



**HEALTH PHYSICIST DR. MAX SCOTT** positions a sample can of paint under a gamma scintillation counter in the In Vivo Radioactivity Measurement Facility in Y-12. Once positioned, the sample is isolated within the shielded facility and monitored for 800 minutes to determine its radiation content. The work is being performed for the National Aeronautics and Space Administration's Lunar Receiving Laboratory at Houston.

## In Vivo Facility Used In Lunar Lab Experiments

Samples of construction materials and electronic equipment for use in the National Aeronautics and Space Administration's Lunar Receiving Laboratory at Houston are being examined for radioactivity content in Y-12.

Materials with negligible natural radiation background are required for the NASA facility to avoid their interfering with an accurate radiation appraisal of geological samples returned from the moon.

The examinations are being conducted at Y-12's In Vivo Radioactivity Measurement Facility, a steel-walled chamber normally used by health physicists in monitoring personnel for internal deposition of radioactive materials.

In a typical test, a sample of paint, welding wire, metal plate or tube, gravel, or a piece of electronic equipment is counted for a period of 800 minutes in the shielded isolated chamber. Radiation emitted from radioactive elements in the sample is detected by gamma scintillation counters.

## Physics Division's Moak Leads Friday's Seminar

C. B. Moak, Physics Division, will conduct this week's seminar. His subject is "Equilibrium Charge Distributions of Heavy Ions and Tandem Accelerator Design."

The seminar is set for Friday, February 17, at 3:15 p.m. in the East Auditorium, ORNL's 4500N building.

## CHANGING TIMES

Civilization does change. When there is trouble in the household, the man usually goes to his club. In primitive days he just reached for it.

## UCC Director Of Safety Visits Y-12

Robert Thode, safety director of Union Carbide Corporation, visited in Y-12 last week to review the safety program of the plant. His responsibility is the surveillance of safety practices throughout the corporation. In reviewing Y-12's safety history, Thode was impressed with the formal safety programs held in the plant, as well as safe practices in our various occupations. He also endorsed the plant management's support of the safety efforts.

And what does the safety picture look like in comparison? The end of 1966 saw Y-12 complete five years of operation with an average well below one injury for every million man-hours worked, an enviable feat, to be sure.

While the plant suffered eight lost-time injuries in 1966 (compared with only four the year before), the actual number of first-aid cases dropped to a new low of 1,717. Of these 145 were considered serious . . . with the above-mentioned eight resulting in lost-time.

### Compared To Others

The frequency rate (number of chargeable accidents per million man hours worked) for 1966 was 0.79. While the figures for 1966 are not in for the chemical industry, and for industry as a whole . . . look at what this came to in 1965: the chemical industry suffered a 3.36 frequency rate; industry as a whole sustained a frequency rate of 6.53!

Y-12's 0.79 frequency rate (Union Carbide's as a whole is 2.5) is less than four times lower than that of the chemical industry . . . less than three times lower than the corporation's as a whole . . . and less than eight times lower than that of industry as a whole!

Continued on Page 4



**ROBERT THODE, SAFETY DIRECTOR**, Union Carbide Corporation, center, visited in Y-12 last week to review safety practices in the plant. He also looked over past performances relative to safe working habits. Above he confers with Roger F. Hibbs, Y-12 Plant Superintendent; and C. E. Johnson, right, head of Y-12's Safety Department.

## UCC Sales, Earnings For 1966 Break Records For Fifth Year!

### All Major Product Groups Show Sales Gains For Year, Despite Strikes In Metals Group

Union Carbide sales climbed to a record \$2,223,980,000 in 1966, and earnings rose to an all-time high of \$230,973,000, or \$3.82 a share, Birny Mason Jr., chairman, reported last week. As recently forecast, sales for the year were eight per cent above 1965 sales of \$2,063,901,000. Net income increased two per cent over the \$226,917,000, or 76¢ a share, earned a year ago and set a record for the fifth consecutive year.

The year's record results were achieved, Mason pointed out, despite a number of adverse factors. The main factor depressing earnings during the last four months of the year was a series of labor disputes arising out of coordinated efforts by several unions to bring about multi-million, corporate-wide bargaining. This led to work stoppages at 11 of the corporation's plants. As of this date, settlements have been achieved at two plants and a tentative agreement has been reached at a third, which has been operating under a Taft-Hartley injunction. A number of facilities scheduled for completion during 1966 delayed by late equipment deliveries and shortages of skilled construction labor in certain geographic areas. To meet the strong demand for products, older plants had to be operated at uneconomically high rates for prolonged periods. In addition, the corporation had to purchase unusually large quantities of materials from outside sources to supplement its own production.

### All Major Groups Show Sales Gain In 1966

All major groups showed sales gains for the year, Mason stated, although sales in the metals group dropped in the second half as a result of strikes at several plants. A breakdown of sales by product groups for each quarter of 1966 is given in the following table.

### SALES BY PRODUCT GROUPS

	Dollars in Millions				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Chemicals	\$176	\$191	\$215	\$199	\$781
Plastics	97	101	95	95	388
Industrial Gases	103	109	105	107	424
Carbons and Batteries	75	78	81	98	323
Metals	80	88	78	62	308
<b>Total</b>	<b>\$531</b>	<b>\$567</b>	<b>\$574</b>	<b>\$552</b>	<b>\$2,224</b>

Union Carbide's overseas business continued to expand. Mason revealed that sales to customers outside the United States amounted to approximately \$765 million in 1966, compared with \$715 million in 1965. This includes export sales and the operations of the corporation's Canadian subsidiary and affiliated companies overseas in which Union Carbide has a 50 per cent or more interest. Export sales from the United States, Puerto Rico, and Canada in 1966 were \$147,283,000, compared with \$150,363,000 in 1965. Export sales have been limited, Mason pointed out, by shortages of product.

To help meet the heavy demand for products and relieve pressures on production facilities, many of which were operated at higher rates than in any year in the past decade, Union Carbide is continuing to expand production facilities throughout the world. The corporation spent \$351 million on new construction in 1966, the largest capital outlay in its history. This includes \$330 million spent in the United States and Puerto Rico and \$21 million in Canada. In addition, to keep pace with strong demands abroad, overseas affiliated companies spent \$66 million on new facilities during the year.

### Huge Taft Complex In Louisiana Is Largest

The corporation's largest building project in the United States

Continued on Page 4

## Metal Tube Business Booms In United States

More than a billion metal tubes are produced each year in the United States and about half of them are used for toothpaste. It was first packaged in a metal tube in 1892 by Dr. Washington Sheffield, a Connecticut dentist.

Metal tubes are the preferred package in Europe for a wide variety of food items like jelly, fish and meat spreads, catsup, mustard, caviar and chocolate icing, mayonnaise, cheese and butter.

## SAFETY SCOREBOARD

The Y-12 Plant Has Operated 73 Days Or 1,966,000 Man-Hours (Unofficial Estimate) Through February 12 Without A Disabling Injury A Job Well Done Is Also Safely Done

# The Bulletin

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



NUCLEAR DIVISION

JAMES A. YOUNG *Editor*



American Association Industrial Editors

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## Thompson Rites Held February 3

The death of Robert D. Thompson, Civil and Architectural Engineering, is sadly reported. Mr. Thompson died Wednesday, February 1, in the Harriman hospital.

The Thompson home is at 306 Lakewood Road, Kingston. Mr. Thompson was a native of Ludington, Michigan.



Mr. Thompson

He had been in high-way construction work in Florida, Kentucky, and Missouri, before coming here in 1944. He returned to Y-12 the second time March 5, 1951.

Survivors are his wife Mrs. Mary Carroll Thompson; a daughter, Mrs. Anita T. Fields, two grandchildren, Oak Ridge; sisters, Mrs. Doris Schrader, Atlanta; Mrs. Iva Paetschow, Ludington; Mrs. Louis Weidhamer, Traverse City, Michigan; Mrs. Mary Shaw, Ogden, Utah; and brother Dean Thompson, Kansas City, Missouri.

Funeral services were held Friday, February 3, at the Bethel Presbyterian Church, where Mr. Thompson was a member. The Reverend Morris Hunt officiated at the rites, and burial followed in the Kingston Memorial Gardens.

Sincere sympathy is extended the Thompson family.



Riders wanted from Northeast Knoxville, straight day, to any portal. F. E. Clevenger, plant phone 3-5095, home phone Knoxville 522-7393.

Will join car pool from corner of East Drive, Edison Lane, Oak Ridge, to Central Portal, straight day. Joe Pryson, plant phone 3-5938, home phone Oak Ridge 483-8217.

Ride wanted from Karns to Biology Portal, straight day (Tuesday, Thursday and Friday only). Lois McGinnis, plant phone 3-7327, home phone Knoxville 584-2729.

Ride wanted (or will join car pool) from Garden Apartments, to North or Central Portal, straight day. Betty Oates, plant phone 3-7739, home phone Oak Ridge 483-4856.

### A HELPING HAND

Most folks, if they look hard enough, will find a helping hand at the end of their own arm.



'MYSTERY OF LIFE' or the world of genetics and its challenges will be reported on the February 26th edition of "The 21st Century." Here Fred Warshofsky, left, science editor, and CBS News Correspondent Walter Cronkite, discuss a model of a DNA (deoxyribonucleic acid) molecule, the complex substance that carries the genetic information that controls man's hereditary characteristics. The weekly series (on WBIR-TV, Channel 10) at 6 p.m. Sundays is sponsored in the public interest by Union Carbide Corporation.

## 'Marriage Contract' Set This Week-End

"Heketuba" (The Marriage Contract) is the tenth annual production of the Sisterhood of the Jewish Congregation of Oak Ridge. The play will be presented Saturday and Sunday, February 18, 19, beginning at 8:20 p.m. at the Oak Ridge Playhouse.

The local production of "Heketuba" will be the national premier in English. Translated from Hebrew by Miriam Arad, the play was written by Ephraim Kishon, a well-known Israeli author and columnist. When the comedy premiered in Israel in 1962 it was an overnight smash hit and became that country's longest running play.

The play takes place in present-day Israel. The story concerns the comic situations that arise when the fiancée of a beautiful young girl demands to see her parents' marriage contract and they cannot find it.

Tickets may be obtained from Mrs. Richard Handler, Oak Ridge telephone 482-1341, or Mrs. Mel Sturm, 483-5538.

Caution pays a "living" wage.



Five Y-12ers move into the magic circle this week, observing anniversaries with Union Carbide Corporation. Congratulations.

### 20 YEARS

Emmett L. Moore, Fire Department, February 16.

Odeva Mack, Graphite Shop, February 18.

### 15 YEARS

Neal Dow, Beta Two Forming, February 15.

Daniel H. Palkowski, Mechanical Design Engineering, February 18.

### 10 YEARS

Leland T. Carden Jr., Data Processing, February 18.

### COLD CARRIERS

When you cough or sneeze in someone else's face, you may be passing on more than 20,000 virus-laden droplets at a speed of 150 feet per second—some of these droplets linger in the air for as long as 30 minutes.



## PITTMAN-CROUSE

The First Baptist Church, Concord, was the scene of the holiday wedding of Miss Hallie Estelle Crouse and Mr. Kenneth Wayne Pittman. The December 17th rites were performed by Mr. Eddie Smith, minister of the Church of Christ.

The bride is the daughter of Mr. and Mrs. Elmer G. Crouse, 1144 Thornton Drive, Concord. Her father is in Y-12's Metal Preparation Division, and the mother (Evelyn) is in Materials and Services. The groom's parents are Mr. and Mrs. Kenneth C. Pittman, 225 Gilbert Street, Morristown.

Given in marriage by her father, the bride wore a sheath gown of white peau de soie and Alencon lace. The crown of matching lace and pearls held a bouffant veil of imported English silk illusion.

Miss Frances Moore, maid of honor wore a long blue crepe dress and carried a bouquet of white carnations. Flower girls, Carolyn and Marilyn Smith, Lenoir City, were cousins of the groom. They wore dresses of white dotted swiss trimmed in blue, and carried baskets of petals. Eddie Brown, Decatur, Georgia, cousin of the bride, was ring-bearer.



Mr. and Mrs. Kenneth Wayne Pittman

Nuptial music was provided by Mrs. Dorothy Conner, Materials and Services, at the organ, and Miss Elizabeth Amos as vocalist.

Floyd Ray Smith, Newport, acted as the groom's best man. Ushers were Roy Ditmore, Oak Ridge; Buford Clendenen, Chattanooga, and L. C. Clapp.

A reception honored the couple immediately after the ceremony at the church.

Both the bride and groom attend Tennessee Technological University, where she is a member of the Society of Business Administration, and he is a student member of the American Institute of Chemical Engineers.

They reside at 160 West Seventh Street, Cookeville.

## Monday Is Official Holiday For Y-12ers

Monday, February 20, is an official holiday for Y-12ers, as the plant celebrates George Washington's birthday a little early (February 22.) Actually, the father of our country was not born on February 22 anyway . . . he was born on February 11 by the Old Style calendar. When the calendar was revised his birthday was set at February 22.

Anyhow any anyway . . . Monday is the official holiday.

No employee will be required to work except those whose presence is required by continuous operation or the protection of the plant.

## Edison Day Sees AEC Visitors Here

The Atomic Energy Commission and its contractors participated last week in the 120th anniversary observance of the birth of Thomas Alva Edison. Saturday, February 10, and 11, saw 5,200 junior and senior high school students and teachers visit the 14 AEC contractor laboratories and other facilities for "Science Youth Day."

SYD is an international education program inaugurated by the Thomas Alva Edison Foundation to honor the great inventor and at the same time to encourage young students both here and abroad to become interested in sciences and engineering careers.

The students toured the American Museum of Atomic Energy operated by Oak Ridge Associated Universities; and Oak Ridge National Laboratory, operated by Union Carbide. They learned about atomic energy and how it is being used in medicine, industry, agriculture and research.

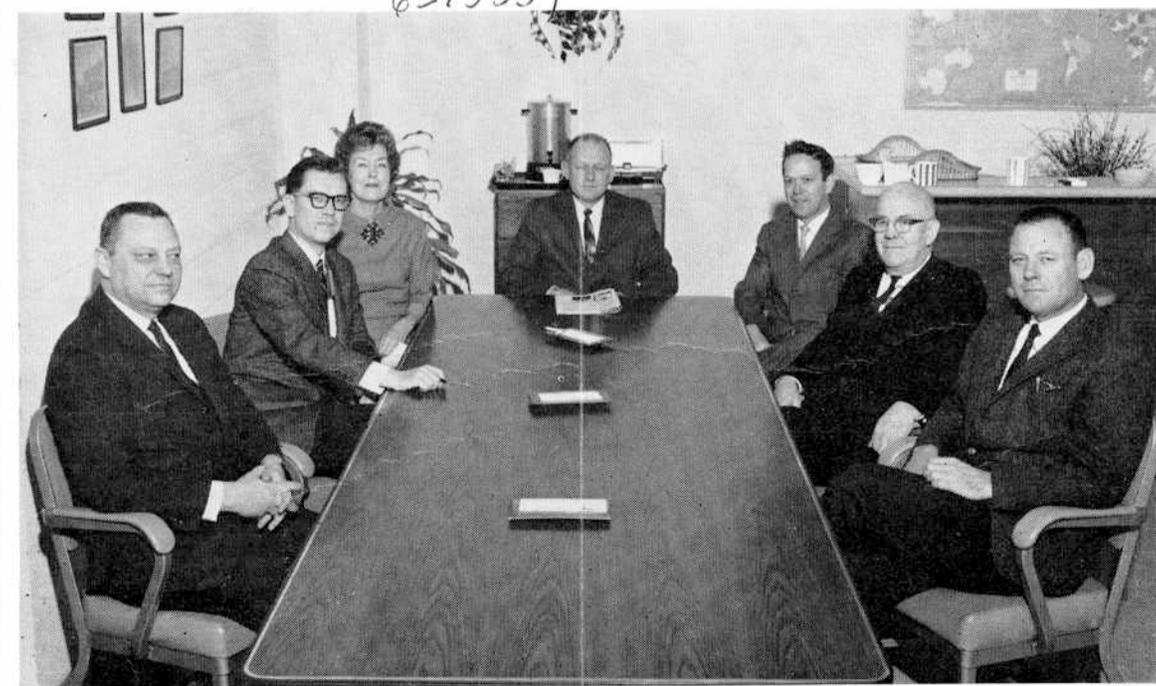
## Drexel's Dieter Speaks At Metals Meet Tonight

George E. Dieter Jr., Drexel Institute of Technology, will speak tonight at the American Society for Metals meeting. The meeting is set Wednesday, February 15, at 6:15 p.m. at the Holiday Inn West, Knoxville.

Dinner begins at 6:15 p.m., and reservations may be made through W. R. Martin, extension 3-1675.

## HARD KNOCKS OF LEARNING

The man who remembers what he learned at his mother's knee was probably bent over at the time.



THE 1967 BOARD OF Y-12's CREDIT UNION met recently to elect officers for the calendar year. They are P. L. "Pat" Patrick, center, president; C. V. Ketron, vice president; Lorena Causey, treasurer, manager; Tom Stephens, assistant treasurer; Bill Hackett, secretary. C. V. Ketron will head the supervisory committee; and Fred Wilkinson heads the credit committee. Reading clockwise, the board consists of Stephens, Paul Blakeley, Mrs. Causey, Patrick, Hackett, Ketron, and Dan Stroud.

### 3 Basketball Teams Keep Clean Slate

Three teams in the Basketball League now sport three-wins, no-loss records, as the Bombers, Radioisotopes and VIP's all line up in first place.

Only three games went into the record books last week, as the Collegians dropped hardwood honors to the VIP's in the initial game, 59 to 36. Chuck Brown led the losing Y-12 squad . . . with 14 through the bucket. For the VIP's it was the usual Jim Carter, this time with 25.

The Ecobums downed the Has Beens in Monday's second game, 51 to 40. Leading the 'Bums was Paul Rowher with 17; Tom Kitchens with 15 big points. For the losers it was Bob McCulley who accounted for 16 of the 40 points.

Final play saw the B bar R's squeak by the Y-12 Bat Boys 39 to 34 in the closest tilt of the week. Jerre Batson and Bob Brown fired 10 points through for the ORNL team. Leading the Y-12 squad were Hugh Beeson, with nine; Romeo Green with eight.

League standings follow:

Team	W	L
Bombers, ORNL	3	0
Radioisotopes, ORNL	3	0
VIP's, ORNL	3	0
B bar R's, ORNL	2	1
Ecobums, ORNL	2	1
Braves, Y-12	1	1
Collegians, Y-12	1	2
Bat Boys, Y-12	0	3
Celtics, K-25	0	3
Has Beens, ORNL	0	4

### Beavers Dominate Volleyball Play

Action began quickly in the Volleyball League last week on Court A. The Old Men won three games from the Mix-Ups, 15-9, 15-8, and 15-7 . . . the Mix-Ups took game number two 15-8.

The Y-12 Beavers continued their winning streak by winning four from the K-25 Sports, 15-7, 15-3, 15-7 and 15-3. The Ecobums claimed one game 17-15 at the expense of the Set-Ups . . . but the Set-Ups returned to the courts to take the remaining three, 15-4, 15-13, 11-3.

Meanwhile on Court B, the Scrubs shellacked the Y-12 Eagles 15-4, 15-7, 15-7 and 15-1. The Tigercats clawed four away from the Beagles 15-11, 15-9, 15-10 and 15-11. The Charley Browns won the first two games 15-10, 15-9 from the Neophytes, but the cellar-dwelling team returned to win the final two games 15-7, 15-11.

League standings follow:

Team	W	L
Beavers	35	1
Set-Ups, ORNL	28	8
K-25 Sports	25	11
Scrubs, ORNL	25	11
Ecobums, ORNL	23	13
Old Men, ORNL	22	14
Tigercats, ORNL	18	18
Eagles, Y-12	12	24
Beagles, ORNL	12	24
Mix-Ups, K-25	7	29
Charley Browns, ORNL	7	29
Neophytes, Y-12	2	34

### Campers-Hikers Plan Dinner Meet Saturday

The Talahi Chapter of the National Campers and Hikers Association is meeting Saturday, February 18. The meeting is set for 6:30 p.m. at the Ridge Recreation Hall.

A covered dish supper, plus slides by Mr. and Mrs. A. J. P. Gore, an English couple who will give camping experiences, make up the February meeting. This is the third indoor meeting. January's attendance totaled 43.

Prospective members are welcome.

April 28-30 are red-letter days for the NCHA . . . as they plan the Harrison Bay State Park, near Chattanooga, outing.

### Recreation



**Saturday, February 18**  
TECHNICAL DINNER-DANCE: Oak Terrace Ball Room. \$5 per couple per dance; \$10 per couple per dance and dinner.

**Sunday, February 19**  
SKEET: Practice Shoot. 1 p.m. Oak Ridge Sportsman's Association.

**Monday, February 20**  
HOLIDAY FOR Y-12.

**Tuesday, February 21**  
PHYSICAL FITNESS: 7 p.m., Oak Ridge High School Gymnasium (Women's PT held in Girls' Gym).

**Wednesday, February 22**  
BASKETBALL: Beginning 6:30 p.m. Oak Ridge High School. Collegians vs. Braves; Bombers vs. Ecobums; VIP's vs. Bat Boys.

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

BADMINTON: 7:30 p.m. Jefferson Junior High School Gym.

**Thursday, February 23**  
BOWLING: 5:45 p.m., Classic League, Ark Lanes.

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

**Saturday, February 25**  
BOWLING TOURNAMENT: Ark Lanes. (As per schedule).

**Sunday, February 26**  
BOWLING TOURNAMENT: Ark Lanes. (As per schedule).

### Bo Glovier Takes Skeet Tournament

Bo Glovier, Y-12, capped honors in the most recent Skeet Tournament, held February 5. His 49,181 led the list, topped only by Fred Welfare's 50,000, which was under penalty. H. Wills, ORNL, came in second with 48,981 . . . and Carl Brewster, Y-12, finished third with 48,880.

A practice shoot will be held Sunday, February 19, at 1 p.m. at the Oak Ridge Sportsman's Association. The next tournament is set for Sunday, March 5.

The new rules now in effect have resulted in new participation . . . and newcomers are always welcome . . . either at the practice shoots or the regularly set tournaments. Just show up at the ORSA range.

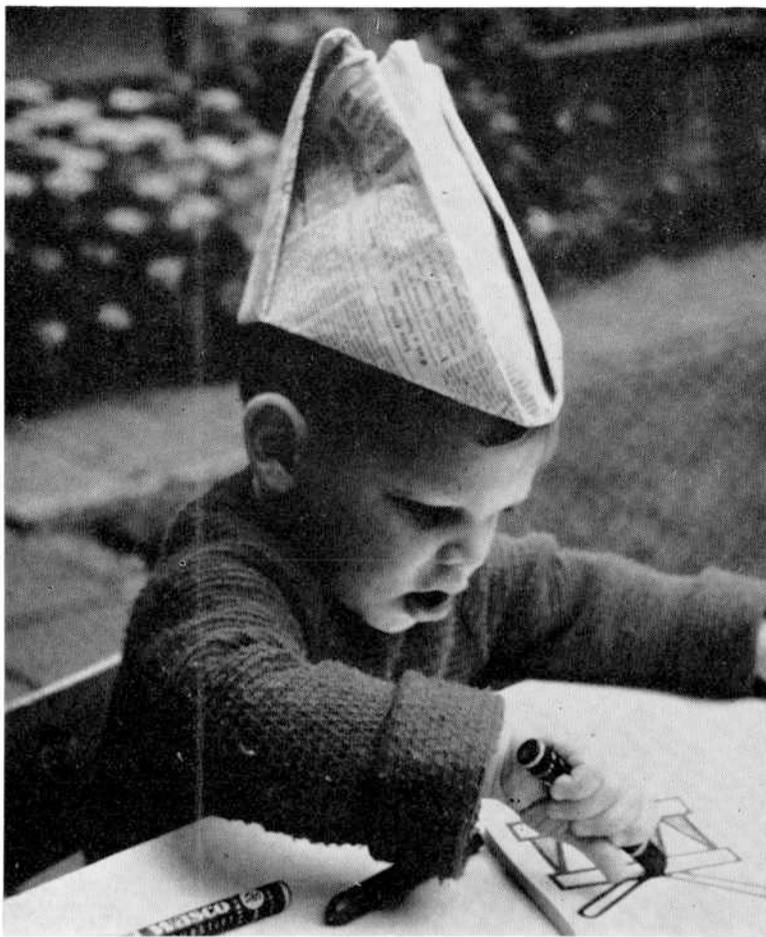
February 5 Firings:

Skeeter	H'Cap Score
R. Allstun, Y-12	48,575
C. Asmanes, Y-12	48,858
Ken Bahler, K-25	48,369
Carl Brewster, Y-12	48,880
Wm. Brundage, X-10	47,872
Jack Case, Y-12	47,491
W. Davy, X-10	48,923*
D. Fry, X-10	45,923
D. Glovier, Y-12	49,181
Finis Patton, Y-12	48,585
H. Prewett, Y-12	48,654
T. Webber, Y-12	45,922
Fred Welfare, ORNL	50,000*
H. Wills, ORNL	48,981
D. Ray, ORNL	47,280

\*One penalty removed.



"Before we take you to your machine, Miss Lee... we supply the aprons."



Peter and Crayons



'Coquette'

### Camera Club Begins '67 Year With Suggested Education Plans

Prize winners in the color slide classification of the Carbide Camera Club's January competition on children have been announced.

Winners include "Peter and Crayons" by Herman Postma and "Coquette" by Richard Sladky. Julian Dunlap placed among the black and white print classification winners. Postma placed third in the 1966 year-long competition in color slides.

February's competitive subject is announced as "Open."

A primary topic for this year's educational program will be color printing. Tentative plans also include a comprehensive course in basic photography. The club is also considering a series of advanced seminars for the benefit of advanced photographers. The primary goal of the program, however, is to teach what members want to know. Suggestions for subjects may be given to Bob Stephenson, telephone extension 3-1409, or Oak Ridge telephone 483-4564.

Membership fees are being taken for 1967. They are \$3 . . . plus an additional \$1 per family member. They are due now. Any Carbide employee and his family may participate in the club's activities.

Other 1966 color slide winners were Anna Dobbins, first; Peggy

Turner, second. Print winners were Bill Russell, Joe Dedrick and Dave Bourgette in that order.

### Goofers Go To Top Of Mixed Alleys

The Goofers gained a toe-hold on the lead in the Mixed Bowling League last week by trouncing the Hits & Misses for three points. Taking four were the Roses 'N Thorns over the Rollers, and the Twisters over the Alley Cats.

The Mustangs and Novices shared two points each.

Roy Scates, Mustangs, rolled a 223 scratch single game. Bob Hagood, Goofers, gained a 249 handicap single. Hagood's series of 593 scratch, 674 handicap were high also.

Dixie Stinnett swept distaff honors, rolling singles of 210 scratch, 261 handicap. She and Irene Carmack tied for scratch series, each with 448. Dixie's 637 handicap series was high.

League standings follow:

Team	W	L
Goofers	16	8
Hits & Misses	15	9
Roses 'N Thorns	13	11
Alley Cats	12	12
Twisters	12	12
Rollers	11	13
Mustangs	11	13
Novices	6	18

### Y-12ers Hold Two Table Tennis Leads

Bill Motley continued holding the reins in the X League of Table Tennis play last week with a three-win, no-loss record over Al Norris. Roy Huddleston also took three from Norris, and lost two to Herb Mook. Gordon Brewer took two sets from Fred Shull.

X League standings:

Player	W	L
William Motley, Y-12	9	0
Roy Huddleston, Y-12	10	2
Herb Mook, ORNL	5	4
Gordon Brewer, Y-12	4	5
Subbu Raman, ORNL	3	3
Fred Shull, ORNL	3	9
Al Norris, Y-12	1	8
Ralph Einstein, ORNL	1	5

Ed Gambill took three games from Stan Cantor last week, and lost two to Ram Uppuluri and Bob Coveyou. Coveyou defeated Cantor for the full count.

Y League standings:

Player	W	L
Ed Gambill, Y-12	10	5
Ram Uppuluri, ORNL	5	1
Bob Coveyou, ORNL	5	1
Roy Matheny, ORNL	1	5
Art Weinberger, ORNL	0	3
Stan Cantor, ORNL	0	6
Nick Case, ORNL	0	0
Ernest Schonfeld, ORNL	0	0

Joe Lewin continues his fast hold on K League standings with a three-point win over Joe Hallau. Francois Kertesz defeated Tudor Boyd for the full count also.

K League standings follow:

Player	W	L
Joe Lewin, ORNL	10	2
Francois Kertesz, ORNL	8	1
Bob Bernard, ORNL	5	4
Winfred Collins, Y-12	4	5
Harley Law, Y-12	4	5
Ed Isham, Y-12	3	6
Joe Hallau, Y-12	3	9
Tudor Boyd, Y-12	2	7

### Howard Horne Fires Classic Alleyways

The Playboys and Has Beens continue their 'death-lock' on the lead in the Classic Bowling League. Both took three-point wins in action last week. The Boys won from the Screwballs, and the Has Beens from the Wasps.

Two four point wins went to the Tigers over the Bumpers, and the Eagles over the Markers. Three and one-half points went to the Swingsters over the Rippers. The Smelters sailed past the Rebels by three. The Splinters and All Stars . . . and the Eightballs and Cubs all shared two points.

Howard Horne, Smelters, set the alleys ablaze with a hot 238 single game, 269 handicap-wise. His series of 614 scratch, 707 handicap were high also.

The Smelters seized singles honors with 930 scratch, 1094 handicap. The Eagles earned series highs with 2630 scratch, 3095 handicap!

League standings follow:

Team	W	L
Playboys	21	7
Has Beens	21	7
Swingsters	18	10
Splinters	17	11
Wasps	16	12
Tigers	15½	12½
Cubs	15	13
Eagles	15	13
Rebels	14½	13½
Bumpers	14	14
Markers	13½	14½
Screwballs	10	18
Smelters	10	18
All Stars	10	18
Rippers	7½	20½
Eightballs	6	22

### B Shift Party Set Wednesday At Marina

B Shift is sponsoring a game night next Wednesday, February 22. It will be held at the Oak Ridge Marina, out on the lake.

It begins at 7:30 p.m. and all Y-12ers are invited, say B Shift-men.

Something new . . . they say . . . what will it be? See for yourself . . . Bring the family; Enjoy the evening . . . is B Shift's song.

A "Hands Off" sign can mean yours if disobeyed.



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

(RETURN REQUESTED)

BULK RATE  
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Oak Ridge, Tenn.  
Permit No. 71

## Badgers, Big Five Grab C Alley Top

The Badgers and Big Five bagged the lead in the C Bowling race last week, thanks to big three-point wins over the Sunflowers and Rollmasters. Four points went to the HiLifers over the Rodders and the Royal Flush over the Fireballs.

Other three-point wins saw the Strikers superior to the Invalids and the Parbusters past the Rounders.

Louie K. Brooks, Parbusters, busted the alleys with a 231 scratch game, 258 handicap single. Dick Huber, Badgers, bagged a 587 scratch series; Frank Adams, HiLifers, rolled a 660 handicap series.

The Badgers barged ahead in singles . . . 938 scratch, 1065 handicap. The Big Five hit a new season high in scratch singles, with 2643 . . . and the HiLifers had a 2998 handicap series.

**The C League will not roll next Monday, February 20, due to the holiday. The matches scheduled then will be rolled on Monday, April 17 . . . and the position roll-off will be held April 24.**

League standings follow:

Team	W	L
Badgers	13	7
Big Five	13	7
HiLifers	12½	7½
Rounders	12	8
Fireballs	11	9
Royal Flush	10	10
Strikers	10	10
Rodders	9	11
Rollmasters	8½	11½
Invalids	8	12
Parbusters	8	12
Sunflowers	5	15

## VACATION BONUS

A man returned from a two weeks' vacation and asked his boss for time off to get married. "Why didn't you get married two weeks ago?" the boss asked. "And ruin my vacation?" the startled employee retorted.

## Welding Society Plans Courses

The Northeast Tennessee Chapter of the American Welding Society is sponsoring a 12-hour lecture course on modern metal joining processes, tentatively set to begin Monday, February 27. The course is designed to give a general but comprehensive picture of the processes covered. It is being offered to welders, inspectors, technicians, welding supervisors, and engineers, and will be held on Mondays from 7 p.m. until 9, at the Oak Ridge Atomic Energy Museum.

Joseph J. Phislinger, ORNL Metals and Ceramics Division, will be the course lecturer.

The course outline will cover the following subjects: soldering; brazing; resistance welding; induction welding; thermit welding; electron beam welding; laser welding; solid state bonding, ultrasonic welding; friction welding; welding of plastics and adhesive bonding.

A tuition fee of \$15 will be charged which will include a 146-page, cloth-bound illustrated text book.

Certificates will be presented upon the successful completion of the course.

Enrollment may be made by contacting C. L. Estes, extension 3-7594.

## ORIGIN OF TAPS

"Taps," the plaintive bugle call, was composed during a lull in Civil War fighting. General Daniel Butterfield, commander of a brigade in the Army of the Potomac wrote the haunting notes as his men were camping on the banks of the James River in Virginia.



**SEWELL BROWN, RIGHT, AND CHARLIE CRUME, left, Radiation Safety, received safety awards for programs they put on in 1966 that were voted best by fellow members of their department. Brown receives the first prize of a power saw from G. A. Strsser, and Crume took a traveling alarm clock as second prize.**

## UCC Safety Director Visits In Y-12

Continued from Page 1  
**ORNL's Lowest**

The Oak Ridge National Laboratory enjoyed the lowest frequency rate of the four atomic energy installations operated by Union Carbide . . . 0.51. The Oak Ridge Gaseous Diffusion Plant's rate was 1.91, and the Paducah plant suffered 2.02 injuries for every million man-hours worked.

The hands and fingers accounted for 60 per cent of all of the injuries in Y-12 last year!

Motor vehicle accidents dipped last year to 29 . . . a new low also . . . which averages 14.14 accidents for every million miles driven.

## Home Accidents Drop

Off-the-job accidents also showed an encouraging drop for 1966. Still there were 7,898 days lost last year by employees from accidents away from the job, in a total of 71 accidents.

Fire losses in the plant were only \$8,515.20 . . . in 30 incidents of fire. This was another new low, in numbers and cost of damaging fires.

As cheering as the 1966 picture may look . . . there were still 1,862 injuries reported on the job in Y-12 last year. Many of these mishaps could have been prevented. (The very definition of an accident implies preventive measures could have avoided it. It is defined as: "An event that takes place without one's foresight.")

## Safety's Advantages

Y-12's illustrious safety performance through the years is more than a source of pride to all of us. Working in safe surroundings is an advantage of untold benefits . . . knowing you work in safe surroundings is an added benefit.

Let's strive to make 1967 an even better year than ever as far as safety is concerned!

## LARGE WATER USER

The gaseous diffusion plant at Paducah has a water works larger than that of many cities. About 340 million gallons of water circulate through the plant's cooling system every day.

## Radiation Safety Chooses Best Safety Programs In '66

The Radiation Safety Department opened their 1967 safety meetings with a quick review of meetings held last year. In a rather unique contest, they voted two programs as outstanding among those held.

Sewell Brown, holding the March meeting, took first place with his safety meeting on "1075 in Tennessee," subtitled "Automobile Accidents—Yesterday, Today! and Tomorrow? According to program coordinators, Brown's talk was well prepared, well presented, and contained excellent source material.

E. C. Crume Jr., who held the July meeting, took second place. Charlie's meeting was entitled "The Nice Safe Office" and covered unsafe practices in the office. He illustrated by actual answer to questions by show of hands of the people present at the meeting that the department did have office hazards that were involving the section in accidents.

The department graded each of

the 12 meetings . . . point by point.

Brown was presented an electric Skil saw as his award, and Crume won a travel alarm clock. Other than the awards, the winners were also recognized by having their names inscribed on a plaque which now hangs in the Conference Room. The plaque reads: "Award of Achievement—Radiation Safety Department. Made in recognition for the best safety program during the year. Difficulty of monthly subjects, originality, entertainment, and individual effort will be the basis for the yearly chairman's decision." Brown and Crume's names are inscribed on the plaque.

Making the presentation was George Strasser, superintendent of the Technical Division.

A brief review of upcoming safety programs for 1967 was given by E. F. Fleischman, 1967 coordinator. C. M. "Hap" West coordinated the programs last year.

## UCC Sales And Earnings Break Records For Fifth Consecutive Year

Continued from Page 1

States is a multimillion dollar petrochemicals facility at Taft, Louisiana, the first unit of which went on-stream late in September. Also planned or under construction at Taft are facilities for producing ethylene, ethylene oxide, polyethylene, glyoxal, peracetic acid and its derivatives, and acrylics. Other key construction projects in this country include a 1.2 billion pound-per-year ethylene unit, which will be the largest single ethylene unit ever built — a synthetic phenol plant, expected to be the largest and most economical phenol plant in the world — the first part of an expansion of the world's largest electrode plant — three 1,200 ton-per-day air-separation units to be added to a large industrial gas complex supplying oxygen to several steel mills — and the world's largest ore-treatment plant for the recovery of vanadium.

Union Carbide's affiliated companies outside the United States are also carrying out major construction projects at about 30 locations. Among facilities recently completed, under way, or planned are a synthetic fibers plant producing nylon in Canada — new chemicals, plastics, and graphite electrode facilities in Brazil — a \$50 million project in Belgium involving polyethylene, petrochemicals, and industrial gases — and a \$20 million expansion of chemicals and plastics facilities in India.



**OAK RIDGE HOSPITAL'S** first baby of the New Year is pretty little Lisa Anne Bird. She was born at 2:17 a.m. Sunday, January 1, the daughter of Gary and Barbara Bird. She is the granddaughter of John Sewell, Y-12's Machine Maintenance, and described as having lots of black hair, long fingers and toes, very alert, even at one hour's age!