

Nuclear Science Seminar Held Here By U. S. Navy

The Navy Department's Office of Naval Research is holding its Sixteenth Nuclear Science Seminar in Oak Ridge this week and next. The two-week seminar, held in conjunction with the U.S. Atomic Energy Commission, began Monday, November 28.

The Navy has maintained a growing interest in nuclear sciences as demonstrated by its successful development of scores of nuclear submarines, including a number which are armed with Polaris missiles capable of firing nuclear warheads. In addition, the Navy operates nuclear surface ships.

The seminar is emphasizing specific applications of nuclear science and technology which the military reservists will find both timely and useful. They will be acquainted with the many unusual devices for nuclear and space application which have presented extremely difficult technological obstacles. However, techniques have been developed at Y-12 for the fabrication of radiation shields for the Nomad navigational buoy, the SNAP 10-A, a blood sampling capsule first used in Gemini 3, and other unusual instruments. Information on these programs will provide an insight to solving problems concerning which no previous experience exists.

Y-12 Is Chairman

William C. McWhorter, Chemical Development, is acting as chairman for the Navy seminar. McWhorter is a lieutenant in the U.S. Naval Reserve.

Other Y-12ers will be heard in the current seminar being held for the Navymen. Roger F. Hibbs, Y-12 Plant Superintendent, is today describing "Operation at the Y-12 Plant" at the seminar. John

M. Googin, Development, will speak next week on "Advanced Materials in Space Technology," and Roy L. Huddleston, also from Development, will speak next Wednesday on "High Pressure Technology."

The group was welcomed to Oak Ridge Monday by Dr. V. E. Parker, Deputy Director for the Oak Ridge Associated Universities. Sam R. Sapirie, manager, Oak Ridge Operations, AEC, also spoke to the group Monday describing the "Operation at Oak Ridge."

Other Scientists Speak

Many other Union Carbide Corporation officials and AEC men will address the group this week and next.

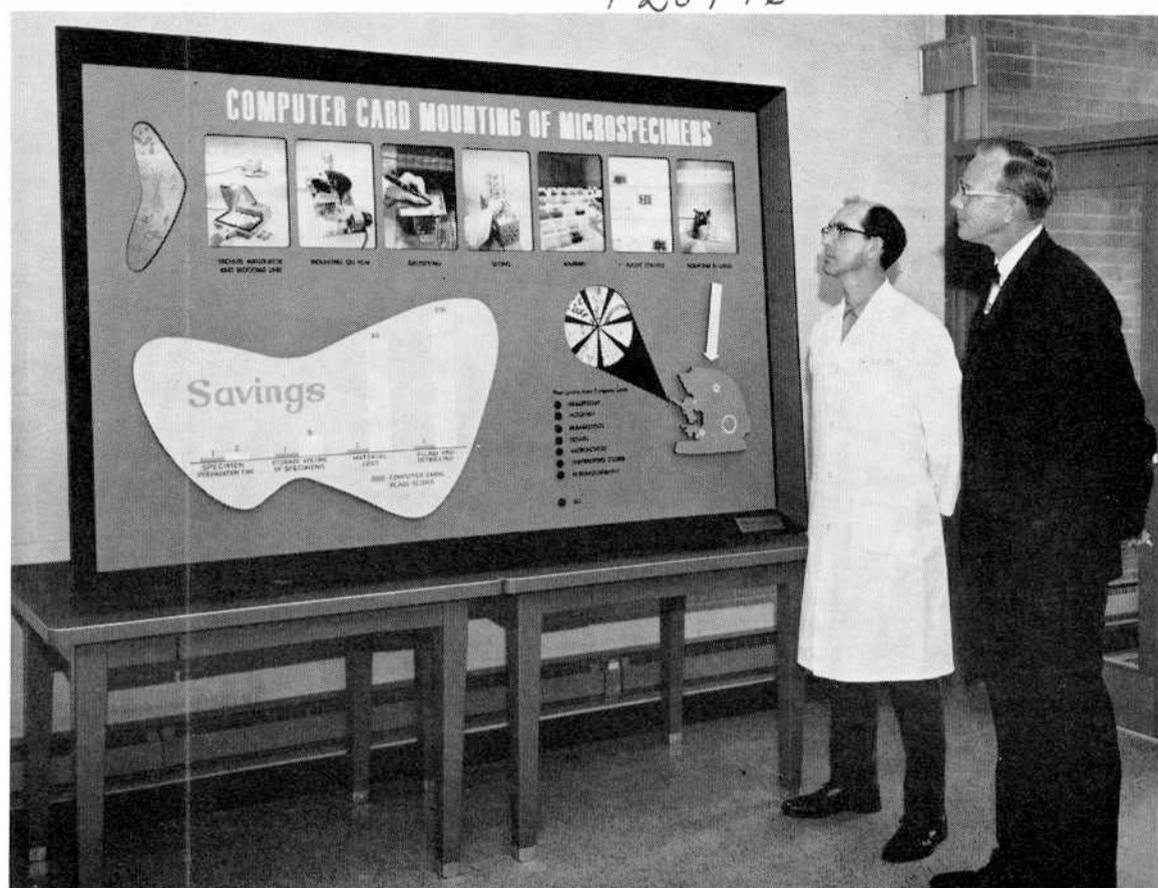
Large quantities of fresh water have always been of concern to men of the sea. At Oak Ridge National Laboratory, studies are being conducted in order to determine the feasibility of desalting sea water by means of large-scale dual-purpose (fresh water and electricity) nuclear reactors. Progress along these lines will be carefully reviewed by the Navy.

These topics represent a sampling of the areas to be presented by some of the principal scientists and engineers in atomic energy. Sponsors of these programs include the Atomic Energy Commission, National Institutes of Health and the University of Tennessee-AEC Agricultural Research Laboratory.

Approximately 40 reserve officers from the Navy, Army and Air Force Research and Development organizations are expected to attend the seminar.

R. E. Cofield, Development, will speak tomorrow on "Non

Continued on Page 4



DAVID A. JONES AND MERWYN SANDERS inspect an exhibit depicting computer card mounting of microspecimens in biological research. The exhibit was designed and fabricated in Y-12 for use by ORNL at scientific meetings and general display purposes. Jones, an ORNL biologist, and Sanders, Y-12 health physicist, were instrumental in designing the display to the above purpose.

Maintenance Sets Party, December 9

"Holiday Highlights" will be the theme for the annual Maintenance Christmas party this year.

It is set at the Oak Ridge Country Club for Friday, December 9. After the dinner, there will be dancing with music by Tony Musco and his orchestra.

Special Computer Card Display Is Fabricated For ORNL Useage

An exhibit depicting computer card mounting of microspecimens in biological research has been designed and fabricated by Y-12 for use by Oak Ridge National Laboratory at scientific meets and for general display purposes.

The system involves the use of standard-size computer cards — each with a special "window" for the mounting of a microspecimen. In the application illustrated

above, stained histological sections have been mounted on 35mm Mular film in the windows of the cards instead of on conventional glass slides. The result is a viewable and photographically reproducible specimen accompanying its permanent data recorded on the same card. The mounting of the specimen and data together in this manner facilitates storage, retrieval, and processing of specimens as well as data, especially in those cases where large numbers of specimen are to be handled.

The concept, originally applied by Merwyn Sanders, Radiation Safety, to the mounting of air-monitor filter samples, has been applied here by David A. Jones, ORNL Biology, and co-workers to the handling of the large numbers of histological sections to be expected in an experiment involving many thousands of mice.

As illustrated in the photograph, the method can be equally well applied to many other kinds of biological specimens; for example, bacteria, plant cells and autoradiograms.

Christmas Carol Will Be Presented

The Oak Ridge Playhouse joins with the Oak Ridge Junior Playhouse to present "A Christmas Carol." This production is an original adaptation of the traditional Dickens' tale. Ted Lehman, a former Oak Ridger who is now successfully acting and directing in Hollywood, is the author of this adaptation.

The story of the meaningful encounters of Tiny Tim and his family with the miser Scrooge is familiar to all, and everyone will enjoy seeing it performed on the stage.

There will be many familiar faces in the cast, as well as some talented newcomers to the Playhouse stage. Among the performers are Marshall Lockhart (wife of George); Nancy Savage, H. C.'s daughter, and Leigh Herndon, daughter of P. G.; Brent Gresham, Jack's son, and Karen, daughter of E. Volkin.

Performances will be on Saturday, December 10, at 2 p.m. and 8:20 p.m.; Sunday, December 11, at 8:20 p.m. and the following weeks as well.



C. E. LARSON, NUCLEAR DIVISION PRESIDENT, presents a check to the Anderson County United Fund for \$10,150 from Union Carbide. He gives the check to W. E. Thompson, UF Chairman, as D. M. Lang, United Fund General Chairman for UCC here, looks on from the left. "Union Carbide is delighted to participate again in this united community-wide effort to support with one gift so many agencies essential to our future health and welfare," Larson stated. "We are hopeful you will continue your efforts to enlarge participation in this important community endeavor, because we believe this is a big step toward making this and future drives successful."

SAFETY SCOREBOARD

The Y-12 Plant Has Operated 39 Days Or 1,080,000 Man-Hours (Unofficial Estimate) Through November 27 Without A Disabling Injury Safety Is Not A 'Sometimes' Thing

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG *Editor*



American Association Industrial Editors

OFFICE

Post Office Box Y
Oak Ridge, Tenn. 37830
Bldg. 9704-2 Room 137
Telephone 3-7100



Katy Kutkost
SEZ.

Improvements in Reproduction are routine.

Ever send a roll of film to a "discount" developer in Chicago? By the time the diving board shots come back, there is snow on the ground. Until lately getting prints from Building 9739 Reproduction was not too different an experience. Three days wait when you're in a hurry feels like a season.

Last September, the prints started coming back in one day . . . every day. Mr. Service (Don McMurray) claimed no special action caused the change.

One could say Mr. Service has a short memory because he later admitted the key play in faster drawing service was a swap of a Xerox 1860 printer for a Xerox Copyflow. Rent for the new job is \$11,000/year less than the old Copyflow. Better tracings from the engineering draftsmen helped make the switch to half-size prints possible.

Since Don makes at least one improvement a month, he doesn't consider it special. Just about everyone else in his group does likewise. It's a habit.

Julliard Quartet Concert Is Set

The Oak Ridge Civic Music Association proudly presents the famed Julliard String Quartet in concert. One of the most distinguished groups to appear in Oak Ridge, the Quartet is scheduled for a performance Saturday, December 3, at the Oak Ridge High School Auditorium at 8:15 p.m.

Quartet - in - Residence of the Julliard School of Music of New York, the group was established in 1946 by William Schuman. Members Robert Mann, violin; Earl Carlyss, violin; Raphael Hillier, viola; and Claus Adam, cello, are on the faculty of the famed Julliard School, conducting classes, seminars and individual instruction as well as giving concerts at the school. In 1962 they were also appointed Quartet-in-Residence of the Library of Congress, thus becoming the acknowledged First Family of Music in the United States.

The Quartet has made extensive concert tours in the United States and abroad, becoming the first American string quartet to visit the Soviet Union.

For the Oak Ridge concert, the group will perform Schubert's Quartettsatz in C minor, D. 703

Highway Patrolman Visits Safety Meeting In Plant In Attempt To Reduce Accidents

There were 23,235 highway accidents in Tennessee last year . . . averaging almost 64 a day! A total of 1,077 lives were lost in traffic accidents in this state alone . . . of the nation's 49,000 deaths.

Tennessee's traffic fatality rate is slightly higher than the national average. A total of 5.6 lives are lost in our state for every 100 million miles driven . . . while the nation's average is 5.57 lives.

Members of the Industrial Relations Division, and other departments from the Administration Building, got these startling facts recently as Lieutenant Glen C. Haun, Tennessee Highway Patrol visited in the November safety meetings.

There are now 91,300,000 registered vehicles in this country . . . with more than 98,000,000 licensed drivers.

Last year alone the grim toll (highlighted by the 49,000 deaths) there were 1,800,000 persons injured and an estimated \$8,900,000,000 in collision losses sustained on our highways.

Accidents Can Be Reduced

Lt. Haun pointed out that there are only a few ways that the slaughter can be cut down . . . by legislation, education and enforcement. He stated that Tennessee has enough laws on the book. Education, he pointed out, is the big problem. Strict enforcement of existing laws need public support. In areas where crack-downs have proved effective in reducing the number of accidents, the strictness was unpopular at first, then gained public acceptance after results became evident.

Another problem now faces the driver, Lt. Haun illustrated, the interstate highway systems. He recommended 10 points to keep in mind while driving on the expressways.

1. A driver's physical fitness and mental attitude are tremendously important factors determining whether he is a safe driver or not. Pressures from business, family problems are detriments to safety. Never drive alone if you have a physical ailment.

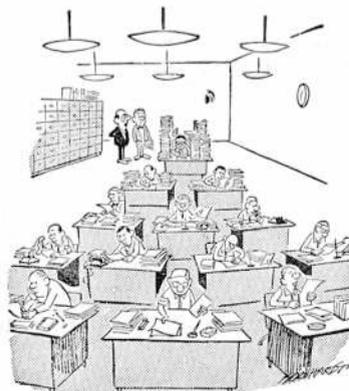
2. Make sure the vehicle is in good condition. Check the brakes, lights, fan belt, tires, gas before going on a long jaunt on an expressway.

3. Know the route you plan to take in advance.

4. Emerge smoothly into the traffic. Keep same speed until accustomed to the traffic flow on the road.

5. Keep pace of the lane you're in. Watch traffic well ahead of

(Opus Posthumous), Quartet no. 6 by Bartok, and Quartet in B flat major, opus 130, with Grosse Fuge, by Beethoven.



"There's a bottleneck somewhere in this office, Wemsey, and we've got to find it."



STRICTER ENFORCEMENT of existing laws on Tennessee's highways is the answer to rising accident-rates on the roads says Glen C. Haun, a lieutenant for the Tennessee Highway Patrol. Lt. Haun recently visited in Y-12 and spoke at an interesting safety meeting.

you for change of flow . . . i.e. someone leaving interstate or changing lanes.

6. Pass with care on left. Give proper signal with turning lights, and return to right lane only when you can see the car you have passed in your rear-view mirror.

7. Watch signs that control traffic, and keep your eye peeled for traffic emergency signs.

8. In case of trouble, stop off highway leaving lights on dim, and flasher operating. If you are off the road, remain in car . . . if not, get out on right side away from traffic.

9. Use distress signal. A handkerchief tied on the radio antenna, or door handle next to traffic is a recognized source of trouble. Most main-line truckers and law enforcement officers will stop to lend a hand.

10. Prepare for exit by declaring intentions with signal light.

The severity of interstate accidents was pointed out due to the speed of vehicles on thoroughfares.

A trouble spot was described by the Highway Patrol officer on a bridge about one-half mile west of Melton Hill exit on our expressway. There have been nine accidents at this spot this year, with four fatalities. The Patrol department talked to all the accident drivers and surveyed the spot. They finally found that a patch in the road changed the sound of tires, and thus drivers stiffened at the wheel and thus lost control of their vehicle.

Keep Alert!

Keeping alert and aware of what's going on on the road, as well as with our own vehicle, Haun pointed out, is the best way to keep out of trouble in traffic.

Some states have a Good Samaritan law, where other drivers are compelled to stop to lend assistance, but Tennessee has no such law.

Sometimes we as drivers can help more by passing up an accident than stopping to further clog traffic. If it is obvious that help is being administered, and there is nothing that can be done, we should drive on out of the way.

Lt. Haun completed his highly interesting treatise on safety on Tennessee's highways by spirited questions from his two audiences.

Education such as this, proving that law enforcement agents are on our side, is one step in the direction of making our highways and expressways safer places to be on.

Eisenhower, Kirk And Miller Retire After Long Y-12 Tenure

Three long-time Y-12ers bid adieu to fellow workers today, as William B. Eisenhower, Buildings, Grounds and Maintenance Shops; Greeley A. Kirk, General Weld Shop; and Raymond O. Miller, Buildings, Grounds and Maintenance Shops, are added to the Plant's retirement roles.

William B. Eisenhower (and he says there is a distant kinship, too, before we go any further) is a native of Cocke County, Tennessee. He spent his early years in Parrottsville in carpentry and farm work. He also worked in Johnson City, for Rust Engineering in Newport, Frazer-Brace in Kingsport, J. A. Jones, here in Oak Ridge, and Hughes-Folkrod, Elizabethton. He came to Y-12 July 10, 1944.

Married to the former Roby Lee Wilde, Eisenhower lives at 1131 Circle Drive, Kingston. They have a daughter, Mrs. Rosemary Cabrera, Key West, Florida, supervisor of the junior and senior high school there. Mrs. Cabrera was recently elected to the Board of Education in Florida, as director of social studies.

The Eisenhowers plan to visit in the far-south resort town, probably for the duration of the winter. They plan, however, to make Kingston their permanent home. His retirement plans include a lot of "taking it easy."

Kirk, A Kentuckian

Greeley A. Kirk, General Weld Shop, was born in Woodford County, Kentucky, and spent his youth in the NuWay Shoe Shop, Lexington, Kentucky. He also worked in Knoxville at the Oakwood Shop, worked in Oak Ridge and Knoxville in shoe repairs and the grocery business, and during the war was employed as a welder with the Sun Ship Builders, Chester, Pennsylvania. He worked briefly with Dempster Brothers, Knoxville, before coming to Y-12 August 20, 1951.

The Kirks live at 2905 Avondale Road, Knoxville. Mrs. Kirk is the former Pearl Ignight. They have a son, Gene, who is a minister at the Peck Methodist Church, and a former Y-12er. Their daughter, Caroline Attaway, lives in Knoxville also. There are six grandchildren to delight both of the Kirks.

Kirk says his retirement will consist of a little work and a lot of rest.

Miller Also Retiring

Another native East Tennessean, Raymond O. Miller, retires today. He was born near Caryville, and resides there now.

From 1920 until 1940 he was a carpenter in Caryville, and from 1940 until 1943 worked with the High Point Coal Company there. He worked in Y-12 during the war years, and from 1947 until 1951 was employed by the V. L. Nicholson Company, Oak Ridge. He returned to Y-12 for the second time July 9, 1951.

Mrs. Miller is the former Hilda Tipton, and they live at Route 2, Caryville. The Miller's have two daughters, Mildred Dillard, Alexandria, Virginia; and Betty Yelinek, Houston, Texas. There are three grandchildren, also.

The Miller's plan an immediate vacation to Houston, and plan to return to Caryville for permanent residency.

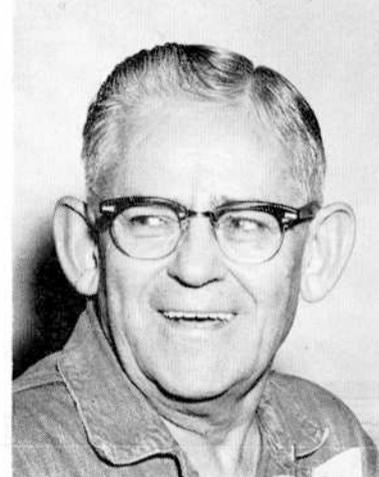
Y-12ers wish all three retiring veterans good health and a long and happy retirement.

GERONIMO!

Navy flight surgeons advise pilots to tense their bodies and let out a yell as a means of fighting blackouts during flight maneuvers.



William B. Eisenhower



Greeley A. Kirk



Raymond O. Miller

Waste Disposal Film Produced By Laboratory

A film, "Waste Disposal by Hydraulic Fracturing," has been produced by Oak Ridge National Laboratory. The 16mm color motion picture runs approximately 10 minutes.

The film illustrates the development, by ORNL's Health Physics Division, of a process for the disposal of intermediate - level radioactive wastes in underground bedded shale formations.

The picture shows an actual injection of material into the formation, supplemented by animation which portrays the manner in which the grout is forced down into the well and then into the fracture for permanent disposal.

Prints may be borrowed from AEC film libraries in the United States and abroad, and from the Oak Ridge National Laboratory.



THE CLAXTON PEE-WEES were recent victors in two midget bowl games . . . defeating the Baby Falcons, 21-0, and the Sweetwater Pee-Wees 19-0 in the Optimist Bowl. Coached by two Y-12ers the squad has several Y-12 stars on it. In the front row, from left, are Steve Back, Allen Hampton (son of James), Rickey Davis (John's son), David Hoose (A. D.'s son), Rickey Wentworth (son of Harold), Sam Easley, Mike Baker (Fred's off- spring), Danny Smith and Greg Phillips (Joe B.'s son). Standing in the second row are Bob Hagan, Dickie McAlister, Chuck Fritts, Chuck Foust, Robbie Prather and Mark Wentworth (another son of Harold). In the back row are Harold Wentworth, Civil and Archetctural Engineering, Danny Smith, Walter Morehead, Phil Julian, Cecil Bunch, Bill Bolling, and Jim Grubb. Jim is in Y-12's Physical Testing, and a former UT gridiron stalwart.

'Cranes Are Flying' Next AAUW Foreign Film

"Letyat Zhuravli," (The Cranes Are Flying), a Cannes prize-winning Russian film is the December film in the Foreign Film Festival, sponsored by the American Association of University Women. In Russian with English subtitles, the movie will be shown at 7 and 9 p.m. Sunday, December 4, at Jefferson Junior High School.

A romantic drama of two young lovers caught up in the tragic events of World War II, the movie offers prize-winning acting, an effective musical score, and interesting camera work.

Single admission at 75¢ each will be available at the door before the performance, and season ticket holders may use their tickets for admission.

Be careful! Remember there are no spare parts for the human body.



Ride wanted from 678 West Outer Drive, Oak Ridge, to North Portal, straight day. Etta Jean Smith, plant phone 3-5206, home phone Oak Ridge 483-6446.

ICEBERGS MORE VISIBLE

Thanks to chemistry, icebergs no longer are as dire a threat in the sea lanes as they once were. Bombing icebergs with jugs of brilliant red dye is one way naval aviators are helping their sea-going buddies as well as fishing fleets and passenger and cargo vessels in the North Atlantic. The jugs smash on impact and the dye spreads over the face of the iceberg making it visible for miles, thus helping to overcome the age-old iceberg menace—seeing them soon enough to avoid a collision.



WHERE THE DEER AND THE ANTELOPE PLAY is where Carl McBee decided to go for a hunting vacation recently. Carl is seen seated at the right with buddies on a Montana foray that bagged them their limit in antelope and deer. Others in the party include friends, from left, Maurice Walls, Alex Kolka and Reid Walls, standing. 'Nobody said a discouraging word, did they?'

Ping-Pong Leads Belong To Y-12ers

In Table Tennis in the X League last week Y-12er Roy Huddleston won two sweeping sets, at the expense of John Stockdale and Herb Mook. League-leading William Motley saw no action.

In the Y League, Gordon Brewer took two matches from Ram Uppuluri; Al Norris won two from Ed Gambill . . . and Ed won three from Ellis O'Rourke. O'Rourke also lost three to Stanley Cantor.

X League standings:

Player	W	L
William Motley, Y-12	17	1
Roy Huddleston, Y-12	15	3
Subbu Raman, ORNL	15	6
John Stockdale, ORNL	10	10
Bob Bernard, ORNL	6	12
Henry Nicholson, ORNL	6	12
Ralph Einstein, ORNL	5	7
Ernest Schonfeld, ORNL	5	13

Y League standings:

Player	W	L
Gordon Brewer, Y-12	19	2
Al Norris, Y-12	16	5
Ram Uppuluri, ORNL	15	6
Fred Shull, ORNL	14	4
Ed Gambill, Y-12	13	11
Stanley Cantor, ORNL	10	11
Art Weinberger, ORNL	7	11
Joe Lewin, ORNL	5	16
Francois ertesz, ORNL	0	15
Ellis O'Rourke, Y-12	0	18

'Plowshare' Project Started Back In '57

Plowshare, the name given to the Atomic Energy Commission's program to study and develop peaceful uses for nuclear explosives in sciences and industry, was formally established in 1957. The program has many potential applications in such area as deeply buried explosions for gas and oil recovery, gas storage, waste disposal, mining and water management; excavation of harbors, canals and mountain passes; production of transplutonium isotopes; and neutron physics research. The program consists of laboratory and field experiments to develop basic technology and the exploration and evaluation of proposed applications.

STICKY WORD PROBLEM

Governmental agencies always have a penchant for dubbing the program by its initials. Planners knew they were in trouble with immigrants recently when news headlines began abbreviating the War On Poverty program.

Safety work is the study of the right and orderly way of doing things.

Recreation



Monday, December 5

BOWLING: 5:45 p.m., C League, Ark Lanes.

TABLE TENNIS: 7 p.m., Wildcat's Den.

PHYSICAL FITNESS: (Girls), 7 p.m. Oak Ridge High School Girls' Gym.

BASKETBALL: Beginning 6:30 p.m., Oak Ridge High School Gymnasium. Bombers vs. Celtics; Has Beens vs. Radioisotopes; B bar R's vs. VIP's.

Tuesday, December 6

PHYSICAL FITNESS: (Men), 7:30 p.m., Oak Ridge High School Gymnasium.

Wednesday, December 7

BASKETBALL: Beginning 6:30 p.m., Jefferson Junior High School. Bat Boys vs. Ecobums; Celtics vs VIP's; Braves vs B bar R's.

BOWLING: 8 p.m., Mixed League, Ark Lanes.

Thursday, December 8

VOLLEYBALL: Beginning 6:30 p.m., Court A, Tigers vs. Old Men; Scrubs vs. Beavers; Neophytes vs. Eagles. Court B, Beagles vs. Charley Brown's; Ecobums vs. Mix-Ups; Set-Ups vs. K-25 Sports. Robertsville Junior High Gym.

BOWLING: 5:45 p.m., Classic League, Ark Lanes.

BADMINTON: 7:30 p.m., Jefferson Junior High School Gymnasium.

Friday, December 9

MAINTENANCE DIVISION Christmas Party: Oak Ridge Country Club.

Bowling Leagues Rest For Thanksgiving Holiday

The Classic and Mixed Bowling Leagues "rested from their labors" last week, observing the Thanksgiving holiday.

Play will be resumed in both leagues as per usual this week.

Swim For Your Life

The adult Atlantic mackerel must literally swim for its life. If it stopped swimming, this important food fish would suffocate since it requires a continuous flow of water to keep its blood supplied with sufficient oxygen.

Badgers Better C Bowling Lead

The Badgers gained a little breathing room in the C Bowling League last week by cleaning the plow of the Fireballs. They now lead C Bowlers by two and one-half points.

The next - in - line Rounders trimmed three points from the Rollmasters. The Rodders took four points from the Royal Flush, and the Invalids cleaned out the Parbusters by the same score. Taking three points were the Big Five over the Strikers and the HiLifers past the Sunflowers.

Joe E. Morgan, Rounders, rounded off good single scores with a 239 scratch, 255 handicap tally. His 589 scratch series was high also. Ernest Ely, Rodders, claimed a 662 handicap series for highs there.

The Rounders posted 881 scratch single totals . . . while handicap singles went to the Badgers and Rollmasters, each with 1014.

The Badgers rolled high series . . . scratch of 2497 and 2926.

In a make-up match, the Strikers rolled season highs in scratch of 950 in singles and 1099 in handicap. Their handicap series of 3048 was season highs also.

League standings follow:

Team	W	L
Badgers	32	12
Rounders	29½	14½
Sunflowers	27	17
Rodders	24	20
Strikers	23	21
Big Five	23	21
Fireballs	20½	23½
HiLifers	20	24
Parbusters	19	25
Rollmasters	16	28
Invalids	16	28
Royal Flush	14	30

Air Mail—Almost!

The first attempt to carry U.S. mail by air took place in August, 1859. A pouch containing 123 letters and 23 pamphlets was placed aboard Professor John Wise's balloon at Lafayette, Indiana, for carriage to New York.

Unfortunately, the balloon came down near Crawfordville, Indiana, and the mail had to be forwarded by train.

WORLD'S BEST LINGUIST

The most accomplished linguist in the history of the world was the former chief librarian of the Vatican Library, Cardinal Guiseepe Caspar Mezzofanti (1774-1849). He could translate 114 languages and 72 dialects and spoke 60 languages fluently.



DANNY BRANHAM, 16, managed to bring down his first deer . . . a doe . . . on Central Peninsula with his trusty bow-and-arrow. Danny is the son of Lester Branham, Research Services. The arrow hit the doe with such impact it went all the way through her body.



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

(RETURN REQUESTED)

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



November passes, and emerges the last month of the fading year . . . December. Crossing important landmarks with Union Carbide Corporation are more Y-12 veterans. Congratulations.

20 YEARS

James J. Ward, Janitors Department, December 1.

15 YEARS

Clarence L. Scalf, General Mechanical Engineering, December 3.

Troy W. Baker Jr., Electrical Department, December 3.

Arvin E. Huskisson, A-2 Shops, 9212, December 3.

Rudolph Payne, H-2 and F-Area Shops, December 4.

Linde Stones Are Not Available Thru Stores

The Company Store at North Portal does not, repeat does not, carry applications for Linde stones.

The Store gets numerous phone calls daily from employees wishing to order the sapphires and other synthetic stones. These products may not be ordered through channels by employees any longer.

The beautiful stones are available at jewelry stores everywhere, and are only a fraction of the cost of the real McCoy.

COSTLY ABSENTEEISM

The loss in wages and salaries because of illness and injury was recently computed by the Health Information Foundation at \$13.6 billion a year!

This amounts to 5.3 per cent of the total payroll of the country.

ciety. He is the Navy representative to the National Research Council. He is also the author and co-author of numerous technical papers and has numerous patents to his credit.



JOHNNY RUSSELL, son of Fred Russell, Electrical, serves aboard the U.S. Coast Guard Cutter Chincoteague. His home port is Norfolk, Virginia, the proud papa states.

FAST DRAW

The reason drive-in banks are so popular is that women can withdraw money from the back seat while their husbands are making deposits from the front.

OIL ON THE WATERS

There's nothing like throwing a little light on the subject to start an argument all over again.

Navy Seminar . . .

Continued from Page 1

Destructive Testing." Dr. C. E. Larson, president of the Nuclear Division, will be banquet speaker tomorrow night for the group.

King Is Speaker

Dr. Peter King, Chief Scientist of the Office of Naval Research, was special guest speaker at the opening luncheon Monday. Dr. King began his government career at the Naval Research Laboratory in 1939 as a chemist, became a branch head in 1949, superintendent of the Chemistry Division in 1954, and associate director of Research for Materials in 1956. In that position he supervised the Laboratory's four research divisions in the materials area. In 1960, he was awarded the Distinguished Civilian Service Award for his contributions to the development of a long-range atmospheric radiation detection program. This program resulted in the system which provided conclusive evidence of the first atomic explosion by a foreign power. By measuring the amount of fissionable material in rain water, Dr. King was able to determine the bomb material and to fix the approximate time of explosion. He is a member of the American Chemical Society, the Washington Academy of Sciences, the Scientific Research Society of America, the American Association for the Advancement of Science, and the Philosophical So-



ANGELA WINLOW DONS A HEADDRESS for her big Christmas party act, set for December 21 at the Oak Ridge High School. All Carbide youngsters, ages two to 10, are being welcomed to the traditional big party. An application appears in this issue of the Bulletin.

Tickets For Kids' Parties Begin Journeys Through Mail

Ticket applications are already flooding the Recreation Office for the big Carbide Christmas party for kids, set December 21. There are five big ones in the making on that Wednesday before Christmas . . . 9 and 11 a.m.; 1, 3 and 5 p.m.

The choice is up to each individual employee and tickets for attending kids and parents are mandatory. The ticket application appears nearby.

Set for the big day are Angela Winlow and her trained Collies . . . a wowie bowser act sure to win the hearts of every child attending. Of course, there will be the usual appearance of the old man in red, the carol singing and colored cartoons. Every child of a Carbider is welcome, but he needs a ticket.

Fill in the ticket application completely, and mail to the Recreation Office, Building 9704-2. Your tickets, plus those for the bairn, will be mailed to your home address . . . so be sure to put in your entire address . . . street number, or route number, plus city and ZIP Code.

An incomplete address may cause delay in mailing the tickets out.

There will be a special gift package for each child attending. Age restriction is stated as from two to 10.

No tickets will be mailed after 4:30 p.m. Friday, December 16 . . . so time's fleeing. Better get those requests in now. Make sure your youngsters attend the time you want, too, by getting in early.

Tickets are issued on the first-come-first-served basis . . . and popular times get exhausted very early in the game.

Please check first, second and third choice on the application form. Every effort will be made to give first choices, but when the limited number of tickets are gone, second and third choices will be issued.

That's Wednesday, December 21. Arrange now to see that your youngster gets there.

Linde's Gray Is Executive V.P.

William S. Gray Jr. has been appointed executive vice president of the Linde Division of Union Carbide Corporation, according to an announcement from J. Goffe Benson, division president.

Gray has been with Union Carbide since 1950 when he joined the corporation's Law Department. Initially, he served as counsel for the Ore Division, which at that time was responsible for procuring and processing ores for metallurgical use and other purposes, and also represented the corporation's interests in numerous affiliated overseas mining companies. In 1959, he became counsel for the Linde Division, and was appointed a vice president of the division in 1965.

Gray attended Princeton University and later New York University where he was graduated with an LLB in 1950. That same year, he was admitted to the New York Bar.



"And when they heard about this at the factory I was immediately promoted to the production department."

Application For Tickets

TO

Christmas Parties

FOR CHILDREN OF CARBIDE EMPLOYEES

(Ages Two-10 Only)

WEDNESDAY, DECEMBER 21

Employee's Name _____ Badge No. _____

Home Address _____

(PLEASE PRINT — STREET ADDRESS OR R.F.D., CITY, AND ZIP CODE)

NUMBER OF TICKETS (Children) _____

NUMBER OF TICKETS (Adult) _____

— CHECK TIME PREFERRED —

Wednesday, December 21 9 A.M. _____ 11 A.M. _____

Only 1 P.M. _____ 3 P.M. _____ 5 P.M. _____

Please check first, second and third choice (write in space "1", "2" or "3") as only a limited number of tickets will be issued for each party. Preference will be given early applicants and if tickets for first choice are exhausted, tickets for second choice will be issued.

Return this form, properly and completely filled in, immediately to the Y-12 Recreation Office, Room 108, Bldg. 9704-2, NOT LATER than December 16. The required number of tickets will then be mailed to parents at their HOME ADDRESS.