



NUCLEAR DIVISION NEWS

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

Vol. 4 - No. 1

Thursday, January 4, 1973

QUESTION BOX

If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. (Or telephone it in to your plant news representative . . . see page two). You may or may not sign your name. It will not be used in the paper if you so desire.

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

(Space limitations required condensation of the following question. However, none of the points of emphasis was changed.)

QUESTION: Why is there such a difference in the food prices between the three Oak Ridge plant cafeterias?

X-10 has four entrees each day, K-25 has three entrees, and Y-12 only has two. At K-25, they serve a fried chicken breast for 45 cents; at Y-12, we never get chicken breast, but chicken thighs are 60 cents.

A slice of cheese added to a sandwich costs 10 cents, but a slice of cheese added to a hamburger costs 5 cents - what is the difference?

There is also a noticeable difference in the vegetables, especially between K-25 and Y-12. A serving of pinto beans at K-25 costs 15 cents and at Y-12 a serving costs 20 cents. K-25 and X-10 also offer more variety in their selection of vegetables.

K-25 offers soup at two prices - 15 cents and 30 cents. With a sandwich, the 15 cent serving is adequate.

I do not feel that I should have to pay a third more to eat at the Y-12 Cafeteria. These differences of a nickel and a dime soon add up and make a lunch in the Y-12 Cafeteria cost considerably more than at the other plants.

ANSWER: A good question. We have been studying for some time the operations of the cafeterias to determine whether improvements can be made in the handling of the operations and service. Included in the study are prices, menus, physical arrangements, buying, service, etc. We hope to have some conclusions from the study in the near future.

QUESTION: The place I previously worked poured profits from vending machines into various fringe benefits for its employees. Is there a percentage of profit from vending machines in our plants, and where does the profit go?

ANSWER: Vending machines are considered to be a part of the overall food operation in the Nuclear Division. Profits

and losses from the vending machines are therefore part of the overall profits and losses of the food operation. The continuing aim is to run the total food service operation at a break-even point. There has not been a profit in the overall food service in recent years.

QUESTION: Please tell me why on the stub of my paycheck you deduct so many items under the category of "Misc." with no explanation at all. If I find out I have to call the office and it has to be looked up. I do think if there is a deduction you could list what it is, as there are blanks on the stub unfilled.

ANSWER: There are approximately 15 different miscellaneous deductions in addition to the standard deductions which are printed on the check stub. It is not feasible to program the names of each of these deductions into the computer for use at the time a payroll check is calculated.

No deduction is made from any employee's check unless the employee has given his permission in writing for the deduction or unless it is legally required by law.

Each employee should be aware that he has given permission for a deduction that falls in the miscellaneous category. If a deduction appears on your check stub that you do not understand, you are urged to call the Timekeeping Office and find out what it is for.

Next Issue
The next issue will be dated Jan. 25. The deadline is Jan. 17.

Zucker named to ORNL post; Zanolli Y-12 medical director



Zucker

Alexander Zucker, nuclear physicist with Oak Ridge National Laboratory since 1950, has been named associate laboratory director for basic physical sciences. He replaces Arthur H. Snell, who becomes a senior research advisor on the director's staff.

Zucker has been director of the Laboratory's heavy-ion program since his return last fall from a two year's leave in Washington, where he served as executive director of the Environmental Studies Board of the National Academy of Sciences, National Academy of Engineering. In his new position, he will assume responsibility for the ORNL research programs in physics, chemistry, mathematics and controlled thermonuclear fusion; seven divisions will report to him.

The new associate director brings to the office 20 years of research experience in nuclear physics and accelerator development. He has done research in nuclear reactions with a variety of particles ranging from polarized protons to oxygen ions. He spent a year at the Rutherford Laboratory in England in 1966-67 on Fulbright and Guggenheim fellowships.

Zucker received his undergraduate training from the University of Vermont and his doctorate in nuclear physics from Yale. He and his wife, the former Joan-Ellen Jamieson, a local potter, live at 103 Orange Lane with their three daughters, Rebecca, Claire and Susannah.



Dr. Zanolli

Gino F. Zanolli, M.D., assistant medical director at Oak Ridge National Laboratory since 1959, has been named medical director of the Oak Ridge Y-12 Plant. He replaces Dr. Charles R. Sullivan Jr., who has been Y-12 medical director for the past 22 years.

Dr. Zanolli joined the Union Carbide organization in 1955 when he became a member of the medical staff at ORNL. He was named assistant medical director there in 1959.

A native of New York City, he obtained his M.D. degree at the State University of New York Downstate Medical Center in 1954 and interned for a year at the U.S. Public Health Service Hospital at Staten Island, N.Y.

In addition to his medical background, Dr. Zanolli holds both undergraduate and graduate degrees in chemical engineering from Columbia University.

He is a Diplomat in the American Board of Preventive Medicine, a Fellow in the Industrial Medical Association and a member of the American Medical Association. He has been on the staff of the Oak Ridge Mental Health Center for the past several years and is a member of the courtesy staff of the Oak Ridge Hospital.

Mrs. Zanolli is the former Patricia McConnell. They have six children, Meg, Eugene, Michael, Regina, Gerard and Patricia. The Zanolli family lives at 110 Balsam Lane, Oak Ridge.

NUCLEAR DIVISION SAFETY SCOREBOARD

Time worked without a lost-time accident through December 28:

Paducah	80 Days	508,000 Man-Hours
ORGDP	77 Days	1,055,000 Man-Hours
ORNL	17 Days	286,000 Man-Hours
Y-12	59 Days	2,078,000 Man-Hours

Safety is everyone's concern!

W-2's TO BE MAILED

Nuclear Division employees planning to file early tax returns will be interested in receiving their W-2's. The Payroll Department advises that statements of earned income and tax withheld for employees of all four plants will go in the mails on or about January 8. W-2's are mailed to our homes and should be in our hands sometime next week.

Paducah's Annual Mistletoe Ball



Employees and guests turned out in record numbers to make the holiday dance at Paducah a big success. The music of the Bill Black Combo started the dancers early, and they went on into the early hours of December 2. As shown below, the merrymakers agreed that this annual Mistletoe Ball was a howling success... "one of the very best," according to many of the attendees.



Nuclear Division deaths

Dizzie B. Freeman, ORNL Janitor's Department, died December 23, in the Oak Ridge Hospital, apparently from a heart attack.



Mr. Freeman

Mr. Freeman, a native of Alabama, had been at ORNL four years. Prior to joining Union Carbide he had worked with Rust Engineering and with the City of Oak Ridge.

He is survived by his wife, the former Ellen Mahone, 203

South Benedict Avenue, Oak Ridge. He is also survived by his children, Alvin Glenn, Craig Douglas, Carl, Connie Faye, Judy Elaine and Steven Darnell, all of Oak Ridge; and Dizzie Freeman Jr., Willie G. Freeman, Dallas Freeman, and Mrs. Mary Jean Woodgett. Seven grandchildren also survive.

Funeral services were held in Oak Valley Baptist Church, with the Rev. Dozier McKinnon officiating. Burial followed in the Oak Ridge Memorial Park.

Charlie F. Hall, Y-12's Guard Department, died at his Route 2, Oliver Springs, home December 16. Mr. Hall had suffered a heart attack about five weeks ago and was recuperating at his home when he suffered the second attack.



Mr. Hall

Born in Detroit, Mich., Mr. Hall came to Y-12 in 1948, first working as a truck driver. He later transferred to the Guard Department and was working there at the time of his death. Prior to joining Union Carbide, he was with the Maxon Construction Company.

He is survived by his wife, Mrs. Polly Brock Hall; parents, Mr. and Mrs. Herb S. Hall; three daughters, Mrs. Becky Hayes, Mrs. Betty Cagley and Mrs. Alan Ladd; two grandchildren, and two brothers.

Funeral services were held at the Beech Park Baptist Church with the Rev. Borden Clowers and Ronnie Hatmaker officiating. Burial followed in the Oliver Springs Cemetery.

GRAPHIC ARTS SUPERVISOR

Glenn C. Williams, former Graphic Arts Supervisor at Oak Ridge National Laboratory, died December 18 at West Mall in Oak Ridge. Mr. Williams was

granted a medical termination from ORNL November 30, 1970. Funeral services were held at Martin's Chapel and burial followed in the Oak Ridge Memorial Park.

Acc



PIONEER SCIENTIST HONORED — Manson Benedict, left, a leader in the development of the first gaseous diffusion plant, receives the Atomic Energy Commission's Enrico Fermi Award for 1972. AEC Chairman James R. Schlesinger presents Benedict with the plaque and gold medal. Benedict, now professor of nuclear engineering at Massachusetts Institute of Technology, was also cited for his role in the development of the nuclear reactor for generation of electrical power. In addition to the gold medal, the Fermi Award consists of \$25,000.

Helen Truett, Ernest Taylor named to new posts at ORGDP

72 2513 72 2467

Two promotions are announced in the Oak Ridge Gaseous Diffusion Plant, as Ernest A. Taylor Jr. is named a shift supervisor, and Helen M. Truett, is made an industrial relations representative.

Ernest A. Taylor Jr., a native of Harriman, came with ORGDP, in 1945, after serving four years in the Army.

Mrs. Taylor, the former Viola Proffitt, is executive director of the Roane County Chamber of Commerce. They live at 112 Dogwood Drive, Kingston, and have two children.

Taylor's outside interests include bird hunting and refinishing old furniture.

Helen Maher Truett, a native of Lenoir City, earned her coveted Certified Professional Secretary's certificate last year. She attended Tennessee Wesleyan College, and came with Union Carbide February 23, 1948. She has worked in training, safety, mechanical inspection, fire department, security, and most recently as secretary to the superintendent of Industrial Relations.

Mrs. Truett lives at Route 4, Lakeside Drive, Lenoir City. Her husband, Jerry W. Truett, is with the Tennessee Valley Authority. Their daughter, Jerrene, is a social worker near Washington, D.C.

Water sports, especially fishing, rank high on her pastime activities.



Taylor

Mrs. Truett

ORNL credit union opens Knox branch

ORNL Employees Federal Credit Union now has a Knoxville-based branch to serve its members. The new office is open from 9 a.m. to 5:45 p.m. Tuesday through Friday and on Saturday from 8:30 a.m. until noon.

Members wishing to pick up a check at the Knoxville office on their way home can expedite loans or withdrawals by calling the Oak Ridge office, extension 3-4527, and make the request. The call will be recorded and the check will be ready at the Knoxville branch that afternoon, saving considerable time. The member's records will remain in the main branch in Oak Ridge.

The office is located at 5833 Clinton Highway next door to the Firestone station at Tremont, and Clinton Highway.

The Oak Ridge telephone number of the ORNL credit union is 483-7468, the Knoxville number 546-0786.

Meanwhile, the four Nuclear Division plants have annual meetings forthcoming for their credit unions. All have important offices to fill, and policies to vote on.

The K-25 credit union meets January 23 to elect three board members and one to the credit committee. Their meeting is set for 7:30 p.m. at the Civic Center, in the Shep Lauter Room.

Y-12's credit union meets January 25, at 7 p.m. at the Robertsville Junior High School, and will name two board members and one credit committee member.

ORNL's credit union meets January 29 at 7 p.m. at the Oak Ridge Civic Center, and plans to name four new board members.

Paducah's credit union will meet Sunday, January 21, at 1:30 p.m. in the Jaycee Civic Center, Paducah.

G.E.D. test course set for Paducahans

Paducah plant employees wishing to take G.E.D. tests will be interested in the following. Free classes preparing candidates for the G.E.D. tests will be held Monday and Thursday from 7 to 9 p.m. at Jetton Junior High School. All necessary supplies are furnished free of charge and you may register at any time.

Registration is at Jetton, located on South 10th Street, Paducah. Ask for Room 106, or 107 and Fran Perry will register you.

The G.E.D. test will be given at the Paducah Community College Mondays and Thursday. The cost is \$5. Half of this cost will be reimbursed through the Carbide Educational Assistance Plan upon successful completion of the test.

Paducah employees wishing to obtain the forms should see their supervisor.



ORNL

CARPOOL MEMBER from Inskip area, Knoxville, to East Portal, 8:15 a.m. shift. Freida Cox, plant phone 3-1925.

ORNL

CARPOOL MEMBERS from Emory Valley to East Portal, day shift. Bob Stone, plant phone 3-6620, or Oak Ridge 483-4417; Dan Danford, 3-1134 or 483-1412; or Bill Nestor, 3-6301, or 482-1135.

Y-12 PLANT

CARPOOL MEMBER from Norwood or Cherokee Ridge area, Knoxville, to any portal, straight day. E.C. Keith, plant phone 3-7615, home phone Knoxville 947-8573.

ALL CARBIDE FISHING RODEO

A new season has opened for Carbide anglers. There's a rodeo now open for all Carbide employees, retirees and members of their family (spouse, son or daughter).

An 11-species (smallmouth, largemouth, striped bass, walleye, sauger, crappie, bream, trout, hybrid or rock fish, muskie and rough fish) contest opened January 1 and will extend through June 30. Another one will be staged for the latter half of the year.

Prizes will be awarded in four positions of each of the categories... first by weight, then by length and girth, in case of ties.

Entry blanks are available in containers at the Portals, the Cafeteria, or the Recreation Office, Building 9711-5, Y-12.



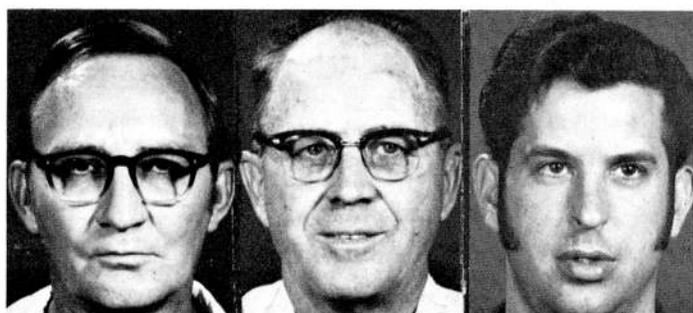
ORGDP dinner-dance at Civic Center, December 2



SPORTS NOTES



Kight Levin Gollhofer Mayo



Dunlap Howard Kinsey

PADUCAH BOWLING

The Strike-Outs won the first half of the Men's Bowling League at Paducah. They consist of Capt. Roby Kight, Bob Levin, Waldo Gollhofer, Tom Mayo, George Dunlap, Joe Howard and Bill Kinsey.

The Tigers and Pumpers ran a good second and third. Dave Paschall took the highest handicap game, with Gene Charvat and Scotty Ray close behind. Series highs went to Don Koret, Manley Fortune and Bob Ward in that order.

The Good Time Rollers were acknowledged as the most improved team during the season's first half.

ORNL BOWLING

The Damagers refused to play Santa in the C Bowling League recently and literally blew the Remkeys out of first place with a championship performance. Ray Walker starred with a 689 series for the winners of the first half. Ed Williams rolled a 677 handicap series and Richard Ricker bowled a 268 handicap game.

The Guttersnipes took the E League crown by a mere one point in front of the Woodchoppers.

The A League's first half crown lay securely in the hands of the Ten Pins, miles out in front of the ORAU team. Fred Kitts, Latecomers, rolled a 644 handicap series on the final night of the first half.

The Mousechasers inch out with a four and one-half point lead in the ORNL Ladies League, as they post a 2380 handicap series high thus far. Sally Stockstill still holds a 232 high scratch game for the Pick-Ups in league action.

CARBIDE INDOOR RIFLE

Y-12er Dick Spurling captured honors in recent firings in the Carbide Smallbore Indoor Rifle League, with a 369 scored, only 9 behind the season's high, fired by F.M. Barnes. Y-12er Elmer Johnson scored a 351, and W.H. Davy scored a 335. Lawrence Weston, ORNL, carded a 327 score.

Y-12 BOWLING

The Rollers cranked up their bowling power and swept the Mixed League by rolling a season high of an 896 handicap game... a 2432 handicap series! Wanda Sewell rolled a 209 in that big one; C.R. Lively posted a 213 in the same game. The Hits & Misses and Friskies tied for second place in the first half.

The Rounders took complete command of the C League's first half, outstripping the Mini Strikes and Rollmasters. Season highs went to the Parbusters with a 3124 series back in the fall season.

The Has Beens did it again in the Classic League. Going into the final night of the first half, it was them and the Markers tied for first place. The Markers took the first game by 16... the Has Beens returned to win by 59 pins... going into game number three ahead by 43. Then they opened up and handily won the total pin contest.

ORGDP BOWLING

The Pay-Offs, in the ORGDP Women's League, were just that in final throes of the season's first half. They downed the Up-Towners for three points to cinch the first half honors by six points. Mary Foley, Up-Towners, however, recently rolled scratch games of 212, 190 and 182 for a 584 series... 659 handicap-wise!

The Planners were safe winners of the Wednesday League's first half, finishing four in front of the Rookies. High handicap honors went to Stan Finch, with a 258 single, and Bob Ebel, with a 656 series, in the final night before the holidays.

The Tuesday League, which bowls straight through and not in halves, still sees the All Stars out front, a good 10-points ahead of the City Slickers. The Atoms' Ginsburg rolled a 225 single game recently... and M.J. Grady, Mishaps, posted a 258 handicap single.

"Middle age is that time between adolescence and retirement when you have to take care of yourself."

Anonymous

Social security taxes increase 2,000% or more in past 25 years!

Your social security taxes will be sharply higher this year as a result of the bill passed by Congress just before it adjourned. The maximum tax bite, \$468 in 1972, will jump to \$631.80 in 1973, up 35 percent. Partly this is because the tax rate goes up from 5.2 percent to 5.85 percent; partly it is because the maximum amount on which you must pay taxes goes from \$9,000 to \$10,800. You'll pay the maximum tax - and Union Carbide will pay that amount for you - if you earn \$10,800 or more next year.

In 1974 you'll be paying even higher

rates. The tax rate will stay the same (5.85 percent), but it will be payable on the first \$12,000 of annual earnings instead of the first \$10,800. So, if you make \$12,000 or more in 1974, your social security tax will be \$702 instead of \$631.80. And, because Union Carbide matches these payments dollar for dollar, its social security taxes will go up by the same amount.

Following is a table showing all the changes made in the plan, from 1937 through the latest changes made by Congress this year.

Changes In Social Security Taxes From 1937 Through 1974

Year	F.I.C.A. Rate	Medicare Rate	Combined Rate	Wage Base	Employee Tax
1937-49	1.0%	0.0%	1.0%	\$ 3,000	\$ 30.00
1950	1.5%	0.0%	1.5%	3,000	45.00
1951-53	1.5%	0.0%	1.5%	3,600	54.00
1954	2.0%	0.0%	2.0%	3,600	72.00
1955-56	2.0%	0.0%	2.0%	4,200	84.00
1957-58	2.25%	0.0%	2.25%	4,200	94.50
1959	2.5%	0.0%	2.5%	4,800	120.00
1960-61	3.0%	0.0%	3.0%	4,800	144.00
1962	3.125%	0.0%	3.125%	4,800	150.00
1963-65	3.625%	0.0%	3.625%	4,800	174.00
1966	3.85%	0.35%	4.2%	6,600	277.20
1967	3.9%	0.5%	4.4%	6,600	290.40
1968	3.8%	0.6%	4.4%	7,800	343.20
1969-70	4.2%	0.6%	4.8%	7,800	374.40
1971	4.6%	0.6%	5.2%	7,800	405.60
1972	4.6%	0.6%	5.2%	9,000	468.00
1973	4.85%	1.0%	5.85%	10,800	631.80
1974	4.85%	1.0%	5.85%	12,000	702.00

ALL CARBIDE BASKETBALL

Two nine-team leagues got underway early in December, pitting some of the Division's finest maple artists against each other. Three teams grabbed perfect early leads in the Atomic League, and two still boast of perfect slates in the Nuclear League.

League standings follow:

ATOMIC LEAGUE

Team	W	L
G B U's	3	0
CC 69ers	3	0
Pistols	3	0
Bottle-necks	1	1
Springers	1	2
K-25 Trojans	1	2
Isomets	0	2
Sharpshooters	0	2
A-5 Bucks	0	3

NUCLEAR LEAGUE

Team	W	L
Aardvarks	3	0
TAT Playmakers	1	0
Abends	2	1
Bombers	1	1
Environmental Sciences	1	1
Butterfingers	1	2
X-10 Cafeteria	1	2
Grundy Express	1	2
Biology	0	2

ALL CARBIDE BOWLING

The SASA's still command a good lead in the Carbide Family Mixed League as the Sewells, Wanda and Jay, shared recent honors... handicap singles of 234 and 252 respectively!

DIVISION Retirees



McGraw Spaulding

The Oak Ridge Gaseous Diffusion Plant records two more December retirements, as Bernard L. McGraw and Daniel T. Spaulding retire.

Bernard T. McGraw has been with Union Carbide more than 27 years. He was with Technical Maintenance at the time of his retirement. The McGraws plan to remain in Oak Ridge where he says he would like to "pass the time camping, fishing and some travelling, with a little work."

Daniel T. Spaulding, a maintenance mechanic, retired to his 1150 Mayflower Road, Kingston, home.

INFORMAL BADMINTON

Beginning at 7 p.m. tonight at the old Jefferson Junior High School is informal badminton for all Carbide employees and their families. Set for each Thursday.

Oak Ridge Carbiders wishing to take off that extra fat, gained during the holidays, may wish to play badminton Thursday.



Children of Oak Ridge employees enjoy Carbide Christmas parties

The Medicine Chest

(Editor's Note: Dr. Lincoln begins with this issue alternating his regular column with a column called "The Medicine Chest." He will attempt to answer your questions on health in general. Simply address your question to "Medicine Chest," c/o NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone. Your name will not be used with the question, and you will not be embarrassed in any way.)

By T. A. Lincoln, M.D.

Your author, who naively agreed to the idea of a monthly Medicine Chest column, now realizes he has a "tiger" by the tail. To control the situation, a few ground rules will be necessary. Questions on "medical policy" at the various plant dispensaries will be avoided since there are frequently subtle differences in the ways each medical department handles specific problems. No advice on details of a specific case will be given since this would not be ethical. Before such advice can be given, it is usually necessary to interview and, in most cases, examine the patient. Questions on general problems relating to common diseases or health related problems which would have a wide interest will be appreciated.

Questions will only be answered in this column. No individual written replies will be made. I prefer to check several references on each subject before I reply in writing, and this sometimes takes considerable time. You may wish to talk to one of the plant physicians and get a verbal reply.

I shall try to get some of the other physicians and Dr. Hurt to help me whenever I can. (Unfortunately, physicians prefer talking to writing so I may not get much help.)



Question: "Please write about the use of antihistamines - what they do; if they can or cannot be used without harm over indefinite periods (specifically, with regard to allergies); how the body is affected, etc., etc."

Answer: Your request will be the basis of a full article later. Thank you for the suggestion. For now, a few words of advice.

Antihistamines are overused like most drugs, even though they are of relatively low toxicity. Probably the most common and therefore most dangerous reaction is sedation. Many patients get sleepy and find it difficult to concentrate. For this reason these medicines can be dangerous if taken while driving or working around hazardous machinery. Some people experience dizziness, nervousness, incoordination, blurred vision and an euphoria almost like the "high" which accompanies a couple of drinks. They can also cause unpleasant gastrointestinal and urinary tract side effects.

Antihistamines are frequently combined with phenylephrine or phenylpropanolamine which cause constriction of the small blood vessels in the nose reducing congestion. Patients with high blood pressure should use these preparations sparingly. When in doubt, check with

your physician. Your druggist will tell you whether these substances are in the preparation you buy. The dispensary nurse will advise you if you inquire at the plants.

Antihistamines are best for hay fever but are useful for some skin allergies. They are usually not effective for bronchial asthma. They can be used for relief of some of the symptoms of the common cold but they have no effect on the duration of the virus infection. Individuals who have a chronic nasal allergy should investigate specific desensitization with an allergist, or see an ENT specialist to check on the possibility of polyps or chronic infection.

Question: As a parent I am disturbed over the drug culture that has developed. What are some methods I can use to see that my children are properly warned about the dangers in drugs?

Answer: Although numerous pamphlets, books and other educational materials are available, I think Dr. Howard Hurt has the best answer.

"As a parent you must bear in mind that the drug culture that you mentioned developed in your generation. Perhaps the most important factor involving your children is the example you set for them. The parent who is accessible to his children and who does not himself abuse alcohol, cigarettes, tranquilizers, diet pills, sedatives, or any other of the tremendous variety of pills and potions available, makes a significant contribution in decreasing the vulnerability of his own children to the hazards of the drug culture. Even the best parental example is of little help if the parent is not sufficiently available and accessible to the child. In your case, I hope this advice does not come too late."

Correction: In Dr. Lincoln's column of December 21 on the contagiousity of tuberculosis there was an error. In discussing the value of skin tests, the copy should have read "In many northern states, the percentage of the young people who have a positive skin test is sufficiently low (less than 2.5 percent) to make it an exceptionally valuable test." The decimal point was omitted from the original copy.



ORGDP

RIDE from Hardin Valley area to Portal 4, 8 to 4:30 shift. Jane Norman, plant phone 3-3051, or 3-3539; home phone Concord 693-2588.

Several ORNL staffers give papers at ANS meet

The work of many Nuclear Division staff members was presented at the winter meeting of the American Nuclear Society, International Conference on Nuclear Solutions to World Energy Problems, held in Washington, D.C. Other staff members chaired sessions and participated on committees.

Among papers representing research in the Division were:

"Fast Reactor Fuel Processing," by Donald E. Ferguson, director of Chemical Technology Division, ORNL.

"Advanced Thermal Power Reactor Systems" by Gordon M. Insch, British Nuclear Design and Construction Ltd., and Donald B. Trauger, ORNL associate director.

"Environmental Aspects of Fusion Power Plants" by Arthur P. Fraas, associate director of Reactor Division, ORNL.

"A Sensitivity Analysis of Neutron and Gamma Transport in Air" by D.E. Bartine, F.R. Mynatt, and E. Oblow, ORNL.

"Calculations of Neutron and Gamma-Ray-Production Cross Sections for Calcium and Lead" by C.Y. Fu and F.P. Perey, ORNL.

"The Testing of Photon Production Data from ENDF/B-III Material 1135 (²⁷Al) by W.E. Ford III, ORNL.

"Progress in the Development of ²²⁴Cm Radioisotopic Power Fuel by R.E. McHenry and T.A. Butler, ORNL.

"One Kilowatt ²⁴⁴Cm₂O₃ Heat Source Test" by K.W. Haff and D.W. Ramey, ORNL.

"Monte Carlo Reactivity Calculations Using a Perturbation Source" by T.J. Hoffman and L.M. Petrie, ORNL.

"Recommended Constitutive Equations for FFTF Use and Application to the Analysis of Structures" by W.L. Greenstreet, ORNL.

"Sensitivity of Elevated-Temperature Mechanical Properties of Type 304 Stainless Steel to Heat-to-Heat Variations" by R.D. Waddell Jr., and W.R. Martin, ORNL.

"Criticality Safety of Some Water Sprinkled Non-Cubic Arrays" by Gary R. Handley, Y-12.

"Double Batching Cell Leadings in Storage Arrays" by J.T. Thomas, Y-12.

"Edge-Channel Flow in a 19-Rod LMFBR Fuel Assembly" by M.H. Fontana, R.E. MacPherson, P.A. Gnad, L.F. Parsly and J.L. Wantland, ORNL.

"Dynamic Experiments for Heat Transfer and Mixing Studies in LMFBR Fuel Assemblies" by T.W. Kerlin, University of Tennessee, and D.N. Fry, ORNL.

"Evaluation of Fast Reactor Irradiated Boron Carbide Pellets" by G.L. Copeland and R.G. Donnelly, ORNL.

"The Effect of Oxygen on the Corrosion of Niobium and Tantalum by Liquid Lithium" by R.L. Klueh, ORNL.

"The Calculation of Heavy-Ion Interactions" by H.W. Bertini, T.A. Gabriel and R.T. Santoro, ORNL.

"Photon Dose Rates from the Interactions of 200-GeV Protons in Fe and FePb Beam Stops" by R.T. Santoro and T.A. Gabriel.

"Calculations of the ΣΣ Facility with ENDF/B-Versions II and III and Comparison with Experiment" by A. Fabry, National Bureau of Standards and J.D. Jenkins, ORNL.

"Calculations for Producing Desired Depth-Dose Distributions Using Negatively Charged Pions" by T.W. Armstrong, R.G. Alsmiller Jr., and K.C. Chandler, ORNL.

"Thermoelectric, Resistance, and Ultrasonic Centerline Thermometry for a (U, Pu) O₂ Fuel Pin" by R.L. Shepard, R.B. Fritts, H.E. Robertson and R.F. Hyland, ORNL.

"The Effect of Carbon on the Mechanical Properties of 2-¼ Percent Cr-One Percent Mo Steel" by R.L. Klueh, ORNL.

"An X-Ray Technique for Phase Analysis in Austenitic Stainless Steel" by J.E. Spruiell, University of Tennessee, and R.E. Gehlbach, ORNL.

"Microstructural Characterization of Deformed Type 316 Stainless Steel" by C.R. Brooks, ORNL, and J.E. Spruiell, University of Tennessee.

"Properties of Thick Stainless-Steel-Shielded Metal-Arc Weldments" by R.T. King, G.M. Goodwin and J.O. Steigler, ORNL.

"Neutron Importance and Fission Density in Spherical Uranium Metal Assemblies" and "Self-Regulated Damped Power Oscillations of the Health Physics Research Reactor" by John T. Mihalcz, Y-12.

"Air-Cooled Concrete Vaults for the Storage of High-Level Solidified Wastes" by J.J. Perona, University of Tennessee, and J.O. Blomeke, ORNL.

"Wall Return Neutron Fluxes for High-and Intermediate-Energy Cavity Neutron Sources" by A. Fabry, National Bureau of Standards, and J.D. Jenkins, ORNL.

"Calculation of the Absorbed Dose and Dose Equivalent from Neutrons and Protons in the Energy Range from 3.5 GeV to 1.0 TeV" by K.C. Chandler and T.W. Armstrong, ORNL.

"The Calculated Response of the TLND Personnel Dosimeter to Neutrons with Energies 400 MeV" by R.G. Alsmiller and Joseph Barish, ORNL.

ORNL Deputy Director Floyd L. Culler Jr., was a co-chairman of the Fuel Cycle Plenary Session.

NUCLEAR DIVISION NEWS



Published bi-monthly for
The Employees Of

UNION CARBIDE CORPORATION
NUCLEAR DIVISION

James A. Young, Editor, Y-12

Ext. 3-7100

ORNL Editor

Ext. 3-6421

Keith Bryant, Paducah

Bell 369

Doug Carter, ORGDP

Ext. 3-3017

-Member-

APPALACHIAN INDUSTRIAL
EDITORS' ASSOCIATION

INTERNATIONAL ASSOCIATION OF
BUSINESS COMMUNICATORS

Office

Post Office Box Y

Oak Ridge, Tenn. 37830

BULK RATE
U.S. Postage
PAID
Union Carbide
Corporation

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

UNION
CARBIDE

RETURN REQUESTED
(Do Not Forward—Return Postage Guaranteed)

Bandy named to board of pro photographers



Bandy

Ward Bandy, supervisor of Photographic Services in Y-12, has been elected to the council of the Professional Photographers of America. Bandy was nominated by the Tennessee Professional Photographers Association to the PPA governing body. PPA consists of over 13,000 professional photographers practicing in all of the United States and most of the sections of Canada.

The Y-12er is one of the three councilmen from Tennessee and represents the industrial photography members of the state at the annual convention and trade show when the council meets. He has attended planning sessions in Ft. Worth and Detroit as a committeeman in the planning of the PPA biennial educational conference in Atlanta, early this year. He will serve at the conference as a moderator of a panel of six photographic experts discussing new tools and techniques of their trade.

Bandy will speak at the February meeting of the Carbide Camera Club on "How to Use the View Camera."

Stock market course set by broker firm

A three-session course on the stock market and investments will be held in Oak Ridge this month. Covering mechanics of the stock market, types of investment, sources of information and other investment related subjects, the classes will be held on three consecutive Tuesdays, beginning January 16, and subsequently January 23 and 30, at the Holiday Inn, Oak Ridge.

Instructors for the courses will be John R. Cope and Leslie A. Goldsmith, Merrill Lynch, Pierce, Fenner and Smith, Inc.

The final course, to be held January 30, will be of special interest to experienced investors and will deal with investment strategies and the structuring of portfolios.

Reservations for the free courses may be made through the local Merrill Lynch office, Oak Ridge telephone 483-4778.

COMPANY SERVICE —20-25-30—

ORGDP
25 YEARS

Clarence R. Lay Jr., and Mark H. Davis.

20 YEARS

Wallace G. Billingsley, John A. Owen and Lamar C. Toomer.

Y-12
25 YEARS

William E. Spraker, Walter A. Sherrod, Cledith E. Davis, Hershell D. Castleberry and Lennie B. Eskridge.

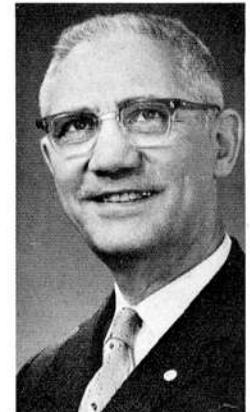
20 YEARS

James H. Copeland Jr., Claude A. Boyd, Homer F. Clayton, Harold L. Perdue, Gerald E. Carden, Marshall W. Rickard, Wayne W. Wright, Daniel D. Keith, William A. Wilburn, Herbert H. Martin, John E. Patt, John P. Gibson Jr., Jackie L. Minton and James C. Rogers.

PADUCAH
20 YEARS

William W. Etherton, Donald A. Hussey, Charles W. Turok, Mary Y. Parrish, Jack T. Crawford, Charles V. Allen, Robert E. Throgmorton, Floyd E. Hoskins, Russell L. Martin, Otis S. Brittain, Estle A. Emery, William T. McCaig, Thomas E. Emerson, Orville Almon, Joe R. Elliott, Donald L. Bennett and David Mills.

ORNL
30 YEARS



Abbatiello

Anthony A. Abbatiello joined Union Carbide at Columbia University January 14, 1943. He came to ORGDP in 1945 and transferred to ORNL in 1954. Currently he is in the Reactor Division. A native of Italy, he lives at 116 Delmar Circle, Oak Ridge.

25 YEARS

William F. Buker.

20 YEARS

Allen B. Eldridge, David O. Campbell, Herbert C. Duggan, Joseph P. Eubanks and Leo R. Stinnett.

CALENDAR of EVENTS

TECHNICAL January 10

Chemical Technology Division Seminar: "Reductive Extraction Studies Using Molten Salt and Bismuth in a Packed Column," B.A. Hannaford. Central Auditorium, Building 4500N, 3 p.m.

January 11

Gas Cooled Reactor Thorium Utilization Programs Bimonthly Information meeting: "HTGR Fuel Recycle: Optimization of Timing," F.J. Homan; "Hot Spot Test in PCRVT Thermal Cylinder Experiment," G.D. Whitman; and "HTGR Safety Program at ORNL," H.J. de Nordwall. East Auditorium, Building 4500N, 9 a.m.

Physics Division Seminar: "Research with Heavy Ions in Dubna," Ivo Zvara, Joint Institute for Nuclear Research, Dubna, USSR, and Chemistry Division, ORNL. East Auditorium, Building 4500N, 3 p.m.

January 15

Biology Division Seminar: "Aspects of the Transport and Capacitation of Mammalian Spermatozoa," Ron Hunter, The Edinburgh School of Agriculture, Scotland, Large Conference Room, Building 9207, Y-12, 3:30 p.m.

January 16

Biomedical Graduate School Seminar: "Microtubules in Cell Form and Motility," Lewis G. Tilney, University of Pennsylvania. Large Conference Room, Building 9207, Y-12, 3:30 p.m.

COMMUNITY December 31

Oak Ridge Community Art Center's opening reception for exhibit of "Crayon Drawings by Danish Children." 3 to 6 p.m. Exhibit open through January 21, 1973.

January 6

The Oak Ridge Playhouse creative drama classes begin. Oak Ridge Playhouse.

January 12

Oak Ridge Playhouse presents: "Slow Dance on the Killing Ground." Oak Ridge Playhouse 8:20 p.m. Other performances January 13, 19, 20, 26, and 27.

January 13

Oak Ridge Symphony Orchestra - All Wagner program. 8:15 p.m. O.R. High School Auditorium, adults, \$2.50; students, \$1.25.



Happy New Year

