Congratulations.

25 YEARS

James W. Emch, Buildings, Grounds and Maintenance Shops, January 4.

James B. Soward, Metallurgical Development, January 7.

Joe P. Harvey, Civil and Architectural Engineering, January 7.

John Sewell, Machine Maintenance, January 13.

Elizabeth C. Johnson, Statistical Services, January 13.

20 YEARS

Jessie E. Johnston, H-2 and F-Area Shops, January 2.

Charles F. Peterson, Special Production Scheduling and Coordinating, January 2.

Joseph Pryson, Dimensional Inspection, January 2.

Ralph C. Kinnaman, Instrument Engineering, January 2.

Warner L. Taylor, Jr., H-2 and F-Area Shops, January 3.

Charles E. Dugger, Alpha Five East Shop, January 3.

Charles S. Scarbrough, Guard Department, January 4.

Howard Garrison, General Weld Shop, January 4.

Thomas A. Scarbrough, Research Services, January 4.

Robert C. Weaver, ORNL Chemical Services, January 5.

James D. Brown, Dimensional Inspection, January 8.

Newell M. Standridge, Utilities Administration, January 8.

Samuel T. Shultz, General Can Fabrication Shop, January 8.

Herschell L. Brown, Buildings, Grounds and Maintenance Shops, January 8.

Garvin R. Stephenson, Assembly Operations, January 8.

Audley L. Sawyer, Electrical and Electronics, January 9.

Chelton T. Bunch, H-1 Foundry, January 9.

Curtis A. Duff, Timekeeping, January 10.

Druey B. Blackburn, Research Services, January 10.

Tilman B. Phillips, Tool Department, January 11.

Howard W. Peckman, Buildings, Grounds and Maintenance Shops, January 11.

William P. Campbell, Alpha Five East Shop, January 11.

Roy H. Stooksbury, Receiving Department, January 11.

George B. Borella, Machine Maintenance, January 12.

Elgie A. Wells, Utilities Administration, January 12.

Troy C. Trotter, Engineering Division, January 12.

Walter L. Simmons, Maintenance Administrative Services, January 15.

John C. Bishop, M-Wing Shop, January 15.

Joseph E. Miller, Environmental Control Engineering, January 15.

John C. Bryan, Beta Two Chemistry, January 15.

Lonnie K. Dickey, Dimensional Inspection, January 15.

William A. Sahr, Alpha Five East Shop, January 15.

Allen E. Morton, Buildings, Grounds and Maintenance Shops, January 15.

15 YEARS

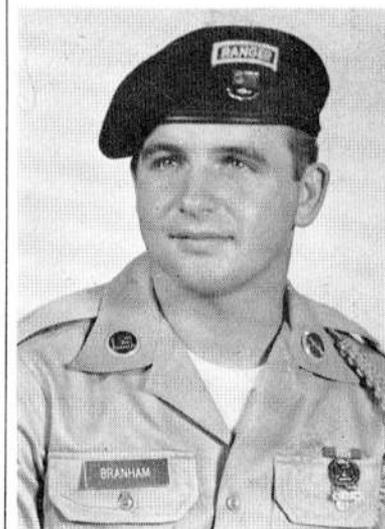
Coleman C. Wright, Laboratory Development, January 13.

Hilton H. Abernathy, Process Maintenance, January 16.

10 YEARS

Martin A. Broders, Publications

Branham Son Gets Gallantry Medal



S.Sgt. Danny L. Branham

A Y-12er's son has been awarded the Silver Star for gallantry in action in Vietnam. Staff Sergeant Danny L. Branham, son of Mr. and Mrs. Les Branham, 517 Scenic Drive, Clinton. His father is in Y-12's Area Five Maintenance.

Danny, a graduate of Clinton High School has been in the Army a year and a half. He began his basic training at Ft. Gordon, Ga., and took advance training at Ft. Polk, La.; and NCO training at Ft. Benning, Ga.

He was awarded the Bronze Star for meritorious achievement in ground operations against hostile force for the period of September 1 through October 31, 1970.

The Silver Star gallantry-in-action citation reads in part: "Staff Sergeant Branham distinguished himself by heroic actions on 31 August, 1970, while serving with Company A, 4th Battalion, 23d Infantry in the Republic of Vietnam. While on a reconnaissance operation, Company A came under intense small arms, automatic weapons, and rocket propelled grenade fire from a large enemy force. During the initial contact, one of the platoon leaders was seriously wounded. With complete disregard for his own safety, Sergeant Branham exposed himself to a hail of enemy fire as he took command of the platoon and began directing his men in placing suppressive fire on the hostiles. When his element became pinned down by an enemy position, Sergeant Branham exposed himself to great danger as he maneuvered forward and silenced the aggressors. Continuing to provide inspired leadership, Sergeant Branham directed the evacuation of several wounded personnel. His valorous actions contributed immeasurably to the success of the mission. The bravery, aggressiveness, and devotion to duty exhibited by Sergeant Branham are in keeping with the highest traditions of the military service and reflect great credit upon himself, his unit, the 25th Infantry Division, and the United States Army."

and Technical Information, January 3.

Elmer L. McGhee, Dimensional Inspection, January 7.

Thomas E. Stooksbury, Beta Four Heavy Machine Shop, January 9.

William T. Calhoun, Alpha Five West Shop, January 15.

George L. Rule, Tool Grinding, January 15.

Clarence W. Huffaker, Beta Two Shop, January 15.

THE CARBIDE COURIER

Thursday, January 14, 1971

Page 3

December Retirees Total 321 Years UCC Service

Thirteen employees departed from K-25 on retirement status during December. They are Wiley Barber, W. J. Dobson, G. E. Franklin, L. C. Gilmore, L. F. Haese, R. H. Holt, T. B. Humphreys, O. L. Lanham, J. B. Marcum, O. L. Oden, R. E. Owens, W. L. Taylor, Jr. and R. L. Teague.

Barber

Wiley Barber has been a painter in the Buildings and Grounds Department, Fabrication and Maintenance Division. He was employed here in August, 1946 after having previously worked for TVA and Tennessee Eastman.

Barber was born in Harriman and attended public schools in Petros. He is married to the former Mildred Adcox. They have a son, Charles Evans, working here at K-25 and a daughter, Mrs. Randall Melhorn, Dothan, Ala.

Barber's outside interests and plans after retirement include fishing in local lakes and streams and deep sea fishing in Florida, also squirrel and coon hunting and growing flowers and vegetables. The Barbars reside in Coalfield.

Barber says, "I have enjoyed my work at Carbide and my association with co-workers and supervision."

Dobson

Walter J. Dobson has been a janitor in the Fabrication and Maintenance Division since October, 1945. Before coming with us he had worked for Alcoa and served three years in the U. S. Army Air Corps.

Dobson was born and attended public schools in Greenback. Mrs. Dobson is the former Lillian Brown. They have been raising six nieces and nephews for the past seven years since the parents of the children died.

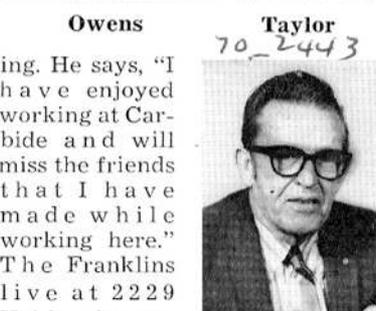
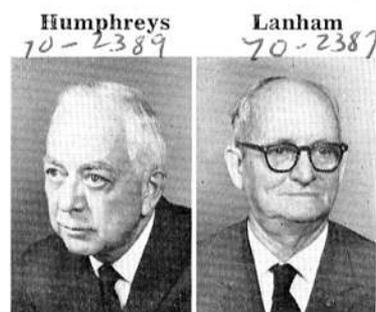
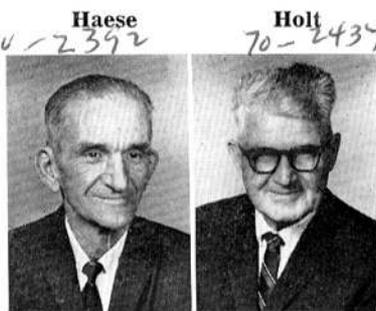
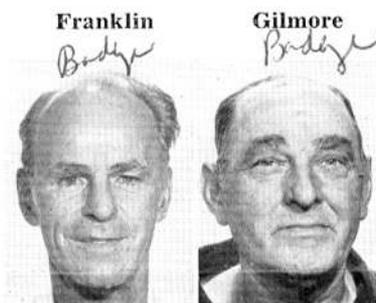
Dobson loves baseball and plans to do some truck farming after he retires. He says, "I plan to keep busy, I would worry myself to death just sitting around." He praised the employees in the Utilities Department and in the Central Control Room for their friendliness and cooperation. The Dobsons live at Route 4, Loudon.

Franklin

Garland E. Franklin, stores clerk in Finance and Materials, was employed at K-25 on December 14, 1944. Prior to his employment here, he worked for Payne Brothers Produce Company at Young Cane, Ga., and for Timken Roller Bearing Company in Canton, Ohio.

Franklin was born in Madison County, N. C., and attended school in Blairsville, Ga. Mrs. Franklin, the former Beulah Burns, is a minister in the Church of God. They have three children; Garland R. is the owner-manager of ABS in Knoxville, Glen W. is owner-manager of the Pioneer Trucking Company in Franklin, Tenn., and a daughter, Mrs. Beatrice McCoy, employed as a bookkeeper by the H. T. Hackney Company in Knoxville.

Franklin's outside interests include hunting, fishing and farm-



Gilmore

Lee Charles Gilmore has been a fire driver in the Fire Department. He was first hired at K-25 on March 12, 1946. He experienced two reductions - in - force when K-25 was curtailing operations, thus his latest continuous service date is September 18, 1967. Before coming with us he worked for TVA and the Southern Railroad. He served almost four years in the U. S. Army as a bulldozer operator, some of this time in the Burma Operations.

Gilmore is a native of and attended public schools in Harriman. He is married to the former Jettie Ruth Frances and they have two children, Rickey Wayne and Sandra K. They reside on Route 2, Harriman.

Haese

Louis Frederick Haese has been a field services maintenance foreman in Cascade Maintenance, Fabrication and Maintenance Division. He came to K-25 on March 5, 1945. Prior employment included the J. H. Williams & Company in Buffalo, N. Y., the Western Electric Company and several firms engaged in radio and instrument repair.

Haese was born and attended public schools in Buffalo, N. Y. He has taken a number of technical courses relating to electricity, telephone and electronic instrument maintenance and repair. He is married to the former Grace Matilda Pless and there are two children, Ronald Charles, and a married daughter Lois Ann Bradley. The Haese residence is 108 Euclid Place in Oak Ridge.

Holt

Raymond Harold Holt has been a K-25er since March, 1945, employed as a welder in Fabrication Shops, Fabrication and Maintenance Division. Before coming with us he worked for Poe Piping in Oak Ridge and before that, worked for Southeastern Shipbuilding Company in Savannah, Ga.

Holt was born in Fairmount, Ga. He attended schools in Fairmount and in Snoreville, Ga. Mrs. Holt is the former Mary Alice Shirley. They have a son, Jerry Ray, residing in Atlanta.

The Holts live at 116 Tucker Road, Oak Ridge.

Humphreys

Taylor Blair Humphreys, Fire Department, has worked here since June 1, 1944. Before his employment here, he farmed and worked for the Sweetwater Mining Co.

Humphreys is a native of Roane County and attended schools in Pine Grove, McMinn County, and in Ten Mile and Concord in Meigs County. Mrs. Humphreys is the former Roberta Walker. The Humphreys have 10 children — eight boys, Walker, twins Edwin and Edward, Guain, Donald, Murrel, and twins Jerry and Larry. The girls names are Geraldine and Janice. The Humphreys home is on Route 1, Erie.

Farming, hunting and fishing will occupy Humphreys' time following his retirement. He says, "I have really enjoyed working here,



ACHIEVEMENT AWARD PRESENTATION — Three men recently completed the helper training program and are now classified as first-class mechanics. Holding their plaques from the left are S. C. Metheney, welder; F. C. Kirkland, electrical mechanic; and G. E. Barger, sheet metal worker. W. E. Rooks, left, superintendent of Field Maintenance made the presentation; as L. A. Studinger, right, superintendent of the Fabrication and Maintenance Division looks on.

Carbide is a fine company to work for."

Lanham

Oliver Austin Lanham left us as a cascade operator in the U-235 Separation Department, Operations Division. He was originally employed on November 27, 1944. Before coming with Carbide, he had worked 20 years in coal mines.

Lanham was born in Westbourne, Tenn., and attended school in Harlan County, Ky. Mrs. Lanham is the former Ruby Alice Thomason. The Lanhams have four boys; Donald works in Y-12, Paul is self-employed in Lenoir City, Oliver is with Firemans Life Insurance Company in Greensboro, N. C. and Arthur is a senior in Lenoir City High School.

Lanham's retirement plans include fishing, hunting, traveling, raising flowers and farming. The Lanhams live at Route 1, Lenoir City.

Marcum

J. B. Marcum has over 40 years service with Union Carbide. He was first employed at South Charleston, W. Va., and transferred to K-25 on May 1, 1944. He has been serving as corporation housing representative in the Auditing Division.

Marcum was born in Lexington, Ky., and attended public schools there and in Columbus, Ohio, and Charleston, W. Va. He is married to the former Virginia Branham. The Marcums live at 360 East Drive, Oak Ridge.

Marcum has a wide variety of outside interests including art, music, growing flowers, and he is currently the chairman for the Anderson County Blood Program for the Red Cross. He says that he is going to "let each day decide itself."

Oden

Orville Leslie Oden has been in the Buildings and Grounds Department, Fabrication and Maintenance Division, since coming with Union Carbide in November 23, 1945. He was self-employed in the cafe business and school teaching before he came with us.

Oden was born in Ryan, Ala. He attended public schools in Ryan and in Tuscaloosa, Ala. He also attended the University of Alabama for four years, taking education and pre-med courses. Mrs. Oden is the former Myrtle Welch. The Odens have five children; David C., employed at ORNL; Billie, principal of Pinson High School in Birmingham, Ala.; Leslie Eugene, a major in the U. S. Army; Jerry is a full time employee at Krogers; and Gary, a student at UT. The Odens live at 112 Jonathan Lane, Oak Ridge.

Oden's plans for the future include hunting, fishing, and working with flowers and vegetables. He plans to stay in Oak Ridge for
(Continued on Page 4)



RECENT BRIDE — Brenda Madge Horton, daughter of Anna Lou Horton, Material Services, was married on November 28 to Gay N. McMurray of Seymour, Tenn. The ceremony was performed at the Zion Baptist Church, Claxton. The couple is residing in Johnson City.



CHRISTMAS DANCE—A montage of pictures show scenes of the K-25 Christmas Dance held December 12 at the new Oak Ridge Civic Center. Fabrication and Maintenance employees were hosts for the annual event.

December Retirees Total 321 Years Service

(Continued from Page 3)
 a while, then return to his farm in Alabama. He said, "I have enjoyed my work at Carbide and will miss the fellowship with all my friends here."

Owens

Roscoe Eldon Owens has been a maintenance mechanic in the Power and Utility Maintenance Department, Fabrication and Maintenance Division. He was employed here on March 3, 1944. He had worked for TVA before coming with Carbide. He spent five months in the U. S. Army in 1943.

Owens was born in Ducktown, Tenn., and attended school in Parksville. Mrs. Owens is the former Myrtle Qualls from Benton, Tenn. The Owens presently live in Benton on Route 1. They plan to build or buy a home in Cleveland, Tenn.

Outside of doing some bird hunting, Owens says that he just "plans to take it easy."

Taylor

William Leachman Taylor, Jr., has been an accounting analyst in the Budget Department, Finance and Materials Division. He has been employed here since November 1, 1945. Prior to coming with UCC, he worked for du Pont at Charleston, Ind., and Pryor, Okla. He served in the U. S. Navy from December, 1942, to July, 1945, primarily in the North Pacific during World War II.

Taylor was born and attended public schools in Louisville, Ky. Mrs. Taylor is the former Roberta Quick and was employed as a

secretary in the General Finance and Materials Division here at K-25 for a number of years.

Fishing, golf, auto mechanics, and spectator sports will occupy the Taylors' time following retirement. He says, "We plan to go to southern Florida for a few months of just golfing, fishing, and relaxing in the sunshine. We have no long-range plans other than to spend more time with our families in Kentucky and Ohio, and to visit many good friends who have left Oak Ridge over the years."

"I have enjoyed my work and associates at Carbide, and Roberta and I will both miss the daily contact with our friends."

Teague

Robert Lute Teague, maintenance mechanic in the Machine Shop Department, Fabrication and

Maintenance Division, has been employed since March, 1945. Before coming with us, he worked for Saint John's Shipbuilding Co. in Jacksonville, Fla.

Teague was born and grew up in Hickory, N. C. Mrs. Teague is the former Stella Deal from Drexel, N. C. They have three children; a daughter, Joan Hovater, is employed at K-25, Ronnie works for Cole Drugs in Oak Ridge, and Charles attends Oak Ridge High.

Bob plans to use his leisure time fishing and golfing. He says, "I have enjoyed working at K-25, made a lot of friends, and I hate to leave."

Tuesday League

Harold Gunter and Ray Rinehart shared Bowler-of-the-Week honors in the December 22 session of the Tuesday League. Gunter had a 231-255 single game and Rinehart had a fine 595-673 series.

It's anybody's race in this League, the three top teams separated by a single point.

Standings

City Slickers	40	Double X	31
All Stars	39	Possibles	31
Atoms	39	Full House	12

Women's Bowling

Peggy Harris, Nancy Hay, and Betty Kemper had the best scores in the December 29 session of the K-25 Women's League. Peggy had a 183 scratch game, Nancy rolled a 224 handicap game, and Betty had series scores of 510-633.

Charlene Castle was the Bowler-of-the-Week on December 15, having a 237 handicap game and a 493-640 series. Oleta Carden had the best single scratch score with a 199.

Standings

Pay-Offs	37	Bowlettes	31½
Up-Towners	35	Pin-Ups	24½
Wood Bees	35	Hits	
Hot Shots	33	& Misses	14½
		Spotters	14

SAFETY SCOREBOARD

OUR PLANT
 Has Operated
1,708,000 Safe Hours
Through January 7
 Since last disabling injury on August 31

Wednesday Bowling League

Congratulations to the Pirates who won the first half of the current season! The Rookies were the hot team in the December 30 session with a 2969 series although the Amps were close with a 1039 for the best team game of the week.

John Peer was Bowler-of-the-Week with a 224-249 single game and a 583-658 series.

The best game of the season was rolled by the Planners on December 16! They had a 1008-1151 single score and a fine 3065 handicap series. Palkowski had a 265 handicap game and Bradley rolled a 684 handicap series.

Standings

Pirates	42	Planners	29
Demons	38	Mix-Ups	27½
Amps	33	Rookies	21
Sandbag'rs	29½	Freezers	20

10 Years' Service

R. D. McCulloch	12-01-60
T. I. Reasor, Jr.	12-03-60
B. H. Stoutt	12-19-60

15 Years' Service

H. C. Monger	12-01-55
R. K. King	12-06-55



Ride wanted from West Knoxville to Portal 4, 8:00 to 4:30. Pat Pacheco, 3-3267, home 584-7387.

20 Years' Service

J. J. Blankenship	12-04-50
T. B. Bomar	12-08-50
J. F. Hudson	12-11-50
M. D. Myers	12-11-50
G. B. Brooks	12-18-50
H. E. Alexander	12-18-50
G. P. McKeethan, Jr.	12-18-50
E. J. Asbury, Jr.	12-19-50
G. W. Wylie	12-24-50
S. H. Neal	12-29-50

LUNAR LODGE

Man's first moon house may be an inflatable structure fabricated with man-made materials and erected by oxygen brought from earth. A model has been constructed using a combination of nylon, vinyl, "Mylar" and stainless steel. Designed to serve as a moon shelter for two astronauts for eight days, scientists claim it is tough enough to resist meteoroid bombardment and thermal radiation.

THE CARBIDE COURIER

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

6-14887 - 6-14900

THE MYOPIA MYSTERY

By T. A. LINCOLN, M.D.

It would be easy to say that nearsightedness, more properly called myopia, is simply an inherited defect. It obviously "runs" in families. When both parents have worn glasses since childhood, it is likely that several of their children will also need glasses. However, it isn't as simple as all that!

In myopia, the distant visual image is brought to focus in front of the retina rather than directly on the retina where it belongs. As a result, the image is blurred. Another way of expressing it is to say that the back of the eye is too far back!



Dr. Lincoln

The globe of the eye is too long. As a matter of fact, actual autopsy measurements of the axial diameter of myopic eyes have found them to be several millimeters too long.

Focusing of the light beam on the retina is not entirely a passive process determined by the length of the eye and the refractive characteristics of the lens. Accommodation is the power of altering the focus of the eye by increasing the convexity of the lens. It is needed to focus on near objects, such as during reading. Delicate muscles

change the shape of the lens, enabling a young person to read fine print only a couple of inches in front of his face. As a person gets older, his lens become less flexible so that after age 45, he can no longer read at a comfortable distance without special reading glasses or bifocals. Accommodation functions chiefly with near vision and is of little help in correcting myopia. It may, however, be a factor in causing myopia.

Reading Ups Myopia Incidence

Several experts believe that the muscular stresses associated with close work, such as accommodation and convergence (getting both eyes to work together and see only one image even when it is close) may stretch the eye and cause it to elongate while still growing. A number of studies have shown that young people who read a great deal have more myopia. Dr. R. W. Parnell in England found that the sight of undergraduates at Oxford University was four times worse than in 18-year-old non-students examined at the time of their national service medical boards. Over 30 years ago, the visual standards for admission to the U. S. Naval Academy were made more rigid because 15 to 30 percent of each new class had to be physically disqualified before graduation because of the decline in their distant vision.

In a more recent study at Harvard, Dr. Edwin Dunphy, of the University Health Service, found that myopia was more frequent in men in college than among unselected young men of the same age. It used to be thought that most cases of myopia stabilize by age 20, but at Harvard many graduate students in the Business and Law Schools continue to lose distant vision through their middle twenties.

Glasses Have Been Main Treatment

Dr. Tikusi Sato in Japan feels that myopia is caused by an adaptive change in the refractive power of the lens brought about by the accommodation required during the large amount of close work young people are now required to perform.

The main treatment of myopia has been to provide corrective glasses. Eye exercises have been advocated but there is little evidence that they really help much. Several ophthalmologists advocate the use of atropine drops in the eye at night to completely paralyze the muscles of accommodation. Such treatment probably is seldom recommended except in cases of rapidly progressive myopia. Some have tried bifocals to try to discourage accommodation in close work.

An interesting suggestion was sent to the *New England Journal of Medicine* in a letter to the editor after its recent review article on myopia by the same Dr. Dunphy mentioned above. The correspondent suggested advising children or young adults to use their glasses only when necessary, the implication being that eyes which do not see distinctly will not work so hard to accommodate while doing close work. Although theoretically possible, Dr. Dunphy was not aware of any published studies on this proposal.

Reading Habits

It does appear that there is no reason to feel that complete correction of a mild refractive error for distance is neces-

GBU's, Shoestrings Win Another One!

Two Y-12 teams, the GBU's and the Shoestrings, still stand high in the Basketball League, with no losses on their record.

After holiday hiatuses, the teams came roaring back to see the Y-12 Untouchables clip the wings of the Hawks 56 to 39. John Williams and Joe King led the rapid fire gunners as they shot down the Hawks. The Hawks made a move in the third quarter, but were too far behind by that time.

The GBU's scored an even 100 points against the Demons' 20 in the second game January 4. The Demons played with only four men. Bud Defenderfer didn't show his old running mate Ralph Stevens any mercy as he poured 24 points through the bucket.

Shoestrings Win Big

The Shoestrings tied the Mod Squad to the floor in final action 60 to 40. Jerry Brown pulled them off the boards for the 'Strings, and poured them back through, leading scoring with 15. The Mod Squad substituted hustle for height, but just couldn't measure up.

In the second night last week the Bottlenecks edged by the Wild Gang 40 to 37. The Bottlenecks' Swartz led scoring with 15. The two Dons, Reeves and Forrester, led the Bunch with eight apiece.

James Gang Wins

In one of the closest, hard-fought games of the new season, the James Gang slipped by the Trojans 64 to 61. K. Bell belted 19 through the hoop, for the winning Gang. Churchill Moore led the losers with 20 points.

The Beta Two Miners dropped the final game to the CC 69ers 79 to 60. Calvin Angel slipped by with 20 points . . . Jim Young scored 17 for the Miners.

League standings follow:

Team	W	L
GBU's, Y-12	4	0
Shoestrings, Y-12	4	0
Untouchables, Y-12	3	1
CC 69ers, K-25	3	1
James Gang, K-25	3	1
Bottlenecks, Y-12	2	2
Beta Two Miners, Y-12	2	2
K-25 Trojans, K-25	1	3
Mod Squad, K-25	1	3
Wild Bunch, Y-12	1	3
Hawks, Y-12	0	4
Demons, Y-12	0	4

ANTIQUÉ GUN SHOW

The Smoky Mountain Gun Collectors Association will hold its annual gun show January 30, 31 at Kerbela Shrine Temple, Knoxville.

The shows will be open to the public. Hours Saturday are 9 a.m. until 9 p.m.; Sunday from 9 a.m. to 3 p.m.

sary. Children who bring home a letter from school saying that their vision was 20/30 need not get panicky. It is absolutely necessary that a child see the blackboard but being able to identify a small bird at the top of a tree is hardly necessary. Of course, teenagers must have adequate vision for driving a car.

Parents should try to get their children to use adequate illumination while reading. Why is it that they often forget to turn on their light or read on their bed all twisted up like a pretzel? The poorer the light and posture, the more work is required to see adequately.

It is clear that the myopic eye is too long. Why it gets that way is not understood. It does seem prudent for young people whose distant vision is declining to use good light and posture and corrective lenses when necessary.



CHRISTMAS JOY—Hordes of happy Union Carbide children greeted the jolly old elf in red during the parties held at the Oak Ridge High School December 23. Some of the happy off-springs are seen above. Emcee Jack Smith, ORNL, checks out with Fred Johnsson (who portrayed Santa) in the middle pictures.

Pack, Hawks Stay Atop in Volleyball

The Pack opened league play in Volleyball last week and kept their slate clean, cleaning the Environmentalists 15-3, 15-4 and 15-6. The Set-Ups charged into the Bombers and let them have it 15-6, 15-4 and 15-6. The Gang clipped the Gooneybirds 15-8, 15-1 and 15-5. AECOP's Foibles routed the Radpheys 15-10 and 15-0 . . . losing game two 15-9.

Meanwhile, on Court B The Y-12 Old Men took games two and three from the Eagles 17-15, 15-12; after losing game one 15-5. The K-25 Hawks aged the ORNL Old Men to the tune of 15-3, 15-6

and 15-7. The Quarks quieted the Boomerangs 15-12 and 15-8; losing game two 15-13.

League standings follow:

Team	W	L
The Pack, ORNL	12	0
Hawks, K-25	12	0
Radpheys, ORNL	9	3
Set-Ups, ORNL	9	3
The Gang, K-25	9	3
ORNL Old Men	7	5
Quarks, K-25	6	6
Boomerangs, ORNL	5	7
AECOP's Foibles, K-25	5	7
Eagles, Y-12	4	8
Bombers, ORNL	2	10
Gooneybirds, ORNL	0	12
Environmentalists, ORNL	0	12

LITERACY RATES

A Harvard University research project reveals that half the nation's adults may lack the literacy necessary to read day-to-day materials such as newspapers, driving manuals, and job applications.

70 2416



NEW AARP OFFICERS—The American Association of Retired Persons has elected a new slate of officers. They are, from left, Harvey Mills, president; Sam Taylor, assistant treasurer; Paul Walker, first vice president; Joe Marshall, board of directors; Geraldine Addison, second vice president; Miles Bradford, third vice president; Frances Huson, corresponding secretary; Harold Ditchen, treasurer; and Cora McAfee, recording secretary. AARP meets the third Thursday of each month at 1:30 p.m. in the Civic Center in Oak Ridge. All area residents past 55 are invited to join the organization.

Retirees Name Officers; Plan for New Year

The American Association of Retired Persons, now some 415 members strong, capped 1970 off with a gala Christmas party at the Oak Ridge Civic Center, December 17. The Sweet Adelines, under the direction of Bill Templeton, entertained with songs of the season.

The local chapter of AARP began with a modest nucleus of 60 persons in 1968, electing Joe Marshall as its first president. The second president Tom Lane saw membership grow to its present strength.

Officers Named

The third president, Harvey B. Mills, took office for the 1971 tenure. Serving with him will be Paul Walker (executive first vice president); Geraldine Addison, second vice president; Miles Bradford, third vice president; Harold Ditchen, treasurer; Sam Taylor, assistant treasurer; Cora McAfee, recording secretary; Frances Huson, corresponding secretary; and Joe Marshall and Tom Lane, board of directors.

1971's leaders say that the aims of AARP are still the same, only

more so . . . to intensify the promotion of good will and fellowship among the "past 55" in the community.

New Members Welcome

President Mills has appointed leaders in each district of Oak Ridge to expedite the aims of the chapter. The following leaders have been named: George H. Hicks, Clinton; Virginia Miller, Norris; E. L. Long, Highland View; Joe B. Black, Linden; Sterling Ryder and J. W. Vance, Elm Grove; G. T. Wells, Pine Valley; Glen O'Brien, Woodland; Sydney Schiffman, High School; Willis Buckner, Gamble Valley; and E. J. Glennon, Cedar Hill.

For all members and new ones are always welcome, the meeting is held at 1:30 p.m. each third Thursday of every month. January's meeting will be January 21. They meet at the Civic Center. Membership applications may be obtained from Mrs. E. L. Long, 366 Outer Drive, Oak Ridge.

Benefits Are Many

Many benefits are to be gained from membership in the AARP from a national level. The Modern Maturity Magazine and the New-

Bulletin are available to members; many types of low cost insurance; medication at reduced rates; a driver-plus plan; and many organized and conducted tours all over the world at reduced costs. The local AARPs offer trips and excursions in the immediate area of interest to most members.

Expectant Parents Course Has Begun

The winter series of classes for expectant parents began last Thursday in the conference room of the Oak Ridge Hospital. The series, sponsored by the Childbirth Education Association of Oak Ridge, will be held on subsequent Thursdays at 7:30 through March 4. Topics to be covered include nutrition, conduct of labor, infant nourishment, further techniques of labor, child care and postpartum readjustment.



Mrs. Holcomb

Cyndy Holcomb, wife of D. B. Holcomb of the Applied Science Department of Computing Technology Center, is serving as president of C.E.A. for the 1970-71 term. She is also president of the Oak Ridge Chapter of the American Association of University Women, and a board member of the YWCA and Friends of the Library. The Holcombs reside at 116 Briar Road with their two children.

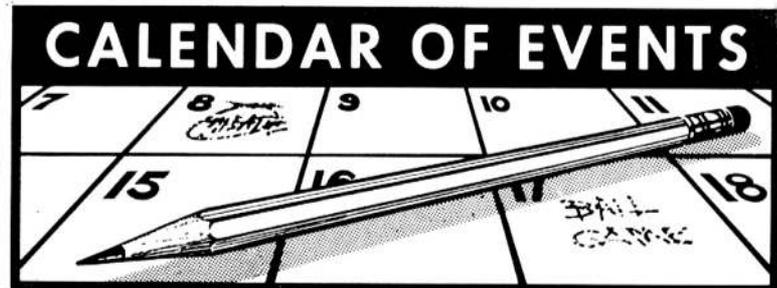
Other C.E.A. board members with Union Carbide husbands, are Mrs. C. R. Gee, Mrs. W. K. Brown, Mrs. D. E. Hendrix and Mrs. R. F. Gibson.



UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

RETURN REQUESTED
(Do Not Forward—Return Postage Guaranteed)

BULK RATE
U.S. Postage
PAID
Oak Ridge, Tenn.
Permit No. 71



TECHNICAL January 15

The University of Tennessee-Oak Ridge Graduate School of Biochemical Science Lecture Series on the Biology of Aging: "Circadian Systems: Perspectives and Unanswered Questions," Colin Pittendrigh, Stanford University. Large Conference Room, Building 9207, 3 p.m.

Physics Division Seminar: "Co-existing with Nuclear Energy V: Reprocessing of Light Water Reactor and Liquid Metal Fast Breeder Fuels," R. E. Blanco, Chemical Technology Division, ORNL. East Auditorium, Building 4500N, 3 p.m.

January 18

Biology Division Seminar: "The Genetics of Conjugation in Escherichia Coli," Neil Willetts, MGRU-Medical Research Council, University of Edinburgh, Scotland. First Floor Tower Annex Conference Room, Building 9207, 4 p.m.

January 19

ORNL Environmental Seminar: "Energy, Urban Ecology, and Edacity," R. P. Hammond. "Environmental Research in the HUD Program," K. P. Nelson. East Auditorium, Building 4500N, 3 p.m.

ORAU Medical Division Staff Seminar: "Ultrastructural Studies in Mouse Leukemia and Lymphoma," Dr. Donald Swartzendruber. Main Conference Room, ORAU Medical Division, 4 p.m.

January 21

Oak Ridge Section of the American Society of Mechanical Engineers meeting, Elks Club, Oak Ridge, social hour 7 p.m., meeting 8. Guest speaker is Roger P. Chassay, Jr., George C. Marshall Space Flight Center, Huntsville, Ala. His topic, "The Sky Lab Program."

January 27

Metals and Ceramics Division Seminar: "Quality Assurance in the Metals and Ceramics Division," W. J. Werner. East Auditorium, Building 4500N, 2:45 p.m.

Nitrogen-Argon Contract Goes to Kentucky Firm

The Atomic Energy Commission has awarded a \$70,000 contract to a Louisville, Ky., firm for supplying equipment to AEC facilities here.

The awarded contract, to Thermal Research & Engineering of DBA Ryan Industries, Inc., will furnish a storage and vaporizing system for liquid nitrogen and argon, to be installed at Y-12.

A visit always gives pleasure. Sometimes it's on arrival; sometimes, on departure.

COMMUNITY January 15

The Oak Ridge Playhouse presents "The Night Thoreau Spent in Jail." Oak Ridge Playhouse, 8:20 p.m. Admission: Adults \$3; students \$1.50. Other performances on January 16, 22, 23, 29 and 30.

January 17

Art Center Film Club presents "Les Biches" (The Doves) Jefferson Junior High School, 8 p.m. Admission: Adults \$1; students \$.75.

January 23

Tryouts for Junior Playhouse production "Maggie's Magic Teapot." Oak Ridge Playhouse, 11:30 a.m.

January 30-31

Smoky Mountain Gun Collectors Association Gun Show, Kurbela Shrine Temple, Knoxville. Open to the public. Hours 9 a.m. to 9 p.m. on Saturday, 9 a.m. to 3 p.m., Sunday.

Rifle-Pistol Club Plans Adult Training Sessions

The Oak Ridge Rifle and Pistol Club will conduct a basic rifle training course for adults. The course will be presented in six two-hour Monday sessions at the Indoor Range of the Oak Ridge Sportsmen's Association. Firearms safety and marksmanship will be emphasized. All firing will be done indoors with .22 caliber rifles furnished by the Club.

Registration will be held at the Range from 7 to 9 p.m. Monday, January 18. Participants may register any time during those hours. The registration fee is \$2. Additional information may be obtained from Jack Huff, Oak Ridge telephone 483-1490; or Bill Galyon, 483-7337.

Carbide Plant in Cebu Second in Philippines

A \$2-million Eveready battery plant in Cebu, the principal southern island of the Philippines, will be completed soon. The Cebu location provides distribution and operating advantages in a market where demand for Eveready batteries has been growing at a fast rate.

The new plant will be the second Union Carbide battery production facility in the Philippines. The other one, which has been in operation for more than 15 years, is located in Manila.

Union Carbide has 32 battery plants in 22 countries around the globe.

Property Sales

Used government vehicles are offered for sale in the latest surplus property "spot bid" sale of government equipment. These and other items may be seen at the Property Sales Office, Building K-722, just off State Route 58 near the Oak Ridge Gaseous Diffusion Plant.

Inspection of these items may be made Saturday from 8 a.m. until 4 p.m.

The sale will be held January 20.

Meanwhile, Property Sales announces another sealed bid sale beginning immediately. Included in this sale will be lots of electrical and electronic equipment, including electric welders, engines, pumps, tractors, forklifts, concrete mixer, etc.

Sealed bids on all these miscellaneous items will be opened January 27.

Asmanes Leads in Skeet Firings in December Meet

Y-12ers swept the field of Skeet firings in the league this month . . . as Charlie Asmanes, Carl Brewster and Ben Weathersby took first, second and third standings. Asmanes fired a 48.654; Brewster a 47.756; and Weathersby a 47.729 in the December 6 competition.

December firings:

Firer	IPCap Score
Carl Brewster, Y-12	47.756
Vernon Raaen, K-25	47.114
Will Davy, Sr., K-25	47.280
Bo Glover, Y-12	44.076
Leon Bray, Y-12	43.578
Ken Bahler, Y-12	46.375
Bob Allstun, Y-12	49.323*
Ben Etheredge, Y-12	47.507
Bob Denton, Y-12	47.280
Alan Van Hull, Y-12	48.381*
Joe Comolander, Y-12	48.610
Fred Welfare, X-10	48.313*
Perry Bullard, Y-12	46.440
Ben Powers, Y-12	46.883
Ben Weathersby, Y-12	47.729
Charlie Asmanes, Y-12	48.654

*Under Penalty, previous winner.