

NUCLEAR DIVISION NEWS

UNION
CARBIDE

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

Vol. 1 — No. 24

OAK RIDGE, TENNESSEE

Thursday, December 31, 1970

'Strive To Be Happy'

"Go placidly amid the noise and haste, and remember what peace there may be in silence. As far as possible without surrender, be on good terms with all persons. Speak your truth quietly and clearly; and listen to others, even the dull and ignorant; they too have their story.

"Avoid loud and aggressive persons, they are vexations to the spirit. If you compare yourself with others, you may become vain and bitter; for always there will be greater and lesser persons than yourself. Enjoy your achievements as well as your plans.

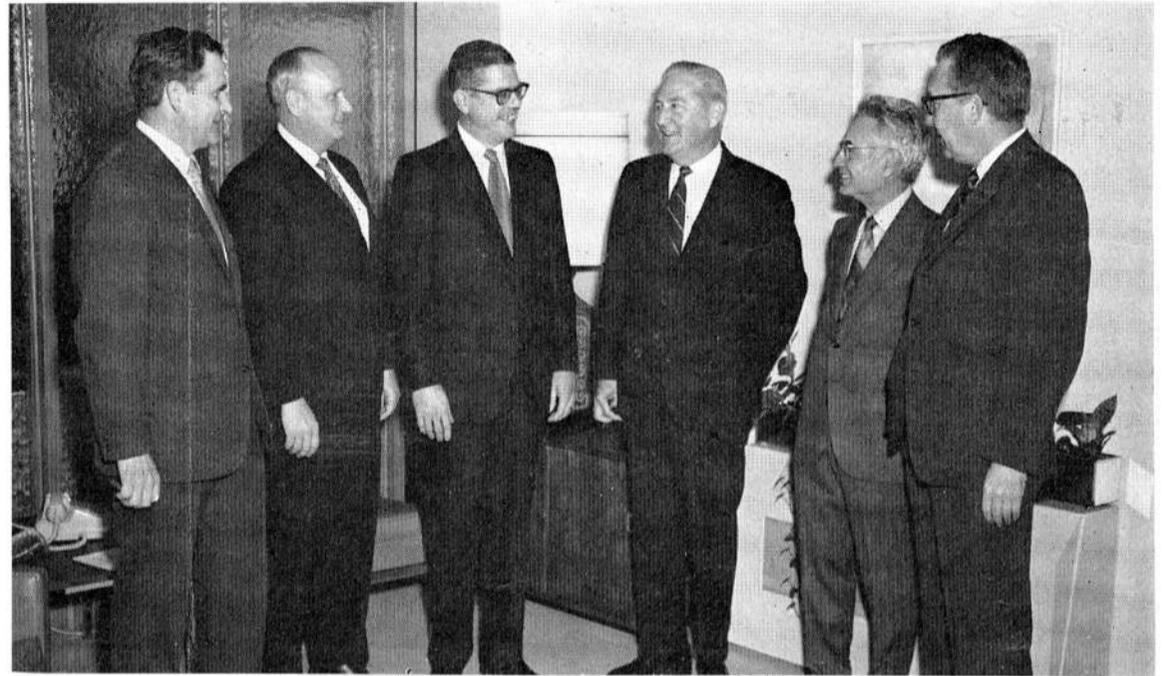
"Keep interested in your own career, however humble; it is a real possession in the changing fortunes of time. Exercise caution in your business affairs; for the world is full of trickery. But let this not blind you to what virtue there is; many persons strive for high ideals; and everywhere life is full of heroism. . . .

"You are a child of the universe, no less than the trees and the stars; you have a right to be here. And whether or not it is clear to you, no doubt the universe is unfolding as it should.

"Therefore be at peace with God, whatever you conceive Him to be, and whatever your labors and aspirations, in the noisy confusion of life keep peace with your soul.

"With all its sham, drudgery and broken dreams, it is still a beautiful world. Be careful. Strive to be happy."

HAPPY NEW YEAR



13 7318
RECEIVES REPORT ON DIVISION ACTIVITIES — During his recent visit to Oak Ridge, F. Perry Wilson, President of Union Carbide Corporation, was briefed on various activities of the Nuclear Division. Pictured are, from left: John F. Shanklin, Vice President and Secretary of the Corporation; Paul R. Vanstrum, Nuclear Division Vice President — Production; Roger F. Hibbs, Division President; Mr. Wilson; Alvin M. Weinberg, Division Vice President and Director of Oak Ridge National Laboratory; and John A. Swartout, Corporate Vice President.

'Mothball Fleet' Plays Role in Science

Some ships of the 'mothball fleet' and some Army artillery pieces tagged for scrap are once again serving the nation. Metal parts salvaged from aging tools of war are now helping nuclear scientists explore peaceful uses of the atom at the Atomic Energy

Commission's Standard Linear Accelerator Center (SLAC) at Palo Alto, Calif.

The gun barrels from the retired ships, built to withstand extreme pressure and the impact of large caliber shells, serve as support for the massive "atom smash-

ers" and as radiation shielding.

Researchers at SLAC used both Navy and Army surplus guns of World War I and World War II vintage to solve the design requirements for the linear accelerator, an instrument which helps scientists break up atoms in order to study their structure. Sixteen inch gun barrels were cut into segments like giant tootsie rolls and stacked underground around the accelerator. The big guns were also put to work at platforms on which SLAC's giant spectrometers swivel. The spectrometers, which are used for examining the structure of atoms, weigh up to 1,700 tons.

To have their guns play a part in the development of peaceful uses of atomic energy seems a strange ending for a few historic warships. Consider the story of the cruiser Vicksburg. Launched in 1943, she saw action at Iwo Jima, Ulithi, and Okinawa during World War II, and by V-J Day had steamed more than 70,000 miles and survived attacks by torpedoes, bombs and kamikaze aircraft. After the ship was subsequently decommissioned and dismantled, her five and six inch curved armor plate — 1,520 tons of it — was installed as shielding around the target area of the two-mile-long Stanford accelerator.

Novel applications have been found for other surplus military equipment. For example, three old submarine periscopes have been installed in thick shielding walls at Oak Ridge National Laboratory to enable personnel to inspect radioactive material.

SPECIAL ISSUE

This is a special New Year's issue of the Nuclear Division News. There are no Y-12 Bulletin and Carbide Courier inserts. The Y-12 and ORGDP sections of the News will be resumed in the January 14 issue.

Community Council To Serve As TAT Program Open Forum

The Training and Technology (TAT) Project has established a Community Council with Oak Ridge civic, governmental, and organizational representatives as initial members.

The new council is intended as a continuing forum for community discussion and action to help meet the social and recreational needs of TAT trainees during their temporary residence in Oak Ridge and as a channel for making the most effective use of available community resources in support of the worker-training program.

Blake Is Chairman

Among its primary aims will be to work with individuals and organizations in achieving a broader understanding throughout the community of TAT and its development in response to industrial manpower training needs, both locally and at other locations.

Under its chairman, Charles A. Blake, equal employment opportunities coordinator for the Nuclear Division, Union Carbide Corporation, the Community Council is serving in an advisory capacity to the TAT project staff and as an arm of TAT's overall Advisory Committee, which comprises representatives of vocational education at the local, state, and regional levels, the broader educational community, organized labor, private industry, govern-

mental manpower agencies, and program sponsors.

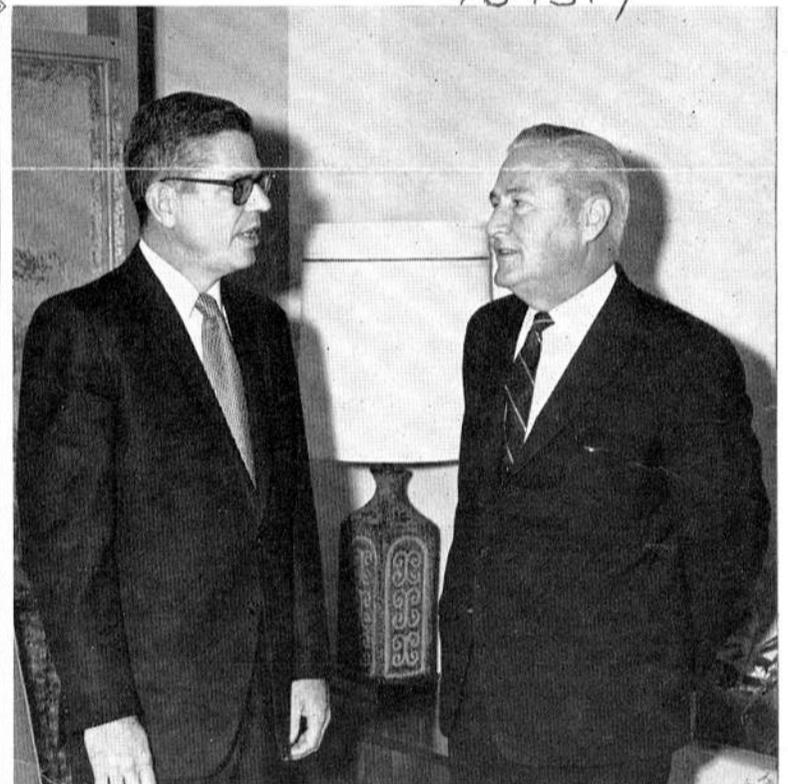
Council members, although serving as individuals, have been drawn from the City Council and its Human Resources Board, the Oak Ridge Schools, city departments, the judiciary, Chamber of Commerce, Ministerial Association, and the business and professional communities.

Program Reviewed

Initial sessions of the Community Council have been devoted to a review of the TAT program and its services to trainees as well as of available community resources that might benefit the training program. The council has met bi-weekly during its organizational period at the TAT Recreation Center in Cheyenne Hall.

Over 400 TAT graduates are now employed by Union Carbide in Oak Ridge and the balance of some 900 with more than 30 other major industrial firms throughout the United States.

TAT has a current enrollment of 188 persons in its six areas of industrial training, 115 of whom are from Knoxville, Virginia, and West Virginia. Under the guidelines for federal support of the program, 75 percent of those selected for training must meet the Department of Labor definition as disadvantaged. Approximately 40 percent are black or members of other minority groups.



13 7319
CARBIDE PRESIDENT VISITS OAK RIDGE — F. Perry Wilson, President of Union Carbide Corporation, discusses Nuclear Division programs with Roger F. Hibbs, Division President, during a recent visit to Oak Ridge. Mr. Wilson was accompanied by John F. Shanklin, Vice President and Secretary, and John A. Swartout, Vice President.

Knoxville OIC, TAT Cooperate In Basic Electronics Training

Twenty-two trainees from the Knoxville area have begun a special pre-vocational course in basic electronics offered by Knoxville's Opportunities Industrialization Center (OIC) in cooperation with the Training and Technology (TAT) Program.

The pilot program is designed to prepare trainees either for more advanced training or for basic entry-level jobs in electronics or related fields. The students, all between 17 and 60 years of age, are either disadvantaged, underemployed, or unemployed.

Most are from minority groups.

The OIC is conducting the classes at the Bell House School in Knoxville. Volunteer teachers are in charge of class planning, teaching, and counseling. OIC maintains records on each student's progress.

Four-Month Course

TAT, which provides general assistance and guidelines for recruitment and selection of trainees, also furnishes laboratory space at the Oak Ridge Y-12 Plant.

(Continued on Page 4)

Nuclear Division Safety Efforts Zero in on Traffic Accidents

How many this year? Must 50,000 Americans die on our highways each year . . . and must the grim figures increase?

Not if the safety departments in the Nuclear Division can help it. (Y-12 has already lost three employees . . . ORGDP two thus far in traffic accidents during 1970.)

Continuous efforts to educate employees in safe driving habits occupy much of the effort of off-the-job safety-minded experts. Booklets, pamphlets, bumper stickers, fliers, windshield scrapers, and other instructive missiles are kept on the firing line to reduce automobile deaths among employees.

Twisted Death Car

Y-12 recently exhibited a demolished automobile that claimed the life of its driver, as he crashed headlong into the rear of a coal truck on a nearby thoroughfare. The grim exhibit traveled from portal to portal where it could be seen as the employee left the plant. In some small measure, it was hoped the twisted steel would slow us down a bit, make better drivers out of us.

The common cold, alcohol, pot, pep pills and emotional hang-ups have contributed to some 4,700,000 auto injuries, according to conclusions resulting from a special auto-safety program developed for U. S. Air Force personnel.

Campaign Launched

Y-12 also recently launched a campaign "Let's Both Drive Safely!" which accounts for the many yellow and black bumper stickers seen around. A driving quiz was circulated among employees, testing their driving habits and reaction abilities.

And, of course, windshield scrapers were issued to all Nuclear Division employees in the Fall as daily reminders of safe driving habits.

Efforts at the Oak Ridge Gaseous Diffusion Plant are as relentless as those in Y-12. The giant safety signs (recently on the Turnpike and on Blair Road) constantly reminded commuters to take it easy on the roads. Safety meetings were devoted fully to accident prevention efforts on the highways during the year. Health and Safety Bulletins were issued to alert K-25ers of the many hazards along the way to work.

Car Pools Encouraged

Car pools are encouraged as one method to combat traffic accidents. (The Nuclear Division News welcomes car pool or ride wanted ads and runs them regularly.) The less cars we have on our roads, naturally, the fewer accidents we are going to have.

Safety awards will soon be issued to both Y-12 and K-25 employees for on-the-job safety in 1970. There is no award for off-the-job safety, however, and it's quite likely Nuclear Division employees would not rate any higher in that department than anybody else, despite the fact that our plant records are the envy of the entire country.

Studies in all the plants here in Oak Ridge are constantly made to keep the parking lots maintained in grade A condition. Y-12 alone has a capacity to park 5,240



FATAL VEHICLE—The driver of this twisted automobile lost his life driving in the passing lane, when it belonged to the traffic flowing in the other direction. In order to avoid hitting

someone head-on, the driver swerved back into his own lane and crashed into the back of a coal truck. The impact cost him his life. He was in a hurry to save a minute, probably.

Vehicular Accidents Continue To Mar Off-Job Performance

According to an April Health and Safety Bulletin from K-25 accidents killed more than 116,000 in 1969, 56,400 of which were from auto mishaps. Typical of many of the efforts of Nuclear Division safety men is the following.

"Accident statistics have been defined as 'a single human tragedy multiplied to the point of indifference.' Possibly the figures relating to the national scene are somewhat faceless and are too often received with indifference. Conversely, the facts appearing in this Bulletin, which relate to our fellow-workers, cannot be viewed with apathy since they reflect the story of someone we know whose life was erased, or who was crippled or hurt in some needless event. The accident statistics presented here are little more than empty scrawlings unless we add the human touch and put them to work. First, consider what occurred on the national scene last year.

Outlook Not Good

"The National Safety Council

automobiles in its six adjacent parking lots. Paving, upgrading, and planning are the never-ending efforts expended to provide free parking for all driving employees.

Individual Effort

None of us want to be involved in a traffic accident, fatal or otherwise, according to a recent article written by Y-12's Safety Department. We should drive as though our life depends on it — for verily it does, according to the article.

Individual effort alone can reduce the traffic count in this country. And with an educational program with all the modern tools of communication available, our Safety Departments hope to educate us into being better drivers, and thus safer drivers!

reports that accidents killed 116,000 persons and injured an additional 10.8 million persons in the United States in 1969. Of those injured, 40,000 persons were permanently impaired to some degree. The deaths and injuries cost the nation more than \$23.5 billion. Accidents in 1969 remained the fourth leading cause of death, exceeded only by heart disease, cancer, and stroke. Accidents were the leading cause of death for persons between ages 1 and 37. The council statistics showed that the decade ended in 1969 produced a 26 percent rise in the number of accidental deaths and that more than a million lives were lost as a result of accidents in that period. Motor vehicle deaths rose 2 percent in 1969 to a total of 56,400 compared with 55,200 the previous year. There was also a 5 percent increase in fatalities in the public area; a rise from 20,000 in 1968 to 21,500 in 1969.

"And now about 1970 and the local outlook. At the end of the first quarter, the industrial picture looks good with employees of K-25, Y-12 and ORNL having accumulated in excess of three million safe hours at each plant since their last disabling on-the-job injury. Regrettably, off-the-job accidents continue to extract their deadly toll from our co-workers. During this same three months period, two K-25 employees lost their lives in off-the-job accidents; eleven others were so severely injured that they lost four or more days from work. During the quarter, a total of 488 man days were lost as a result of these off-the-job accidents. More tragically for some, time loss is continuing and a degree of permanent disability may result from one or more of these unfortunate experiences. Vehicle accidents caused six of the more serious incidents, with both fatalities the result of highway mishaps. Slips and falls were second in major



K-25 EFFORTS—A few of the Health and Safety Bulletins and other missiles prepared by the Safety, Health Physics and Industrial Hygiene Departments at the Oak Ridge Gaseous Diffusion Plant are seen. Efforts to reduce traffic accidents have long been common practice among the safety departments of the three Nuclear Division-operated plants.

causes with five cases reported.

Shared Experiences

"Off-the-job injuries are everyone's problem . . . not only from the standpoint of our personal health and welfare, but we must also be concerned with the loss of skill and productivity occasioned by these off-the-job accidents and, therefore, cannot 'tune out' the significance of the problem or just wait for it to go away. To say the least, none of us can afford to look upon off-the-job safety as anything other than an individual responsibility to our family, our friends, and to society in general. Fortunately, the most important factors insuring our safe return to our daily jobs and

the comparative safety of the plant lie in our knowledge of safe practices and the ability to recognize an accident in the making. This knowledge should not only be practiced 'off-the-job' but shared with others as well."

MAIL COMING UP

The Post Office estimates that the volume of mail, which reached 82 billion pieces last year, will more than double in the next 20 years. The department predicts higher postal rates, unless mail distribution is further mechanized.

NEWS

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Let's Both Drive Safely!

Tips for Holiday Drinkers

By T. A. LINCOLN, M.D.

The holiday season is upon us! It is too late to preach about the dangers of alcohol. There is only time to give emergency instructions to prevent an embarrassing intoxication or a miserable hangover.

Don't drink on an empty stomach! Many people think that eating hors d'oeuvre with cocktails has the same effect as pre-eating. Having a healthy sandwich and a glass of milk before a party will enable you to ease into your synthetic euphoria and not crash into a sloppy stupor.



Dr. Lincoln

'Social Lubrication'

Four ounces of whiskey or a generous martini put into an empty stomach will produce a maximum blood alcohol of from 67 to 92 mg%. If drunk after a mixed meal, the same amount will produce a maximum of only 30 to 53 mg%. Measurable effects on cerebral function occur before 50 mg% is reached and obnoxious intoxication at about 300 mg%. Legal intoxication, as far as driving is concerned, occurs at

150 mg%. The loss of inhibition sometimes called "social lubrication" is probably best achieved at less than 100 mg%.

Alcohol is metabolized at about 10 cc. per hour in an average size person so the alcohol in four ounces of whiskey would require five to six hours to oxidize. For this reason, a person who goes to bed severely intoxicated may get up the next morning still too drunk to drive.

The degree of intoxication depends not only on the concentration of alcohol in the blood but also on how rapidly it is reached. If a person gulps down his drinks, especially on an empty stomach, he will lose control of his senses much more rapidly with the same quantity of alcohol than if he sips it. By sipping, one can titrate alcohol against effect and reach the desired end point. By gulping, the maximum effect cannot be predicted. The best way to spot a pathological drinker is to watch how fast he drinks.

Honey and Toast

It is possible to accelerate the metabolism of alcohol by taking fructose before, during, and after drinking. A thoughtful host will provide canapes containing honey, an excellent source of fructose. When one gets home, having a piece of toast well spread with honey will not only help prevent a depression of the blood sugar which often occurs, but help burn up the remaining alcohol.

The unpleasant effects of alcoholic beverages are related to their content of congeners. These chemical compounds come from the materials used in the fermentation process and from the wooden kegs used during aging. These substances include fusel oil, tannins, furfural, and various aldehydes, esters and acids. They give the beverage its characteristic flavor and aroma, but also add appreciably to its toxicity.

Fusel Oil a Problem

Fusel oil taken orally is five times more toxic on a weight basis than ethyl alcohol. The vapors will severely irritate the respiratory tract and presumably the liquid irritates the stomach. Fusel oil does not disappear in aged whiskies as people who buy expensive whiskey would like to think. Actually, it increases with age. Furfural is used in large quantities in solvent extraction in the petroleum industry. High concentrations in the air cause headaches and irritation of the throat and eyes. The small quantity found in most beverages contributes to the problem of hangover. It is also a potent liver toxin.

Straight and bonded bourbon whiskey and brandy have the highest content of congeners, with Scotch close behind. Canadian and American blended whiskies are considerably lower. Vodka contains by far the least congeners other than pure ethyl alcohol.

The headache of a hangover can sometimes be helped with strong coffee. It is due in large part to the over-dilation of blood vessels in the brain and caffeine helps restrict them. Coffee at the end of the party doesn't hasten the sobering pro-



HAPPY SEASON—Here Y-12's master magician E. B. Lockhart entertains youngsters at a recent party sponsored by the Oak Ridge Jaycees. The scene was typical of a number of holiday events throughout the area. Jaycee Bill Williams, also employed at Y-12, planned the party.

Fine Blanking Will Be ASME Meet Topic

The Knoxville-Oak Ridge Chapter of the American Society of Manufacturing Engineers will hold its next meeting, January 7, at Deane Hill Country Club.

Guest speaker will be Al Bishara, sales engineer with Fine Tool Corporation. He has been with Fine Tool for the past five years, and has been in the metal working industry for the past 30.

Bishara will speak on Fine blanking, a unique and revolutionary method of manufacturing high precision components at a

minimal cost. The program will consist of slides, with explanatory comments to this process, followed by a film showing the progression of dies from the design stage to try out on the press.

The meeting begins at 6:30. Dinner will be served at 7 and the program will be given at 8.

One the 'Morning After'
Having another drink the "morning after" makes no sense at all except to the alcoholic, who can't face the unpleasant withdrawal symptoms. It is not rational to treat hangovers with alcohol!

Alcohol and tranquilizers don't mix. If taking a tranquilizer, either don't drink at all or be extremely careful. The combination of only a modest amount of alcohol and a tranquilizer may cause a severe impairment of judgment, especially during driving.

Before the party, make plans for getting home safely!

Instrument Society Meet Is Set for January Sixth

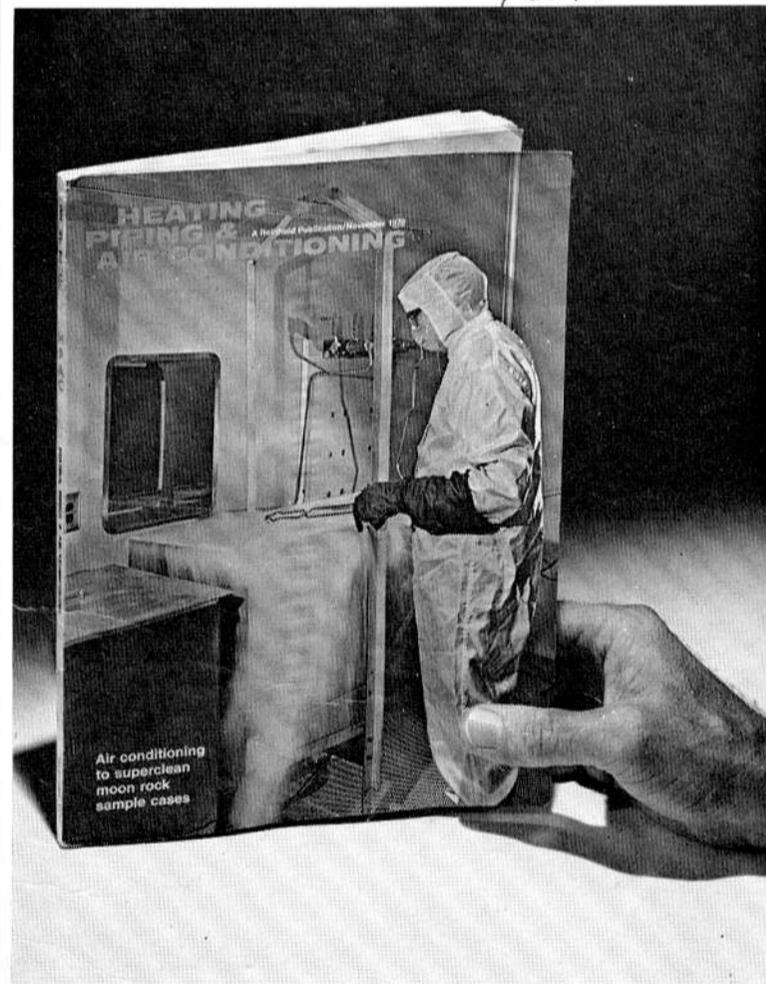
The Oak Ridge Section of the Instrument Society of America will hold its monthly meeting at the Alexander Motor Inn, Oak Ridge, Wednesday, January 6.

The January meeting features Vendors Night. New equipment will be shown. The social hour begins at 6 p.m., dinner at 7 and the meeting at 8.

HAPPY NEW YEAR!
Friday, January 1, is an official holiday for Nuclear Division employees. On holidays only a level of work force necessary to assure continuous operation and protection of the plants is required.

January 1 is the first of 10 holidays we observe.

137106



CLEAN ROOM FEATURED—A color photograph of the super clean room in Y-12's Development Division serves as the cover for the November issue of HEATING, PIPING AND AIR CONDITIONING magazine. The magazine features a nine-page article entitled "Control Environment to Super-clean Moon Rock Sample Containers," authored by R. H. Little, (Development), J. C. Little (Engineering), J. M. McIntyre (Development) and F. D. Mundt (Technical). The technician in the photograph, C. H. McCallister, is using the vapor from dry ice to determine airflow patterns in and around one of the cleaning tanks used in sterilizing Apollo sampling hardware. (For reasons known only to the magazine editor, the Y-12 negative was reversed.)

6-14886



MOON BOX IN MOSCOW—The "moon box" developed at the Oak Ridge Y-12 Plant, as well as other items for the Apollo program developed in Oak Ridge, were part of a Union Carbide display at the Moscow Trade Fair. Pictured is one of the display cases containing the moon box, contingency sampler, and other items involved in the Apollo program.

Pack, Hawks Keep Lead in Volleyball

Two teams, the Pack and the Hawks still stand undefeated in Volleyball League actions, as the season warms. Last week the Hawks, from K-25, took the Bombers 15-4, 15-4 and 15-9. The Pack defeated the Y-12 Old Men, 15-4, 15-9 and 15-5.

Other action saw the Set Ups sink the Gooneybirds 15-9, 15-1 and 15-5. The Gang downed the Eagles 15-9, 15-8 and 15-3. The Radpheys routed the Quarks 15-8, 15-11, after dropping game one 15-11.

On Court B, the ORNL Old Men ousted the AECOP's Foibles 15-12, 15-7; then fell 15-6 in game three. The Boomerangs bombed the Environmentalists 15-8, 15-4 and 15-5.

Team	W	L
The Pack, ORNL	9	0
Hawks, K-25	9	0
Radphys, ORNL	8	1
ORNL Old Men	7	2
Set Ups, ORNL	6	3
The Gang, K-25	6	3
Quarks, K-25	4	5
Boomerangs, ORNL	4	5
Y-12 Eagles	3	6
AECOP's Foibles, K-25	3	6
Bombers, ORNL	2	7
Y-12 Old Men	2	7
Gooneybirds, ORNL	0	9
Environmentalists, ORNL	0	9

Knox OIC, TAT

(Continued from Page 1)

TAT is conducted jointly by Union Carbide and Oak Ridge Associated Universities. More than 1,200 previously unemployed or underemployed persons have completed TAT training in six industrial occupations — machining, drafting, electronics, welding, physical testing, and mechanical operations — and are now employed.

The four-month electronics course, which began Dec. 10, will consist of three-hour sessions which meet twice a week until April 3. Those who complete the course may apply for entry into the TAT program.

Subsidized by OIC

OIC, a volunteer group organized to provide low-cost vocational training for the disadvantaged, also offers typing, key-punching, sewing, and basic mathematics and language remedial courses. The program is subsidized through the national OIC program.

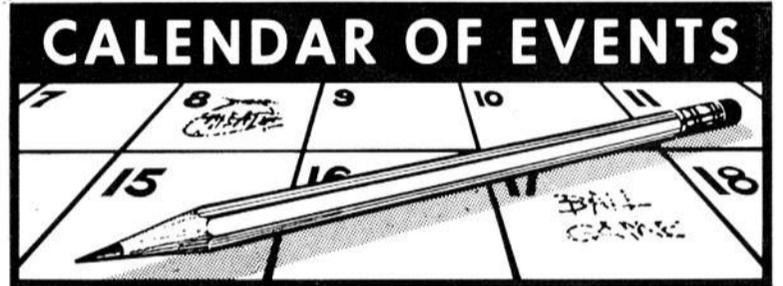
R. W. Byas, Jr., is representing OIC as the program instructor-coordinator, and J. Leo Waters is in charge of TAT activities for the project.



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TECHNICAL

January 5

ORAU Medical Division Staff Seminar: "Some Concepts in the Radiation Therapy of Hodgkin's Disease," Dr. Frank Comas. Main Conference Room, ORAU Medical Division, 4 p.m.

East Tennessee Section of the American Chemical Society Lecture: "Computer-Assisted Design of Complex Organic Syntheses," W. Todd Wipke, Department of Chemistry, Princeton University. Room 300, Buehler Hall, UT Campus, 8:15 p.m.

January 6

The Oak Ridge Section of the Instrument Society of America: Alexander Motor Inn; social hour 6 p.m., dinner 7 p.m., and meeting 8 p.m.

January 7

The Knoxville-Oak Ridge Chapter 107 of the Society of Manufacturing Engineers: Guest speaker, Mr. Al Bishara, Fine Tool Corporation. Deane Hill Country Club, Knoxville; social hour 6:30 p.m., dinner 7 p.m., and program 8 p.m.

January 8

Physics Division Seminar: "Thermal Effects Aspects of Nuclear Power Plant Siting," C. C. Coutant, Ecological Sciences Division. East Auditorium, Building 4500N, 3 p.m.

January 11

Biomedical Graduate School

Lecture Series: Title to be announced. Andre Jagendorf, Cornell University. Large Conference Room, Building 9207, 3:30 p.m.

January 12

ORNL Environmental Seminar: "Environmental Research in the Health Physics Division," K. E. Cowser. "Environmental Research in the Ecological Sciences," J. P. Witherspoon. East Auditorium, Building 4500N, 3 p.m.

ORAU Medical Division Staff Seminar: "Lymphangiography—Worth the Time and Expense?" Dr. Edward Buonocore, Chairman, Department of Radiology, University of Tennessee Memorial Research Center Hospital. Main Conference Room, ORAU Medical Division, 4 p.m.

January 13

Metals and Ceramics Division Seminar: "Current Developments of Metallurgical Importance in X-ray Diffraction," H. L. Yakel. East Auditorium, Building 4500N, 2:45 p.m.

January 14

Biology Division Seminar: "Differential Analysis of the Biological Role of UV-Induced Products in DNA," Michael Patrick, University of Texas, Dallas. Large Conference Room, Building 9207, 3:30 p.m.

GBU's, Shoestrings Are Still Perfect in League Standing

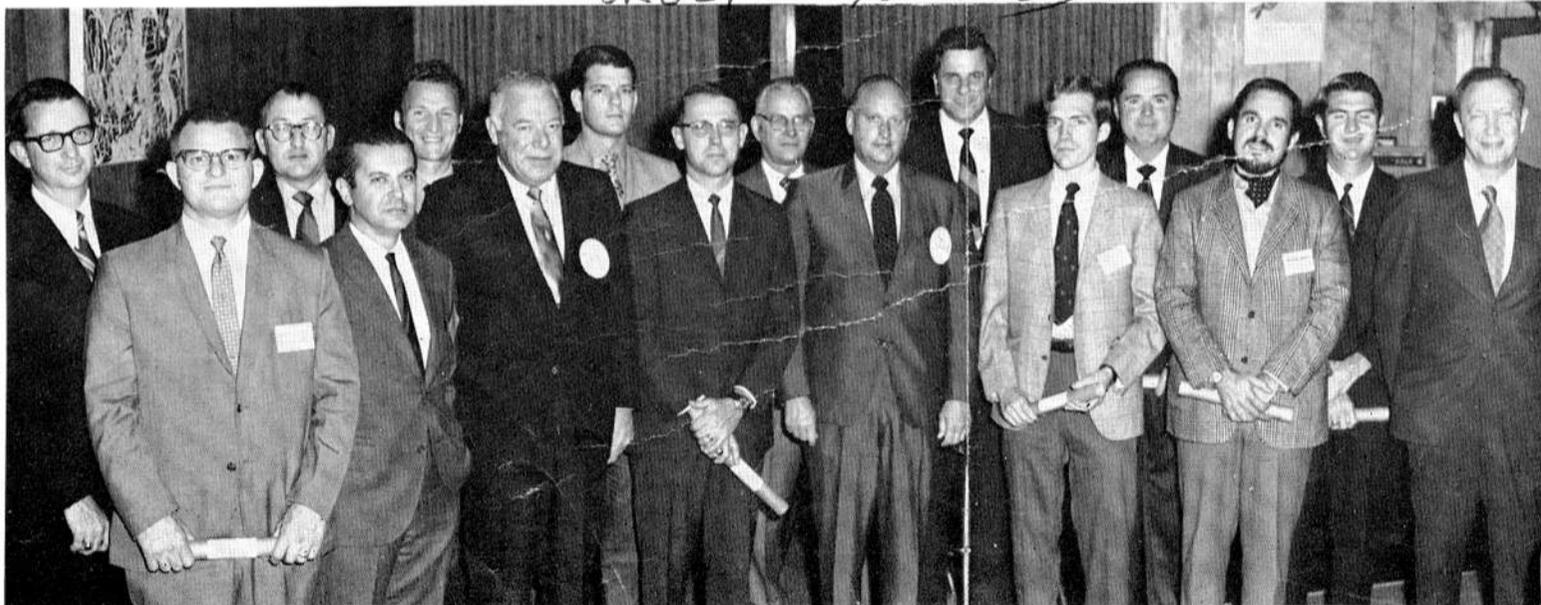
The GBU's and Shoestrings have maintained perfect records atop the Y-12 and K-25 Basketball League in recent league action.

The GBU's crushed their out-classed opponents, the Hawks, by a 84-33 score, with Rick Cordy ripping in 24 points. Bill Pointer was high man for the Hawks with 7. The Shoestrings, appropriately

enough, won by a shoestring over the Trojans by a 62-61 margin in a close, exciting game.

In other league action, the Mod Squad topped the Demons 45-36; the C. C. 69ers defeated the Untouchables 55-47; the Beta-2 Miners won over the Wild Bunch 49-37; and the James Gang held up the Bottlenecks 33-31.

ORGDP 70 2233



ENGINEERS CERTIFIED—A total of 17 engineers received Professional Engineering License Certificates at a recent meeting of the TSPE in Oak Ridge. In the front row, from left, are K. O. Heubschman, J. Lewin, J. M. Case, J. D. Huggins, P. R. Vanstrum, C. R. Gee, W. K. Furlong and S. A. Thompson. In the back row are N. K. Newton, M. N. Ward, M. Siman-Tov, J. D. Stout, D. H. Palkowski, G. M. Doyle, A. J. Thompson and

J. L. Lawhorn. J. R. Hemphill, E. K. Cottongim and R. J. Thomas were not present for the awards. Officers of the Oak Ridge Chapter of TSPE include F. S. Patton, president; W. C. Tunnell, first vice president; John C. Salyers, second vice president; J. J. Kurtz, secretary; R. E. Cooper, treasurer; R. A. Schmidt and J. A. Owen, chapter directors; and T. E. Douglass, state director.



Ride wanted (to K-25) or will join car pool from Powell, to Portal Four, straight day. Jim McNeese, plant phone 3-3267, home phone Powell 947-1936.

Ride wanted from 319 East Drive, Oak Ridge, to Y-12's Central Portal, straight day. Alice Hager, home phone Oak Ridge 482-4581.

Surplus Sale

Used autos — Chevrolets, Dodges, Fords, Studebakers — and Reo and International trucks are offered for sale in the latest surplus property sale of used government equipment. Also in the sale will be used office equipment.

The items may be seen from 8:10 a.m. until 4:10 p.m. Monday through Friday up until sale time, which is 9 a.m. January 20. They may be seen at Building K-722, just off State Route 58.

Additional information may be obtained on extension 3-4601.