

Gary Fuis, Cornell Grad, Has Choice Of Two Scholarships In Advanced Work



Gary Fuis

Monday, June 13, was a big day for the Frank Fuis family. Ithaca, New York the scene. The beautiful campus of Cornell University provided the backdrop. Star of the show, naturally, was son Gary graduating at the top of his class.

Laurels rest easily on Gary's brow, too. Since graduating from Norris High School in 1962 as co-valedictorian, young Fuis was accepted into Non Cramm (Cornell's house for honor students) as a freshman, was initiated into Phi Eta Sigma and Phi Beta Kappa, both honor fraternities, and was on the dean's list throughout his full four years at Cornell. He received three additional scholarships in geology during the past year, and finished school with an over-all average of A plus!

Gary was awarded both the Woodrow Wilson Foundation Fellowship and the National Science Foundation Fellowship for doing graduate work in the college of his choice. He accepted the latter fellowship and has chosen Cal Tech, Pasadena, where in September he will begin a three-year program for his doctorate in geophysics.

After visiting the homefolks in Norris briefly, Gary embarked for Flagstaff, Arizona, where he has summer employment with the United States Geologic Survey.

There are four other Fuises . . . Anita and Barbara, juniors at East Tennessee State University, and Jeffrey and Brian at home.

The Fuises live at 52 Pine Road, Norris. Proud Papa Frank is in Y-12's Mechanical Design Engineering.

Reservists Set Nuclear Seminar

The local 3252 U. S. Army Reserve Research and Development Unit is presenting an army nuclear science seminar beginning Monday, July 11. Over 90 reservists, consisting of university faculty members and technical and professional personnel, are attending the seminar which will be of two weeks duration.

Y-12 personnel participating in the seminar are Captain J. B. Hopkins, Product Certification; and Lieutenant L. A. Abbatiello, Development Division.

S. R. Sapirie, manager of the Atomic Energy Commission's Oak Ridge Operations; and C. E. Larson, president of Union Carbide's Nuclear Division, will welcome the officers Monday.

Y-12 Plant Superintendent R. F. Hibbs will speak to the group on Y-12 activities on Friday, July 15.

The purpose of this seminar is to provide reservists with the most up-to-date information on nuclear science and related fields available. Most of the classes will be held in the Oak Ridge Playhouse auditorium, Jackson Square.

Manly Serves On LBJ Space Technology Panel

William D. Manly, director of technology in Union Carbide's Stellite Division, has been named an advisor to the President's space technology panel. He will serve as a materials advisor to the panel during its review of the SNAP programs later this year. He will be chiefly concerned with analyzing materials problems relating to reliability of high-temperature applications. SNAP sources are used in satellites as well as for terrestrial applications requiring electric power. The systems consist of a radioisotope whose heat is directly converted to electricity.

AIR POLLUTION

Strict enforcement of our new and drastic law against polluting the air should result in fewer, shorter and better political speeches.—Memphis Commercial Appeal.

Camera Club Meet Set Tuesday At 8

Tuesday, July 12, is the next meeting of the Carbide Camera Club. July's competition is announced as "Open," which means any category of photography may be entered.

Tuesday's meeting will be held at the Carbide Camera Clubs' headquarters in Charlotte Hall, at 8 p.m.

Ionization Is Topic Of Thermonuclear Talk

Arnold Russek, University of Connecticut, will conduct this week's Thermonuclear Division seminar. His subject will be "Ionization by High Energy Atomic Collisions."

The seminar is set for Thursday, July 7, 9 a.m., in the TD Conference Room, Building 9201-2.

SAFETY SCOREBOARD

The Y-12 Plant Has Operated 753,000 Man-Hours Or 31 Days Through July 4 Without A Disabling Injury
Phone 3-7755 (Unofficial Estimate) For Daily Report On Accident-Free Hours



THEN AND NOW . . . T MINUS 21 YEARS! At left, is the tower on which rested the first atomic device . . . and at right is how the site looks today. Trinity Site where the world's first nuclear device was exploded July 16, 1945, is marked by a simple stone monument. The Los Alamos photo at left was, at one time, highly classified, of course. The photo of the Trinity Site today is a U. S. Army photo in beautiful color.

Trinity Site As It Was . . . As It Is Now

The cigarette quota was six packages per employee per week. You had to have your pay stub stamped even to get that! That was July, 21 years ago in Y-12.

'Shot from the Sky,' an Army exhibit, opened for five days in Oak Ridge. The collection of war spoils included a Japanese "Zeke" and a German Messerschmitt 109, both in flying condition. The exhibit was brought here to permit workers to see first hand the quality of enemy equipment and to compare Japanese production with ours. The official Army Air Force exhibit bore the theme "Stay on the Job to Finish the Job."

A big war bond drive was in swing in the plant. More than 10 per cent of employees' gross pay in July of 1944 went into War Bonds.

Unknown to most Y-12ers, a strange-looking tower was being erected in the wilds of New Mexico. The culmination of their efforts was to be mounted atop the tower. Detonated on July 16, it was years later that the news was out.

A bare three weeks later the fury of the A bomb was felt by the Japanese empire. The rest is history.

The Bulletin had just quoted General Eisenhower's address given in London prior to V-E Day: "To preserve his freedom of worship, his equality before law, his liberty to speak and act as he sees fit, subject only to provisions that he trespass not on similar rights of others—a Londoner will fight. "So will a citizen of Abilene!"

Another 'ghost' was gleaned in the files recently as the Alpha Bugle was raised from the dead. Does anyone remember the Bugle? Apparently the paper preceded the Bulletin by a month . . . published 22 years ago. See



JULY 16, 1945 WAS THE FATEFUL DAY of the test at Los Alamos. Seen here just five-hundredths of a second after detonation is the giant cloud of fire and dust kicking up in the New Mexico desert. The White Sands Missile Range, New Mexico, was the place. And where were you 21 years ago?

a reproduction of the Bugle elsewhere in this issue.

Our thanks to the editors of The Atom for supplying these remarkable pictures from the past . . . two of which remained classified, but are now cleared for publication.

And, where were you 21 years ago?

Union Carbide Will Sponsor Fall TV Show

Union Carbide will exclusively sponsor a new television show coming up this fall. "The 21st Century" will appear from 6 to 6:30 p.m. Eastern Time over CBS-TV, and will feature Walter Cronkite as the principal reporter. The new series will report on the future in such fields as the miracles of medicine, and new biology, the transportation revolution, the communications explosion, the city and megalopolis and oceanography.

"The 21st Century" will be in color.

Engineers, Scientists Are Much In Demand

According to the U.S. Employment Service, there are 16,700 openings for engineers and scientists in American industry. Unfilled professional job openings increased 29 per cent over last year. There were more unfilled openings for engineers, draftsmen, and engineering technicians than for any other group of professional workers. Together, these openings accounted for 43 per cent of all unfilled job requests. The largest increases in the engineering area were in three specialties — mechanical, electrical and industrial. However, there are indications that the steady growth in demand for engineers and scientists may be reaching its peak with prospects of leveling off on a new plateau.

UP-DATING

He died with his boots on is now "he died with is shoes on," and one of them usually is on the gas pedal.

The Bulletin Union Carbide's 49 Years Bring Myriad Of Products And Uses

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



NUCLEAR DIVISION

JAMES A. YOUNG *Editor*



American Association Industrial Editors

OFFICE

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



Katy Kutkost
SEZ.

WASHINGTON, D.C. CALLING!

Actually, it was a teletype last Tuesday to AEC, Oak Ridge, asking for an example of 1965 Y-12 Cost Reduction to be included on a PRESIDENTIAL DISPLAY for LBJ.

The utility pole savings of \$28,000 was picked. That's the one where Charlie Oldham, Plant Engineering, replaced the round poles with square ones and reduced cost 48 per cent. Look around the area and notice the columns holding up the steam lines . . . you'll see that some are square—they're the latest economy model.

We snapped before and after pictures and tried to get Charlie included but he refused. He claims his profile is classified. Our comment on Charlie's profile: Beautiful, yes . . . Classified, no.

Incidentally, we're in the process of bundling up the green sheets for the June report. Don't stop—the season is always open.

POPULAR FILM

Union Carbide's film "Petrified River" is still considered one of the finest industrial movies ever made. This film, covering the story of uranium from the time it is mined to when it is used, has been viewed by an estimated 85 million people.

Talking about your job outside Y-12 is one sure way of losing it.

"It keeps the wolf away from my door," was one employee's answer last week when asked what Union Carbide means to him.

Multiply this by 74,000 (the number of Union Carbide employees) plus the 131,000 plus stockholders whose money earns dividends, and you have a rather incomplete picture of our company. Maker of anti-freeze, insect repellent, Glad wrap, flashlight batteries, and other products familiar to everyone . . . Union Carbide is all of these, and yet more, too.

The industrial giant called Union Carbide is made up of 15 major operating units (called divisions) . . . the latest one, formed June 1 of this year, is called Electronics . . . with former Oak Ridge Robert C. Charpie as its president.

More Than Chemicals

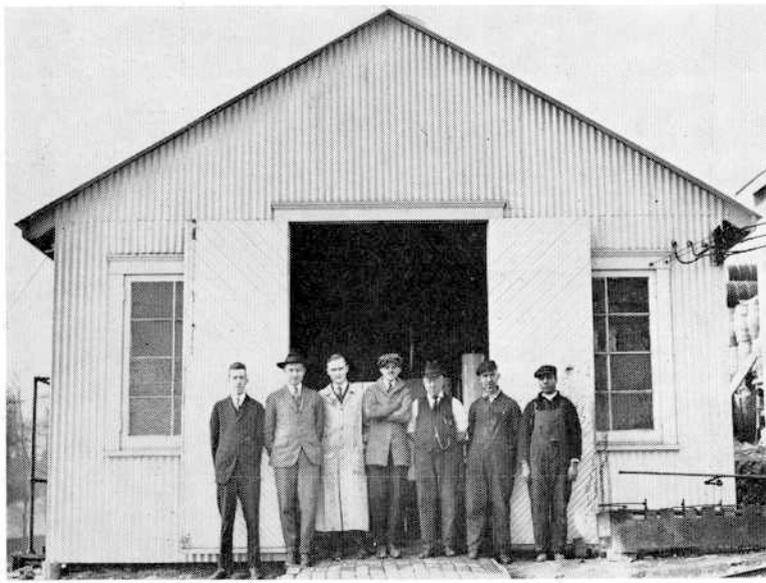
Annual sales of \$2 billion . . . that's Union Carbide, too. And while Union Carbide is frequently considered a chemical company—its Chemicals Division is actually the nation's second largest producer of chemicals—it's more than that too. The Corporation also makes plastics, industrial gases, metals, carbon products and nuclear products . . . in addition to the products with familiar trade names from the Consumer Products Division.

Behind the scenes, that's Carbide, too. The myriad of unseen products . . . building blocks used by the thousands of manufacturers—to help fill human needs. Ingredients for paint; plastics for appliances and autos (Bakelite was a pioneer in this field); biodegradable chemicals for producing better household and industrial cleansers; derivatives for such varied products as textile fibers, special printing inks, and even solid propellant missile cases; Dynel fibers for coats, even wigs; synthetic gems for the jeweler; preservatives for food such as cheese. Over 90 chemicals are produced by Union Carbide for making antibiotics, vitamins, and other pharmaceuticals.

Serves Other Industry

Union Carbide's Chemicals Division manufactures over 400 different chemicals, which find their way into every major branch of industry and end up in everything from floor wax to shampoo.

From the corporation's seven major chemical plants come ingredients such as gasoline additives which help prevent automobiles from stalling; latexes for the



EARLY UNION CARBIDE EMPLOYEES are seen in a 1918 photograph before the building where early work was done on Carbide's Organic Synthesis Fellowship. The four men at left are identified as Glen D. Bagley, G. O. Curme Jr., Henry R. Curme, and J. N. Compton. The three employees at the right are unidentified.

popular water-base paints; and over 100 chemicals made for the textile industry alone. Some are basic ingredients from which many textiles are spun; others are used to impart finishes that make clothes wear better and resist soiling, wrinkling and shrinking . . . jet-age fabrics, all.

While all of Union Carbide's various divisions are distinctly separate operations, each bears an important relation to the other. The Chemicals Division, for instance, obtains most of its raw materials from the Olefins Division, such products as ethylene, propylene, and butadiene. These products originate from the rich constituents of oil and natural gas. (Even the air provides some of the Union Carbide by-products.)

Union Carbide's 'official' history goes back to November 1, 1917 when the corporation was founded as Union Carbide and Carbon Corporation. Five parent firms made up the formation: Union Carbide Company, producers of calcium carbide; Electro Metallurgical Company, steel alloys; the Linde Air Products Company, oxygen; the Prest-O-Lite Company, acetylene; and the National Carbon Company, electrodes and electric furnaces. The merging of these five companies brought together the technical skills and laboratory finds of these companies plus the research at the Mellon Institute, headed by Dr. George Oliver Curme Jr. Curme's process for getting acetylene from oil led to the synthesis of ethylene, propylene and butylene.

Soon Curme had also synthesized ethylene oxide and ethylene glycol, ethylene dichloride and ethyl alcohol and isopropyl alcohol . . . and the stage was set for the arrival of the petro-chemical industry. By 1920, new compounds with commercial value had piled up so impressively that a separate company, Carbide and Carbon Chemicals Corporation, now the Chemicals Division, was formed to make and market these new products. (CCCC was the operating division of Union Carbide that moved into Y-12 in May, 1947, as prime contractors.)

Research efforts—which began with the famous project at Mellon Institute—have never diminished. The Corporation today carries on intense basic and product research in one of the world's most impressive centers. The Technical Center is housed in 15 buildings located in West Virginia. A staff

of more than 2,000—many with advanced degrees in science or engineering—conduct studies and experiments of endless variety. From these laboratories come a long list of products, including Sevin insecticide (that saved Egypt's entire cotton crop a few years ago), ingredients for new mattress foams, new types of epoxies and epoxy resins, new basic ingredients for paints, food preservatives, additives for gasoline and oils . . . and many, many more.

Fortune magazine recently said of Union Carbide, "The company is the world's biggest producer of petrochemicals, plastics, calcium carbide, dry batteries, carbon electrodes, ferroalloys, and oxygen; and for the Atomic Energy Commission it runs three atomic-power plants, as well as the famed Oak Ridge National Laboratory . . . its tens of thousands of products, developed or improved in 29 major labs and turned out in no fewer than 365 plants, include such diverse items as pipe slides, polyethylene film, lubricants, synthetic sapphires, lasers, isotopes, helium, sausage casing, Prestone anti-freeze, auto polish and synthetic fabrics."

In addition to the 14 major operating divisions, Carbide has about 60 subsidiary and associated companies concerned with manufacturing, mining and sales operating abroad, serving markets in more than 100 countries.

One of the subsidiary companies, Ocean Systems, Inc., is doing advanced work in oceanography. Taking advantage of the Corporation's extensive experience in gas technology and in the development of life support systems, engineers have designed diving systems enabling divers to work on the ocean floor at greater depths than ever before. The company was recently instrumental in helping government officials locate and raise the hydrogen bomb lost off the Spanish Coast.

Down the road a piece at the Carbon Products Division's Columbia plant, work has already begun on the expansion of the facilities there. The plant in Columbia is already the world's largest graphite electrode plant. Many different forms of carbon and graphite (a highly refined carbon) are produced by this Division for a wide variety of industrial uses. The steel industry uses more than 100 million pounds in the form of electrodes each year.

These giant cylinders of carbon or graphite are used in electric furnaces for making not only steel but also alloys, calcium carbide and phosphorous. The Division produces specialty products.

Skin For Weiners

Busy in another section of this country, the Food Products Division has a plant at Loudon where an additional cellulose casing production unit was started. The meat industry is one of the biggest customers this division has, as the lowly hot dog and bologna are encased in casing made here.

The Mining and Metals Division saw record tonnages of ferroalloys and alloying metals in 1965. In addition to the alloying metals and pure forms of a variety of metals for use in iron and steel, the division also supplied uranium concentrates to the government for use in nuclear energy operations.

Our own division, the Nuclear Division, formed from the Chemical Division, operates the three plants here in Oak Ridge and the gaseous diffusion plant at Paducah, for the U. S. Atomic Energy Commission.

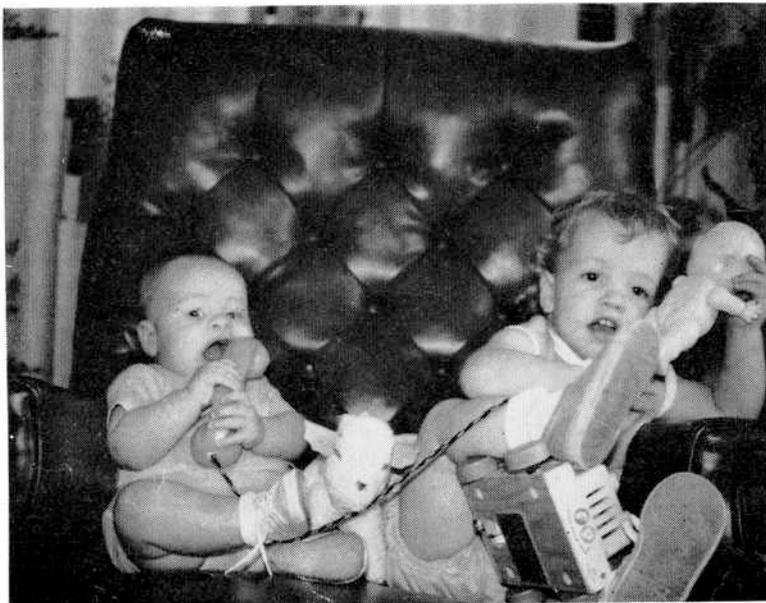
Union Carbide also owns, or shares interest in, plants all over the world. Chemicals, plastics, carbon products, alloys, gases and battery-producing plants are located in Europe, Africa, the Far East, the Pacific, Mexico, Central and South America. Union Carbide International operates these plants . . . all foreign ones with the exception of those in Canada, operated by Union Carbide of Canada Limited, and the one in Puerto Rico, operated by Union Carbide Caribe, Inc.

From the Chemical Division's tiny plant at Clendenin, West Virginia . . . the name of Union Carbide has spread . . . with corporate headquarters in the imposing 50-story office building at 270 Park Avenue, New York.

Like the man side, "Union Carbide keeps the wolf from the door," . . . but it does a lot more than that.



270 PARK AVENUE, the heartbeat of Union Carbide rises 50 stories into the Manhattan skyline. Here the executive offices are located for the corporation.



TODD AND STEPHANIE clown it up for the camera . . . to the delight of Papa C. E. Anderson, Alpha Five Machine Shop. The Andersons live on Middlebrook Pike, Knoxville. Todd is five months old; Stephanie almost two years old.



THE BIG SHOPS, ANOTHER Y-12 TEAM in the three-plant Softball competition is seen before action. Sitting in the front row, from left, are Perry Bullard, Glen Walls, Ben Alexander, Don Branson, H. N. Brendle, Fred Manning and Harley Law. Kneeling in front is Manager H. M. Monday. Sitting on the fence are Bill Wright, George Scruggs, Roy Matheney, Assistant Manager R. E. Gibson, Larry Moncier and Lester Lovegrove. F. K. Clabough was absent when the photo was made.

Y-12's Braves Assume Second Slot In Heated Softball Competition

Y-12 Braves began Softball action last week, in style, by downing the Health Physics team 12 to 2. John Evans poled the only Big League hit of the game . . . as Jerry Babb and Rick Hull pulled down triples.

Another Y-12 team, the Bat Boys, emerged victors in game number two Monday . . . defeating the Peanuts 7 to 6. George Reece and Jim Knight were the big heroes for the winners, each with a double.

The Isotopes Reactor combination kept atop the head in Monday's final foray, by downing the Naughts 22 to 6. I-R homers were earned by Tom Kress, Don Tidwell and Roy Nabors. Bill Fulker-son had the lone homer for the losing squad.

The K-25 Sports felled the ORNL Mets in Tuesday's opener, 4 to 3. The Mets' Bones Stonecipher and Bob Stout homered for two of the three runs earned by the losers.

The Red Devils scratched the K-25 Mets in Tuesday's second game, 11 to 9. For the losers Hollis Stakes drove one across the fence for the only homer of the game. Tom Coffee and Tom Grizard earned triples for the winning squad . . . Sam Woodfin for the losing Mets.

Y-12's Eagles spared no reins as they trounced their fellow plantmen in Tuesday's last game. They downed the Fireguards 22 to 4. Hugh Richards and Joe Habermas homered for the winning birds.

Two ORNL teams tangled in Thursday's opening action, as the Bio team downed the Ecobums 7 to 3. Pete Wicks and John Haffey homered twice to help the Bio's winning cause.

The Falcons, Y-12, defeated their fellow plantmen, the Big Shop team, 23 to 4 in a lop-sided game also on Thursday. Bob Rose got two trips home via long hits as did Benny Trent. Ken Brady and Ted Burger homered once each.

The Sluggers defeated the Clowns in the week's final action 16 to 13. Jackie Canupp, Leroy

Hardin and Bob Cain homered for the losing squad; Elbert Carlton and Pete Dittner for the winners.

League standings follow:

Team	W	L
Isotopes-Reactor, ORNL	8	0
Braves, Y-12	7	1
Red Devils, ORNL	6	1
K-25 Mets	6	2
Health Physics, ORNL	6	2
Bat Boys, Y-12	6	2
Eagles, -12	6	2
K-25 Sports	5	3
Bio, ORNL	3	4
Sluggers, ORNL	3	5
Falcons, Y-12	3	5
X-10 Mets	2	5
Clowns, ORNL	2	5
Naughts, ORNL	1	6
Ecobums, ORNL	1	7
Peanuts, ORNL	1	7
Big Shop, Y-12	1	7
Fireguards, Y-12	0	7

Jack Cowen Leads 4th Archery Firing

The end of the second section of four weeks of target archery found J. P. Cowen winning the bare-bow division of the Archery League with a handicap score of 289.

Other scores were R. B. Wright, 286; E. Tuell, 287, bare-bow; and D. W. Bland, 292 and M. Hickman, 282, free-style. Bland recently fired a possible score of 100 at 30 yards . . . an exhibition of steady hands and cool nerves.

Archery will continue on the field course with two four-week periods which began yesterday, July 5. Each is separate and independent for new shooters to enter at any time.



"We have to charge more because you broke a pitcher and wasted the lemonade."

Recreation



SUNDAY, JULY 10

SKEET TOURNAMENT, 1 p.m. Oak Ridge Sportsman's Association Range.

MONDAY, JULY 11

SOFTBALL LEAGUE: Beginning 6 p.m. Pinewood Park. X-10 Mets vs. Bat Boys; K-25 Mets vs. Sluggers; Fireguards vs. Falcons.

TENNIS LEAGUE: As per schedule . . . to be arranged by individual players.

TUESDAY, JULY 12

CARBIDE CAMERA CLUB, 8 p.m. Charlotte Hall.

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

SOFTBALL LEAGUE: Beginning 6 p.m. Pinewood Park. Braves vs. Eagles; Bio. vs. Isotopes Reactor; Red Devils vs. Ecobums.

THURSDAY, JULY 13

SOFTBALL LEAGUE: Beginning 6 p.m. Pinewood Park. Clowns vs. Peanuts; Health Physics vs. Eagles; Naughts vs. Big Shops.

HORSESHOE LEAGUE: 7 p.m. City Courts, Jackson Square.

PHYSICAL FITNESS: 7:30 p.m. Oak Ridge High School Gymnasium.

Saturday, July 16

HI POWERED RIFLE LEAGUE, 9 a.m., Oak Ridge Sportsmen's Association.

PAYING THE PIPER

"If I knew a miser who gave up any kind of a comfortable living, all the pleasure of doing good to others, all the esteem of his fellow citizens and the joys of benevolent friendship for the sake of accumulating wealth, poor man, said I, you pay too much for your whistle." Poor Richard's Almanac.

SIGN OF THE TIMES

It once was that we went without things to have money; now we go without money to have things.

Huff Fires High In Rifle Scoring

The highest score of the season was racked up recently in the fifth match of the High Powered Rifle League. As the season progresses, more shooters are making higher scores, also.

Jack Huff, Y-12, score a 247-17v out of a possible 250. He was followed by Arvin Quist, ORNL, with a 245-22v; W. H. Kelley, Y-12, with a 241-19v; Anthony Abatiello, ORNL, 237-16v; and Tony's son Leonard, Y-12, with a 233-14v. (Watch out, Pop, he's right behind you!)

Other shooters made the following:

Firer	Score
Bert Searles, Y-12	231
Dudley Hewette, ORNL	230
Ed Foley, K-25	229
Carl Brewster, Y-12	226
Walt Zobel, ORNL	224
Jack Mrochek, ORNL	220
John Miller, ORNL	219
Hugo Bertini, ORNL	218
John Dunn, Y-12	214
Sam DeCamp, ORNL	207
Bill Galyon, Y-12	187
Bill Dress, ORNL	186

The last match of the season will be held outdoors at the Oak Ridge Sportsmen's Association at 9 a.m., Saturday, July 16. Interested spectators and potential shooters are welcome.

Sun Can Injure Eyes Permanently

"Sunbathers should not look directly at the sun even while wearing sunglasses." So states the National Society for the Prevention of Blindness, Inc., warning vacationers that the infra-red rays which give a tan can penetrate the dark glass and damage the retina of the eye.

The sight-saving organization urges sunbathers to protect their eyes from bright sunlight and reflected glare by using sunglasses. These should be chosen with as much care as regular glasses, checking for proper light transmission, tinting and comfortable fit.

The wise motorist will use sunglasses with correct lens density for the proper purpose—to cut down glare when the sun is bright and still permit the wearer to see clearly. Sunglasses should never be worn while driving at dusk or dark. Drivers are reminded that tinted lenses reduce visibility, obscure road and traffic signs. They do not sharpen vision in fog or mist.

Sunglasses with shatter-resistant lenses and safety frames should be worn for complete eye protection when driving or participating in sports, like tennis, golf and sailing.

Harness-Durham Horseshoe Leaders

The Harness-Durham team defeated the Clark-Gallman duo in the Horseshoe League last week for the full count. Barger-Luckett took eight points from Raper-Tinley; the Helms-Wagner two took five from the Zupan-Kendig team; while the Leonard-Gray pitchers won seven from Wyatt and Lucke.

League standings follow:

Team	W	L
Harness-Durham	17	1
Barger-Luckett	8	1
Zupan-Kendig	10	5
Leonard-Gray	7	2
Helms-Wagner	5	4
Gallman-Clark	3	9
Wyatt-Lucke	2	7
Raper-Tinley	2	16
Hutto-Tillery	0	0

Women Have More Headaches Than Men

Researchers have reported that women suffer more headaches than men. One reason, they report, is that females react more emotionally to everyday stress. Medical investigators say that the migraine headache affects at least twice as many women as men; but far more common is the nervous tension headache, which accounts for seven out of ten headaches.

What the researchers failed to point out is that men are the cause of most women's headaches!

Enjoy A Vacation Free From Worry And Theft

Welcome home! No doubt you had a good vacation or a nice visit, and it's great to be back home where someone hasn't broken in during your absence. To help yourself make sure, before you go away see that the police are notified when you are leaving and when you plan to return. Stop deliveries on milk, mail, newspapers and the like. Keep the window shades up, arrange for a light on during the evenings of your absence, if possible. When you leave, lock doors and windows securely. Be sure valuable furs and jewelry have not been left in the house. By doing these things you can save yourself a lot of worry, and have a better vacation while away from home.

HELP NEEDED

A month after Billy started to school, the teacher sent home a note saying: "Young Billy is more than I can handle; I am forced to ask your help."

To which the mother answered, "Listen, all those years I had him alone, did I ask you for help?"

Tee-Off Time Application For Springbrook (Niota) Tournament

Saturday, July 23

Foursome

_____, Leader

Leader's office phone _____

Home phone _____

Tee-Off Time Preferred _____

Fill out completely and return to the Recreation Office, Building 9704-2. Deadline for entering is 4:30 p.m. Wednesday, July 20. Tee-off times will be drawn the next day, Thursday, July 21, at 8:30 a.m.

UNION CARBIDE CORPORATION NUCLEAR DIVISION

RETURN POSTAGE GUARANTEED

Post Office Box Y Oak Ridge, Tennessee—37830

BULK RATE U.S. Postage PAID

Oak Ridge, Tenn. Permit No. 71

THE ALPHA BUGLE

NOT TO BE TAKEN OR MAILED FROM THE AREA

Vol. 1, No. 1

Y-12, OAK RIDGE, TENNESSEE

Saturday, July 1, 1944

TEC OFFERS \$600 IN JULY 4 PRIZES FOR BOND PURCHASES

Buy Bombs For Adolph & Tojo

Your Chance To Celebrate The Fourth By Winning A War Bond Here On The Job

How would you like to win a slice of \$600 in war bonds? You can do it, and help your country and yourself, too.

Here's how it works: Every buyer of a War Bond in Y-12 will have a chance to participate in a drawing at 2:30 p. m., July 4th, for that \$600 in bonds.

The names and numbers will be drawn out on the Fourth, and the lucky ten will receive bonds valued at from \$25 to \$250!

BUST THEIR BALLOON!

Let's prick the axis balloon by driving the tack all the way up!

We're talking about that 12 foot gadget near the cafeteria that registers the progress in our War Bond drive—it only has to go to \$500,000, so let's stick the axis with our War Bond purchases.

So, the more you put into bonds, the better your chances. For example, if you buy a \$100 bond, you get four cracks at that big \$250 bond; if you buy a \$1,000 bond you get 40 chances—one for each \$25. Simple, isn't it?

Someone in your group has been designated as a bond salesman, go to him—or her—and have an application made out. Take the application and the cash or a check on a local bank to the bond sales tables, located in each building, and the attendant will accept your money.

You will get stubs, one for each \$25 you buy, bearing your name and payroll number placed in the barrel. If your name is drawn on July 4, all you have to do is (Continued on Page 2)

A Boy Died Last Night

These paragraphs have become a classic of World War II—a knockout punch to cowardice, conniving, and complacency. They appeared originally in the Louisville, Kentucky, Courier-Journal, for which Mr. Hoagland, the author, was promotion manager, and have been reprinted hundreds of times often without credit to the author.

A boy died last night. It doesn't make much difference about his name. The important thing is that he died, in poignant and awful loneliness, out somewhere on a waste of sand, out in a starless silence, ten thousand miles from home.

"Missing in action," read an obscure line in this morning's communique. That was all. Now he lies there, crumpled beside the twisted wreckage that yesterday was his ship, riding high in the sunlit heavens. The fine head and the shining face and the broad shoulders remain only in a picture that looks out upon a quiet living-room on a shaded street an eternity away.

Last night, in those agonizing hours of unspeakable isolation, he went through a thousand deaths without the one thing that might have helped a little—the sound of a familiar voice, the pat of a friendly hand. Many people died last night in their beds at home, surrounded by those who cared. Last night he died in utter desolation, in unimaginable loneliness.

The pain was terrible enough. But then there had to be that dreadful burden of thought in those endless last hours. Mom and Pop. The flowers blooming again in the back yard. The good old roadster in the driveway. That last sweetheart kiss at the station. Those dances last summer. That half-finished letter in his blouse. All those plans for the future. Buddies back at the field, 500 miles across water, wondering. Couldn't somebody find him, please? The wracking pain again.

Too much for you, all this? Well it really happened last night, just like that. If all of us could only understand it, if we could just grind deeper into our thinking the stark, terrible reality of it, every petty, selfish interest would be swept away. We would sacrifice anything and everything just to make ourselves worthy of that boy. We would hasten to forge an instrument of revenge that would wipe from the earth the traffickers in war.

If the people who have walked secure in a land that has felt no more than the shock of a Fourth of July fire cracker since 1865 would understand about this boy, they would wait no longer for government promulgations and the urging of rallies. There would be no one left to think any further about what the war might do to his mere personal interest tomorrow or the next day.

The invasion has come and our boys are forging ahead on the road to Berlin. Another War Bond Drive is on. Job presenteeism is being stressed more earnestly than ever. Maximum waste and loss of time and effort—an all-out drive to finish the war is now ours—ours to push to the very utmost—to avenge that boy and many, many others like him. No matter how well we do today, tomorrow, or the next day we can never, ought never, must never be satisfied with how well we here are doing our job until the last enemy gun is silenced. And on this Fourth let us realize that we are again fighting for the Independence our forefathers won for us—fighting again because we let someone try to take it from us—fighting with men and materials we could have used in other ways more happily in a world of peace. Each of us can save a soldier's life today, tomorrow and the next day. Each soldier may be unknown to each of us but you can be sure you saved at least one life a day every work day you are present and actively working. But if you miss a work day— (Continued on Page 2)

Alpha Presentees Show Increase

Dash 1 Men Lead Dash 2 While Dash 2 Women Top Dash 1; Dash 3 Enters

With the Alpha presenteeism campaign gathering speed, results are already being shown.

Last week end, June 24 and 25, was by all odds the best since the drive began in May with week end absentee figures dropping to new lows.

Consistent leader during June was 9201-2. Dash One, which started poorly, has come along with arush indicating its loyal population are out to make a real fight for the best attendance record in the area.

The race at the moment is so close that a difference of a few more people being on the job may determine the winner in building attendance.

Dash Three, not a contender during June, is now ready to enter the contest. The Dash Three adherents claim the July title is "in the bag."

Best record for the men appears to belong to 9201-1, although the margin is slight. The women of Dash Two easily won over the girls of Dash One, but indications the last week or so point to a close contest during July.

Which of the buildings is the best at staying on the job? That's something we don't know. It's up to YOU to decide!

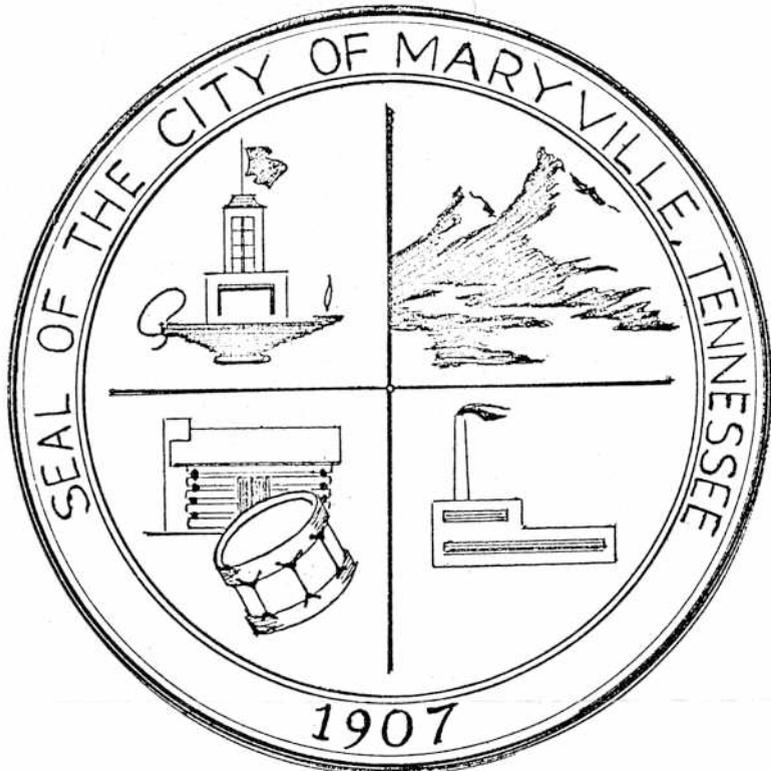
T. E. C. Girls Club Notes

Girls, these are three regular weekly club events about which we thought we would remind you:

On every Tuesday night a dancing class is held for beginners in the Pine Valley School, Oak Ridge, from 7:30 to 8:30 p. m. For those who don't yet dance here's a wonderful chance to learn. Bring your fella, too; if he's a "right guy" he'll be glad to help you by being your dance partner. Perhaps he can brush up on his dancing, too.

Wednesday night you know is (Continued on Page 2)

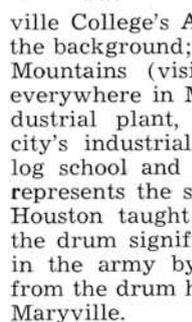
'Pat' Patterson Wins Award For Maryville Seal Design



L. E. "Pat" Patterson, in Y-12's Paint Shop (Buildings, Grounds and Maintenance Shops), recently took honors at Maryville, Tennessee.

The City sponsored a contest in search of a city seal... and "Pat" submitted the winning entry.

His seal design includes the lamp of learning with the tower of a school (representing Maryville College's Anderson Hall) in the background; the Great Smoky Mountains (visible from almost everywhere in Maryville); an industrial plant, representing the city's industrial complex; and a log school and drum. The latter represents the school where Sam Houston taught as a youth, and the drum signifies his enlistment in the army by taking a dollar from the drum head in downtown Maryville.



Ride wanted from Hazelnut Drive, one block off Oak Ridge Highway, to West Portal, straight day. Lillian Higgins, plant phone 3-5072, home phone Knoxville 588-1203 (between 5 and 6 p.m.).

Rider wanted from vicinity of Mabry-Hood Road and Kingston Pike to North or Biology Portal, straight day. P. W. Cofer, plant phone 3-5894, home phone Concord 966-4203.

The City of Maryville was incorporated in 1907.

For submitting the prize-winning entry, Patterson received the top \$50 cash prize.

The committee, which is comprised of the Maryville Board of Mayor and Commissioners, submitted the three top-winning entries to an artist, who will incorporate ideas from all of the three in the Great Seal.

Patterson lives at 4 Byerley St., Eagleton Village, Maryville.

Man Possesses Most Miraculous Mechanism

Man possesses some of the most complicated mechanisms found anywhere. Take the heart. No pump is as perfect if it's treated properly. Eyes? No camera can touch them for efficiency. Nervous system? No telegraphic system can parallel it. Voice and ears? Better than any radio ever built. Nose, lungs, skin? There isn't a ventilating system planned as wonderful. Spinal cord? Nothing can beat this most complex switchboard for giving instantaneous warnings and reactions.

Such a wonderful machine is worthy of the highest respect and care. You are your own best safety device, too. It's up to each individual to protect these marvels that nature has freely bestowed on us all.

JUPITER A STAR?

Is the planet Jupiter really a star? Dr. Donald J. Taylor of the Universities of Wisconsin and Arizona, indicates that Jupiter is more a small star than a large planet. Photoelectric studies by Taylor indicate that the planet radiates about 1.2 times more heat than it receives from the sun.

Had Car Trouble? Join The Crowd!

Ever run out of gas on the highway? Ever lock yourself out of the car? Ever have to be towed out of the snow or mud?

If you have, don't feel too badly about it. Lots of people are having these same little problems, according to the American Automobile Association.

In 1965, the AAA estimated 2,671,000 drivers ran out of gas; 837,000 locked themselves out of their cars; and 2,860,000 had to call for help while stuck. Feel any better?

President Rush MCA Chairman Of Board

Kenneth Rush, president of Union Carbide, has been elected chairman of the board of the Manufacturing Chemists' Association. He will serve a one-year term in that position. The MCA is made up of about 200 chemical companies who sell a substantial portion of their production to other industries. The organization sponsors research in areas of common interest to the industry and serves as a clearing house for information about plastics and chemicals.



As July gets a headstart into the steaming days of summer, more Y-12ers observe important landmarks with Union Carbide Corporation. Congratulations.

20 YEARS

Paul E. Barker, Research Services, July 6. Wilbur C. Okla, Dispatching Department, July 11.

15 YEARS

Willis T. Bryson, Buildings, Grounds and Maintenance Shops, July 6.

Raymond O. Miller, Buildings, Grounds and Maintenance Shops, July 9.

Allen H. True, Electrical Engineering, July 9.

Sallie B. Cornell, SS Control Department, July 9.

Roy C. Smith, H-1 Foundry, July 9.

Halstead Meadows, G-3 Processing Department, July 9.

Hugh T. Christie, Electrical Department, July 9.

Wallace L. Bohanan, Buildings,

Grounds and Maintenance Shops, July 9.

Harold E. Alvey, Dimensional Inspection, July 9.

Elmer R. McConkey, Process Maintenance, July 9.

Finley B. Clowers, Utilities Administration, July 10.

Robert H. Bacon, Area Five Maintenance, July 10.

Claude A. Reed, Buildings, Grounds and Maintenance Shops, July 10.

Joe Whittaker, H-1 Foundry, July 10.

Louie C. Bell, General Can Fabrication Shop, July 12.

10 YEARS

Harry J. Hahn, Buildings, Grounds and Maintenance Shops, July 6.

Elwood W. Tompkins, Area Five Maintenance, July 9.

PHOTOGRAPH, PLEASE

Advertisement in a Manitoba newspaper: "Farmer, age 38, wishes to meet girl around 30 years old who owns tractor. Please enclose picture of tractor."

FAST TALK

If each person who heard gossip told it to two others within 15 minutes the entire world would know in ten hours!