



Y-12 BULLETIN

A Newspaper For Y-12 Employees of Union Carbide Corporation—Nuclear Division

VOL. 21 — NO. 28

OAK RIDGE, TENNESSEE

Wednesday, July 26, 1967

6-13495

Union Carbide's Total Involvement Evidenced In Dramatic Exhibition

Harvesting the nutriments of the ocean, quenching thirst with sea water, breathing pure, odorless air and mending the human body with frozen tissues and "spare parts"—all fantasies from the world of science fiction?

Not according to Union Carbide which displayed these promising developments as present potentials recently in Dallas as part of the 58th annual meeting of the American Home Economics Association. The exhibit dramatized the scientific achievements of the corporation that already have become a vital part of modern living and pointed a finger at things to come in the exciting world of the 21st century.

Through its affiliate, Ocean Systems, Union Carbide is pioneering in research beneath the sea. New oceanographic techniques are being sharpened to garner the mineral contents of the sea as well as to establish new home sites. A particularly vital program with global implications is research leading to the desalinization of sea water to compensate for the world's diminishing supply of pure water.

Union Carbide, which has become known as the "discovery company," is adapting its gas technology to preserving living cells, tissues and organs by means of subfreezing temperatures. Numerous applications in improved health and food lie ahead in the realm of cryogenics.

Anti-Air Pollution

Another challenge to industrial research in the United States is air pollution. One possible answer from Union Carbide's vast scientific repertory may well be the fuel cell, which supplies clean, quiet energy. Some visionaries see it as a potential power source in the automobile of the future.

As a spin-off of this exciting world ahead, Union Carbide offers a provocative glimpse into a somewhat more distant world—the moon. Walter Cronkite and Julia Meade narrate on tape a special live presentation which includes modeling of lunar fashions. For wear on the dark side of the moon are attractive outfits that glow from battery power while on the brighter side, cool, supply jump suits of Dynel will be "de rigueur."

'Portable' Chairs

Back on earth once again, Miss Meade pointed to futuristic chairs which can be easily transported in compact form and inflated to their normal shape, giving earth men and women a seat wherever they go. Also unveiled are rugs woven with metal fibers, synthetic jewels, and super-strength materials which can be used to support tremendous weights.

Focusing on the present was a display of "famous firsts from Union Carbide" — all contributions of the corporation to modern day living.

For example, the products found by the shopper on the supermarket shelf are fresher, purer and better packaged than ever because of cellulose casing, polyethylene, liquid nitrogen and carbamate insecticide. Such innovations contribute significantly to the quality and variety of American food.

Clothing has become easier to care for and longer lasting because of textile chemicals such as glyoxol, a substance that makes durable press durable. And fashion has become more fashionable with modacrylic fiber, better known as Dynel. This "not fake anything" makes easy-care hairpieces, couturier coats and exotic jewelry possible, practical and pretty. As part of the fashion display, the world's largest synthetic ruby was seen plus a selection of the famous Linde Stars in shades of blue, red, white and brown.

Union Carbide's man-made materials help removed the work from housework, too. The world's first stainless steel saucepan and the first plastic resulted from Union Carbide research. Another first in a series of firsts is the Englander totally engineered mattress of spring and urethane foam.

We Won An Oscar!

Leisure time has multiplied with improvements in the standard of living and to help capitalize on this time are hoppy equipment, toys, and portable machines of every description powered by 800 different types of batteries manufactured by Union Carbide. In addition, movie production and projection, television, and the graphic arts rely upon carbon arc lights made by the corporation. (In 1956, Union Carbide won an Oscar for discovering how to produce a yellow arc light that made color movies more colorful!)

Research has been extended even to the lowly mosquito! Ethylhexanediol — better known as "6-12"—is a widely used insect repellent that comes in stick form, aerosols and patio lights.

The variety of past, current, and new products displayed represents 50 years of vigorous research. Incorporated in 1917, Union Carbide looks forward to another half-century of discovery that can be expected to have a profound impact on life in the 21st century.

College Planning Urged In Advance

When should a parent prepare for a child's higher education? At least 15 years before the normal college entrance age of 18, says the Institute of Life Insurance.

Many families apparently are counting too much on current income "when the time comes" and scholarship funds that simply are not available, studies revealed.

How much should you plan to set aside for Junior's education? First-year costs at state colleges run about \$2,000 . . . and slightly higher, \$3,500 for private colleges.

The best advice seems to be to start planning that off-spring's college financing when he comes into this world. Then you are more prepared for the financial jolt when he reaches 18.

The Y-12 Credit Union has education loans for parents who were unable to save for a college education. Free counseling on the various plans is available without obligation, of course.

Health Physicists Meeting Is Monday

The East Tennessee Chapter of the Health Physics Society will meet next Monday, July 31, at the Oak Ridge Country Club. The social hour is at 5:30 p.m., to be followed by a buffet supper and the technical session.

John Auxier, Radiation Dosimetry Laboratory of the Health Physics Sections of Oak Ridge National Laboratory, will be the featured speaker. He will speak on "Dosimetry for Human Exposure; Field Experiments and Laboratory Inter-Comparisons." The session will be moderated by R. D. Birkhoff.

Auxier, a native of Kentucky, graduated from Berea College. He received his master's degree from Vanderbilt University on an Atomic Energy Commission fellowship program. He taught physics and engineering at Vandy and was with the Radio Biological Laboratory at the University of Texas before coming to ORNL in 1955.

He has authored and co-authored many scientific papers concerned mostly with radiological physics, especially dosimetry.

Reservations should be made for Monday's dinner meeting. They may be obtained by telephoning extension 3-5861, or 3-6948.

K-25 Develops Outleakage Sensor

Engineers at Oak Ridge Gaseous Diffusion Plant's Technical Division have developed a relatively inexpensive Outleakage Detector capable of performing the same function as equipment costing much more.

The Outleakage Detector can rapidly detect leaks of uranium hexafluoride gas and other fluoride gases into the atmosphere or from equipment.

It utilizes as a sensor a printed circuit board coated with a molybdenum disulfide compound whose resistance decreases when exposed to as little as 1,000 parts per million uranium hexafluoride gas.

Conventional resistance sensitive circuits with relays are used with the basic sensor to sound alarms, shut down equipment, or actuate safety devices.

These detectors are expected to find use in AEC processing plants and commercial facilities, such as nuclear fuel processing plants, fluorine generating plants, and hydrogen fluoride processing facilities.

SAFETY SCOREBOARD

The Y-12 Plant Has Operated 100 Days Or 2,869,000 Man-Hours (Unofficial Estimate) Through July 23 Without A Disabling Injury Safety At Home At Work, At Play



THE MATERIALS AND SERVICES DIVISION was recently recognized by the Safety Department for its outstanding contributions to Y-12's safety efforts through the years. The division passed the 10-year, 5,000,000 man-hour mark without a disabling injury. Despite its varied type of work in handling materials, the division has maintained a safety record enviable throughout Y-12. Safety Director C. E. Johnson presents the plaque, above, to E. A. Pluhar, superintendent of the division, at left.

AEC Safety Records Best In 20 Years Of Operations

Employees of the Atomic Energy Commission and its contractors had the safest year in AEC's 20-year history during 1966. The record year again qualified the AEC for the National Safety Council's Award of Honor. This is the seventh time since 1950 that the Commission and its contractors have received the award.

More than half of AEC's contractors had no lost-time injuries last year!

Non-radiation hazards were the cause of fatalities and injuries connected with AEC operations during 1966. Of six fatalities, two were caused by falling objects, two by motor vehicles, one by an overturned tractor, and one resulted from burns. There were no serious radiation exposures in AEC operations, for the year.

The number of lost-time injuries during calendar 1966 for each million man-hours of work by AEC government employees and AEC contractor employees was 1.54 (Y-12 had 0.79 injuries for every million man-hours worked) more than 16 per cent below the 1965 rate of 1.75.

19,000 Employees

The AEC's Oak Ridge Operations, one of the Commission's major field offices employing some 19,000 persons, recorded a frequency rate of 1.22 during 1966, with an average well below one injury for every million man-hours worked.)

Of the 41 industries reporting to the National Safety Council in 1966 only one, the communications industry, whose rate was 1.26 for 1966, had a lower rate than that of the AEC. The average injury frequency rate for all

of industries reporting to the Council was 6.91 for 1966.

Severity Rate

The AEC 1966 injury severity rate — the number of days lost in relation to each million man-hours worked — was 244, also lower than that of 1965 (304). (Y-12's severity rate last year was 202.)

There were no accidents involving AEC reactors during the year.

The motor vehicle accident frequency rate (accidents per one million miles) decreased from 5.87 in 1965 to 5.79 in 1966. More than 11,500 vehicle are taken into account in these figures. (And here, Y-12 did not compare so favorably with other AEC facilities. We experienced an average of 14.14 accidents for every million miles!)

Sterling Records

A total of 16 contractors earned AEC safety awards for exceeding one million man-hours without a lost-time accident. Two contractors established near-perfect records — Westinghouse Electric Corporation, operator of Bettis Atomic Power Laboratory, Pennsylvania, with 19,194,917 injury-free man-hours, and Phillips Petroleum Company, operator of AEC's National Reactor Testing Station, Idaho, with 12,291,162 injury-free man-hours.

Under the Oak Ridge Operations, the General Electric Company, Evendale, Ohio, has not recorded a lost time injury since 1961, the year the company was named the AEC's contractor for operating the Nuclear Materials and Propulsion Operations, first at Lockland, Ohio, later at Evendale. Through June 30 of this

Continued on Page 4

The Bulletin

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Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

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Peggy Franklin In Honors Program



Peggy Franklin

Because of her outstanding scholastic record while in high school in Oak Ridge, Peggy Franklin was invited to become a participant in the pre-honors program at Carson-Newman College, Jefferson City.

Now it is official. She has been accepted in the program.

Peggy is the daughter of William A. Franklin, Assembly Operations.

The Franklin home is at 124 West Bryn Mawr Circle, Oak Ridge.



Summer flies, July wanes, and August makes its debut. Making their anniversaries with Union Carbide are several more Y-12ers. Congratulations.

20 YEARS

Rudolph H. Pletz, Radiation Safety, July 28.

15 YEARS

William C. Guettner, Dispatching Department, July 29.

Ernest L. Pemberton, General Expediting and Auxiliary Services, July 29.

Robert P. George, Electrical Engineering, August 1.

10 YEARS

Jack Johnson, Dispatching Department, July 29.

KEEPING 'EM STRAIGHT

Now we can tell the difference between boys and girls. The girls wear their hair long and straight . . . the boys wear theirs long and curly.



Jimmy Pitkanen

Scout Honors Go To Pitkanen Son

Life Scout Jimmy Pitkanen has earned the God and Country Award, and was recently tapped by the Order of the Arrow.

The presentation of Jimmy's coveted Boy Scouts award was made earlier in the year by the Reverend George Naff, pastor of Kern Methodist Church. Jimmy's Scoutmaster, William Pensworth, and Troop 328's institutional representative, Robert Livesay participated in the ceremonies.

Since earning the award, Jimmy has gone on to qualify for the Order of the Arrow, another high Scouting honor.

Only 14, Jimmy will enter the 10th grade at Oak Ridge High School this fall. He lives with his parents Mr. and Mrs. Paul Pitkanen, 105 Euclid Place, Oak Ridge. Pitkanen is in the Reactor Division in Y-12, and Fern is in Y-12's Medical Department.

In March of this year, Jimmy attained the rank of Eagle Scout.

Interested in mathematics, Jimmy plays tennis and is a basketball enthusiast. He hopes to enter a career in math, or perhaps coaching and teaching.

Old Hat? Not So, Says You-Know-Who

Old hat? Not according to chemistry's newest contribution to men's fashions. (And guess what company is right in the middle of producing a synthetic material that looks and feels like the finest felt?)

The new hats are said to be uncrushable, stain-proof, and water-resistant.

In one test a 250-pound man sat on such a hat during an opera performance and when he was ready to leave simply "hand-shaped" it back to its original form.

In still another test a man wore one of the new hats through an all-morning rain and found it was neat and trim to wear to a dinner engagement in the evening!

Illinois' Krieger Guest At Physics Seminar

S. J. Krieger, University of Illinois at Chicago Circle, will be the lecturer at this week's Physics Division Seminar. His subject will be "Hartree-Fock Calculations of Deformations in Light Nuclei."

The seminar is set for Friday, July 28, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.

Y-12ers Attend Retreat At Glovier's Cabin

A Spring retreat recently was held at D. L. "Bo" Glovier's Watts Bar Lake summer home. Deacons and the minister from Central Baptist Church gathered for the two-day visit of study and fellowship. Interestingly enough, there are 13 deacons at Central Baptist who are employed in Y-12. Some of them were unable to attend the first retreat due to work schedules.

A book review was given to the group by Dr. Carroll Hubbard, minister at Central Baptist.

The men were divided into four study groups to cover the following subjects:

1. How can deacons increase their effectiveness in Christian witnessing?
2. How can deacons assist the church in special visiting to render personal ministries?
3. What deacons can do to help church visitors feel more welcome?
4. How to build church fellowship.

A closing message was delivered by Reverend Lewis Bratcher, pastor of the First Baptist Church, Kingston.

Several Y-12ers

Included in the group were Ed Poe, Y-12; Curtis Lawson, City of Oak Ridge; Ray Ellis, Y-12; Cecil Mourfield, Atomic Energy Commission; Bill Johnson, Bell Telephone; Russell Bowlin, Oak Ridge National Laboratory; Jim Nevils, Y-12; Jack Anderson, Central Baptist; Charles Dye, Y-12; Ted Varnadore, K-25; Sam Combs; Roy Campbell, Y-12; Bill Thornton, AEC; Dr. Carroll Hubbard; Walter Rice, Y-12; and Eugene Waters, ORNL. Rice, in Y-12's Laboratory, is chairman of the deacons at Central Baptist.

Rice reports a wonderful time by the group, despite rain.

Ray Ellis, Y-12's Electrical Engineering, led the group singing of some old favorite hymns. He was accompanied by Bill Thornton, AEC Health Physics, on a portable organ.

Breakfast At Lake

The retreat began with breakfast by the lake on Friday morning . . . with a schedule through the day right on up to a bed-time snack before the group retired. Saturday's schedule included a sunrise service at the lake shore, recreation, and devotions and another day of study.

The group broke up on Saturday morning after lunch, and started back to their respective homes.

It was a unique and interesting experience, according to the group, and "Bo's" place on the lake was an ideal place for such a retreat.

Glovier is in Y-12's Electrical Department. Many times his lakeshore home has been open to such worthwhile groups as Scouts, and the latest gathering of deacons.



A DEACONS' RETREAT recently at Bo Glovier's place on Watts Bar Lake attracted several Y-12ers who serve at Central Baptist Church, Oak Ridge. Kneeling in the front row, from left, are Ed Poe, Electrical; Curtis Lawson, City of Oak Ridge; Ray Ellis, Electrical Engineering; Cecil Mourfield, AEC; Bill Johnson, Bell Telephone; and Russell Bowling, ORNL Machine Shop. Standing are Jim Nevils, Y-12 Machine Shop; Jack Anderson, educational director of the church; Charles Dye, Y-12 Electrical; Ted Varnadore, K-25 Machine Shop; Sam Combs, retiree; Roy Campbell, Y-12 Machine Shop; Bill Thornton, AEC; Dr. Carroll Hubbard, pastor of the church; Walter Rice, Y-12 Laboratory, and chairman of the deacons; and Eugene Waters, ORNL.



GROUP SINGING IS LED by Ray Ellis, Y-12 Electrical Engineering, as Bill Thornton, AEC Health Physicist, accompanies on the portable organ. Old favorite hymns that the group knew by heart were the choice.

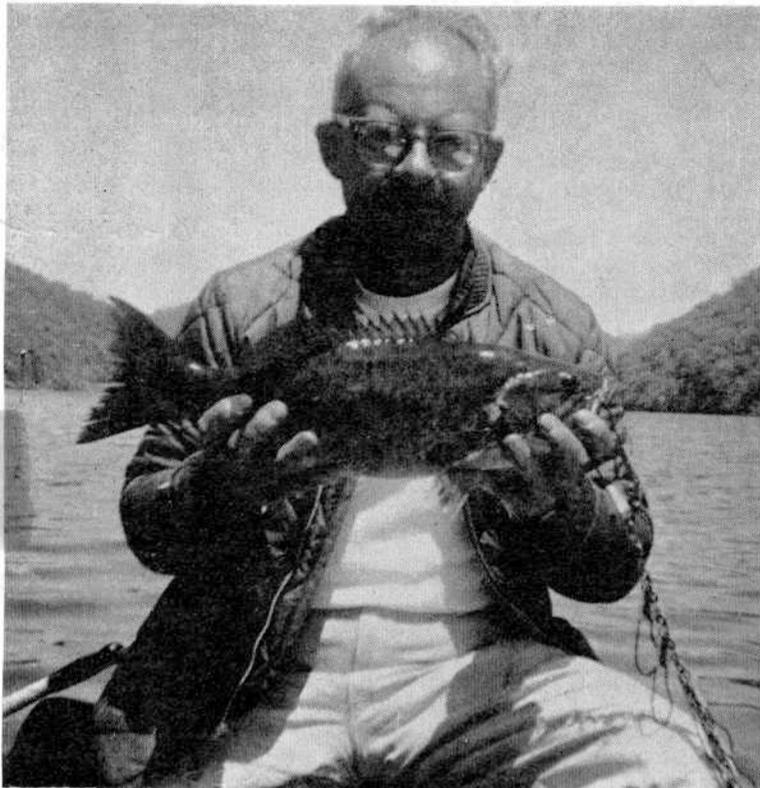


CHOWTIME FEATURES THE CHURCHMEN at work on K.P. duty. The Central Baptist Church deacons enjoyed good food, relaxation and meditation at the Glovier summer home on Watts Bar Lake earlier this Spring. From left are F. T. Hopwood, Jim Nevils, Walter Rice (with face hidden) and Ted Varnadore.



Rider wanted from South Knoxville area, via Solway Road, to East, North, Central or West Portal, straight day. W. H. Sherrod, plant phone 3-5363, home phone Knoxville 577-0295.

Ride wanted from 112 East Hunter Circle, Oak Ridge, to West Portal, straight day. Lynn Eason, plant phone 3-5972, home phone Oak Ridge 483-0369.



W. T. MITCHELL used a trusty old Mitchell spinning reel to wheel in this beauty of a smallmouth bass. He took it in the Little T on a spinner and worms. It will make a worthy entry in the annual Fishing Rodeo here in Y-12.

Braves, Eagles, Mets Locked In Tie For Softball League, One Loss Each

The Softball League got full steam up again last week, making up action lost to the rains. Monday's warfare began as the Eagles trimmed the Pirates 16 to 4. Trig Myhre poled a homerun for the winning team; Don Forrester and Bobby Rutherford helped the losing cause with homers each.

The K-25 Mets slugged it out with the K-25 Slugs, coming out atop the heap 19 to 4. George Plunk, Steve Cates and Bill Hall earned four-baggers for the big Mets and Jack Youngblood blasted one for the Slugs.

Monday's final game saw the K-25 Sports shellack the Y-12 Bat Boys 14 to 10. The Sports' Bob Seyfried homered twice, and teammate Bob Neir hit one. On the losing side it was George Reece with a round-tripper.

The Eagles earned a forfeit win over the Big Shops.

Tuesday's big action began as the Eagles, back in form again, poled their way past the Flyers 11 to 5. The Flyers' Bob Genavin got the only homer of the game.

The Y-12 Braves beat the Pirates 12 to 0, getting seven big runs in the final inning. Jim Milligan mauled the only homer of the game.

The K-25 Slugs posted a forfeit win over the Falcons.

Thursday's play put the Bat Boys in front of the K-25 Slugs 15 to 7. The BB's Dave Hendrickson homered, and the Slugs' Dave Henry did likewise.

The K-25 Mets met the Y-12 Pirates, also Thursday, and downed them 17 to five. John Keith, Bill Hall, Wes Peters and Sam Woodfin all poled long homers to aid the winning cause.

The Y-12 Braves beat the K-25 Sports also Thursday 22 to 4... with Jim Shoemaker, Stephan Babb and Bill Butturini battering homers for the winners. Sam Duncan dunked one in for the losing Sports.

The Bat Boys recorded a forfeit win over the Big Shops, as did the Braves over the Falcons.

League standings follow:

Team	W	L
K-25 Mets	5	1
Braves, Y-12	5	1
Eagles, Y-12	5	1
Bat Boys, Y-12	4	2
K-25 Sports	2	2
Flyers, Y-12	2	2
K-25 Slugs	2	4
Pirates, Y-12	2	4
Big Shops, Y-12	0	5
Falcons, Y-12	0	6

Melon Slicin' Is Set Sunday At 6

As a start there will be 75 succulent watermelons on hand Sunday, July 30, at 6 p.m. at the Clark Center Recreation Park. More will be readily available if needed, says E, F, G, H and J Shiftmen. All Carbide employees in Y-12 are welcome... just bring your badge and family along.

There will be some nice door prizes as the cool melons are rolled out.

You have to register when you get there, and a badge is necessary for registration... so don't forget the old badge.

A fitting climax to the bright month of July, indeed... sitting back, eating watermelon and listening to the whipper-wills holler!



J. W. GOSSAGE, General Machine Shop, pulled a wall-eye out of Norris Lake back in May that's going to give them fits in the Annual Fishing Rodeo. He used the usual spinner and worm rig that's death on the wall-eyed pike.

Bill Mee Tops Kingston Tee-Men

Bill Mee took a one-over-par 73 at Southwest Point, Kingston, Saturday, to cop Y-12's fourth golf tournament of the summer. A total of 172 tee-men lined up alongside Watts Bar Lake for the competition.

Other scratch winners in the first flight were Cotton Thomas, D. E. Littleton, Bill Hamill and Jim George, all with 77. (George eagled hole number 14. The par-four hole saw Jim take a long drive, then putt in with a seven iron.)

Handicap lows in the first division gave George Heins low card with a 67. He was followed by Bob Roe, 68; Walt Sherrod and Ed Sise, each with 69. Jim Pugh totaled 14 pars... R. P. Wallace took 13.

SECOND DIVISION

H. C. Nichols turned an 80 score in to win the second flight in scratch scoring. He was followed by C. C. Ruckart, 83; Glen Lundquist and Burl Henry, each with 84.

Handicap lows saw H. E. Wright, with a 66; D. G. Lincoln and Harold Alvey, 69; Joel Garber and J. C. Thompson, each with 72. Most pars were earned by Jim Milligan, with 10. John Minchey, W. R. Clevenger, R. D. Dobbs, Jack McLendon and C. W. Nelson all took eight.

THIRD DIVISION

Charlie Baxter scored a low 80 to win the third flight... followed by Jim Morehead, 86; E. V. Hawk, 89; and C. V. Taylor and Joe Pryor, each with 94. Handicap lows put Virgil Lovett and A. E. Perry, with 68; Bill Akers, 73; John Perry and J. T. Parker, 75.

Ray Riggs racked up eight pars... Walter Porter six.

FOURTH DIVISION

Charlie Harris posted a low 89 for top scoring in the last flight. Also in the scratch count were A. L. Gossage, 91; E. W. Smith, 93; and A. E. Burger, 95. Handicap lows were posted by B. E. McElroy, 68; Bob Ludwig, 69; Al Brown, 70; and Paul Trebilcox, 72.

George Reece parred six holes; Earl Smith and J. B. Branum took five.

The final tournament of the year will be staged at Lambert Acres, Maryville, come Saturday, August 26.

Insect Bites Claim More Lives Than Snakes

Stings from wasps, bees and hornets killed more people in the past five years than bites of rattlers and all other poisonous snakes in the United States.

During the past five years 86 persons died in this country from insect stings, compared to 71 from snakebites and 39 of poisonous spiders.

While an insect sting means no more to many of us than temporary pain and slight illness, it can bring serious illness and even death to those with certain allergies.

If you have ever had a severe reaction from an insect bite, take warning and see your physician who may give you protection against graver effects should you happen to get stung again.

SPELLING DILEMMA

If you can't spell something, look it up in the dictionary, the educator states. Our beef is how are you going to find it when you can't spell it?



B. O. MILLER, CHEMICAL SERVICES, vies for the title of Mr. Fisherman Y-12 in earnest style. Here, Miller shows off a fine largemouth bass he took in Norris Lake recently on a night crawler. Nobody's telling the weight for the prize fish is entered in the annual Fishing Rodeo.

Half Of Melton Golfers In Race

With this week's matches to wind up the action in the first half of the Melton Hill Golf League, the lead is still up for grabs between half the 18 pairs in the duel. Garber-Huddleston and Huffman-Hogg hold a slight edge in the big race.

Winstead-Ferguson moved up last week to down Henderson-Bryant for the full count of six, as did Thompson-Rogers over Perry-T. Butler. Roberts-Johnson defeated E. Smith-Goodwin; Clabough-Nobles trimmed J. Grubb-B. Grubb, and Jack Gresham (for the Gresham - Brown team) downed Nelson (of the Tiller-Nelson pair)... all for the full count.

Taking four it was Garber-Huddleston over Morehead-Poly; Hogg over Alvey-Gamble and Hamby-Booher over Wright-H. Butler.

Low scratch scores were turned in by Bill Grubb, 37; Nobles, 38; Booher and Hogg, 39; Johnson, 40. Low handicap scores were earned by Nobles and Thompson, 33; Garber, 34; Alvey, 34; Bill Grubb, 34; Thompson, Johnson and Hogg, all with 35.

League standings follow:

Team	W	L
Garber-Huddleston	32	16
Huffman-Hogg	32	16
Winstead-Ferguson	31	17
Thompson-Rogers	31	17
Wright-H. Butler	30	18
Morehead-Poly	30	18
Hamby-Booher	30	18
Roberts-Johnson	30	18
Alvey-Gamble	29	19
E. Sise-Boyd	26	22
Tiller-Nelson	25	23
J. Grubb-B. Grubb	24	24
Clabough-Nobles	24	24
Perry-T. Butler	17	31
E. Smith-Goodwin	16	32
Gresham-Brown	15	33
Dill-Thomason	8	40
Henderson-Bryant	2	46

Coley-Raper Still HossShoe Leaders

The Coley-Raper team lead the Y-12 - ORNL Horseshoe league, thanks to a nine point forfeit win over Kendig-Zupan. Gray-Leonard took eight from Hutto-Tillery; and Luckett-Barger won seven from Rein-Case; as the R-C team likewise downed Helms-Lucke. Matheny-Miller won six at the expense of Helms-Lucke, and Durham-Harness seized five from Gray-Leonard.

Team	W	L
Coley-Raper, Y-12	47	7
Durham-Harness, ORNL	35	10
Gray-Leonard, ORNL	33	12
Luckett-Barger, ORNL	30	15
Rein-Case, ORNL	25	20
Matheny-Miller, ORNL	19	26
Helms-Lucke, Y-12	14	31
Hutto-Tillery, ORNL	13	32
Kendig-Y-12-Zupan-ORNL	0	54

Recreation



Sunday, July 30

WATERMELON FEAST: Sponsored by E, F, G, H and J Shifts, 6 p.m. Clark Center Park. All Y-12ers welcome.

Monday, July 31

SOFTBALL: 6:15, 7:30, 8:45 p.m. Pinewood Park. Big Shops vs. K-25 Mets; Flyers vs. Pirates; Bat Boys vs. Braves.

TENNIS: League play as per schedule to be arranged by combatants.

GOLF LEAGUE: Melton Hill Course, immediately after work. **PHYSICAL FITNESS:** (For Women) 7 p.m., Oak Ridge High School Girls' Gym.

Tuesday, August 1

SOFTBALL: 6:15, 7:30, 8:45 p.m. Pinewood Park. K-25 Slugs vs. K-25 Sports; Eagles vs. K-25 Mets; Falcons vs. Big Shops.

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

Wednesday, August 2

CARBIDE RIFLE LEAGUE: 7 p.m., Clinton Rifle Range.

Thursday, August 3

SOFTBALL: 6:15, 7:30, 8:45 p.m. Pinewood Park. Flyers vs. Braves; Pirates vs. K-25 Sports; Bat Boys vs. K-25 Mets.

ARCHERY LEAGUE: 5:15 p.m., Oak Ridge Sportsmen's Association.

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

Sunday, August 6

SKET TOURNAMENT: 1 p.m., Oak Ridge Sportsmen's Association.

Tennis League Sees Only Two Matches

Two tennis matches were chalked up last week in the Tennis League, as Ed DelGrande defeated Campbell King 6-3, 6-3, and Don Legacy took D. H. Gray 6-4, 6-4.

League standings follow:

Player	W	L
Ed DelGrande	1	0
Don Legacy	1	0
Campbell King	0	1
D. H. Gray	0	1
Charles M. Jones	0	0
Martin West	0	0

POPULATION EXPLOSION

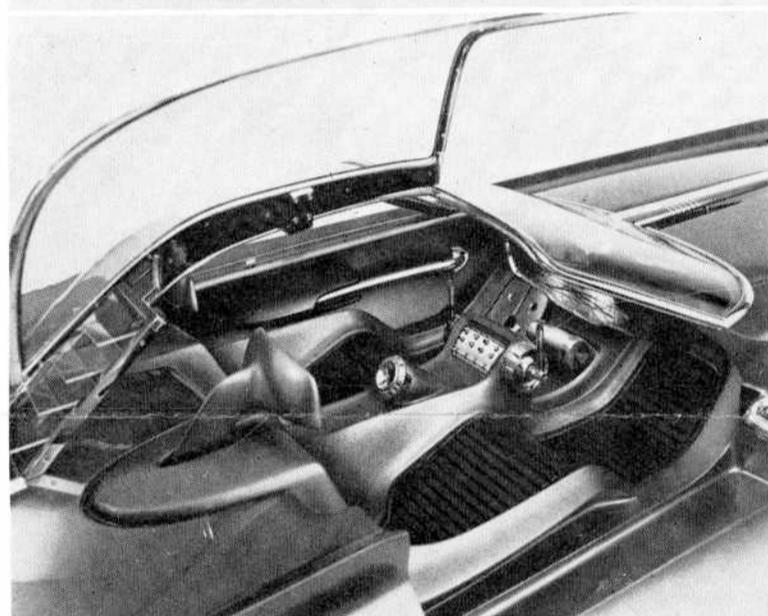
It's strange that all the proponents of controlling the world's population have already been born themselves!



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SEATTLE-ITE XXI, EXPERIMENTAL CAR of tomorrow will be seen on "The 21st Century" broadcast "Autos, Autos Everywhere," Sunday, July 30, at 6 p.m., EDT, on WBIR-TV, Channel 10. Among the features of the futuristic car are travel program computers, variable density glass, jalousie windows, fingertip steering, and four front-drive wheels to improve tracking, traction and braking efficiency. The series, "The 21st Century," is sponsored in the public interest by Union Carbide Corporation.

'Autos, Autos Everywhere' Subject Of 21st Century Colorcast Set Sunday

By the time we reach the 21st Century, America may have as many as 160 million automated, perhaps even flying cars, powered by gasoline or kerosene, fuel cells or batteries or even the atom. What the new autos may look like and how to live with them, will be reported on "The 21st Century," Sunday, in "Autos, Autos, Everywhere."

Walter Cronkite, himself a sports car enthusiast and former racing car driver, will visit automotive research and development centers to see the latest and most advanced concepts in engineering vehicles designed not for flash, or dash, but safety, practical usage, and control of noise and air pollution.

The latest in experiment cars features will be shown. Included will be Ford's aircraft-type automobile control that will eliminate the hazardous steering wheel rim. Chrysler's noise-free gas turbine engine, a television camera rear-view mirror, and a punch card door, ignition and steering apparatus lock will also be seen.

A General Motors Electrovair powered by fuel cells will be

demonstrated. The fuel cells, provided by Union Carbide, create electrical energy through chemical reaction. The waste product of this action is water. A fuel cell is distinguished from a storage battery, which requires recharging, in that it will produce electricity as long as the fuel (hydrogen and oxygen in this case) is fed into the system. The GM Electrovair can accelerate from zero to 60 miles an hour in 16 seconds, and can travel 80 miles between charges.

The StarRcar, a commuter's dream for the 21st Century, will be driven by Cronkite. It operates as a conventional auto, but can also be driven on a special track system for high speed trips. Once on the track, the driver can read, sleep, shave, or catch up on his work. At terminals, or junctions, along the StarRcar route it can be parked, reused or driven away over roads and streets.

For a look at the car of tomorrow, see "The 21st Century" Sunday, July 30, over WBIR-TV, Channel 10. Sponsored by Union Carbide Corporation.

Union Carbide's New Division Set

Formation of the Materials Systems Division of Union Carbide Corporation has been announced by Birny Mason Jr., chairman of the board. Richard S. Abrams has been appointed president of the new division and Curry E. Ford executive vice president. Abrams has been president of Food Products Division and Ford was a vice president of the Carbon Products Division.

In making the announcement, Mason pointed out that Union Carbide has numerous products used in high-performance service — where unusual erosive or corrosive forces are at work or where physical strength must be maintained at extremes of temperatures. He cited as examples the oxidation-resistant metals that the corporation produces for jet engine combustion chambers and its new Thornel graphite yarn being used for reinforcing plastic materials in the development of structural components for space vehicles. Establishment of the new division, he said, will make it possible to combine Union Carbide's product and process capabilities in this high-performance materials field, so that systems of materials can be produced for customers. Instead of only making unfinished parts or other forms of starting materials, the corporation may produce finished parts, subassemblies, or complete assemblies, according to the needs of the customer. Typical products for the new division might vary from corrosion-resistant centrifugal pumps to erosion shields for helicopter blades.

The corporation's present Stellite Division will become part of the new division. The Stellite Division produces specialty metals, as well as combinations of metals and ceramics — as castings, sheet, plate, and in other semi-finished forms — to combat extreme conditions of heat, corrosion, or wear. Extensive use is being made of five Stellite alloys, for example, in the engine for the Saturn booster rocket designed for putting men on the moon.

Other businesses to be included in the new Materials Systems Division are the corporation's Flame-Plating business, which was developed by the Linde Division; Carbate products, such as corrosion-resistant heat exchangers, which are made of graphite by the Carbon Products Division; and special space vehicle components, such as heat shields for intercontinental missiles, which have heretofore been handled by the Development Department of the corporation.

AEC Safety

Continued from Page 1
year GE's accumulated man-hours without a disabling injury stood at 7,294,719, representing more than 2,000 calendar days without a lost-time accident.

Also noteworthy was the record of AEC's Savannah River Operations Office. The principal contractor, E. I. duPont de Nemours and Co., and associated contractors, operated one full year without a lost-time injury.

AEC's record of fire loss and other property damage was good. In 1966 these losses amounted to \$853,498 as compared with \$3,415,069 in 1965. Sandia Corporation, an AEC contractor, won the National Fire Prevention Association Grand Award in an annual contest in which many plants compete.

Walter Creekmore, Garage, J. A. Myers Retire Monday

Two long-time Y-12ers end their careers this month, as Walter Creekmore, Garage; and John Myers, Alpha Five Machine Shop, retire. Myers' retirement is an elected early one. 6-13522

Creekmore, a veteran Carbidier since January 20, 1944, is a native of Angel, Kentucky.

His early employment history was spent with Humphrey Motor Company, Jellico; the Coca-Cola Bottling Company, and the Dixie Garage, also in Jellico. He was in the U.S. Army Air Corps from 1942 until 1943.

Married to the former Cewall Gilreath, Creekmore has five children . . . a son, Hubert Creekmore, Valley Stream, New York, a Navy retiree; daughters, Ruth Ball, Edna Croley, Dayton, Ohio, Mildred Gragg, Lake Worth, Florida; and Imogene Nunally, Orlando, Florida. They are also proud of their 12 grandchildren.

Off To Florida

Immediate plans call for a visit in Florida, with the hopes of eventual winters there.

The Creekmore home is at 148 Tyson Road, Oak Ridge.

John A. Myers, Alpha Five Machine Shop, elected early retirement in July. He is a native of Lexington, Oklahoma.

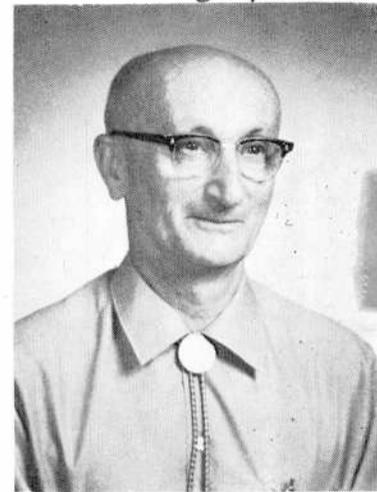
Myers was employed in Y-12 in the early days . . . from 1944 until 1946. He also worked at Oak Ridge Gaseous Diffusion Plant, and transferred to Y-12 February 21, 1959.

From 1935 until 1941 he worked with Myers Garage, Lexington; and from 1941 until 1943 attended the Darr School of Aeronautics, Ponca City, Oklahoma. He then went with the Lummus Construction Company, there, and moved to the Oak Ridge area in 1943, working with Stone and Webster before coming to Y-12.

Two Myers Children

The Myers have a son, Richard A. Myers, Gainesville, Florida; and a daughter, Jackie Lamar Sikes, Clinton. They also have five grandchildren. Mrs. Myers is the former Mary Shumpert.

Myers states he has plenty of



Walter Creekmore



John A. Myers

hobbies to keep him busy, boating, fishing and many others. The Myers want to take a month-long trip to the Far West during the early Fall of this year, and settle at their 119 Georgia Avenue, Oak Ridge, home.

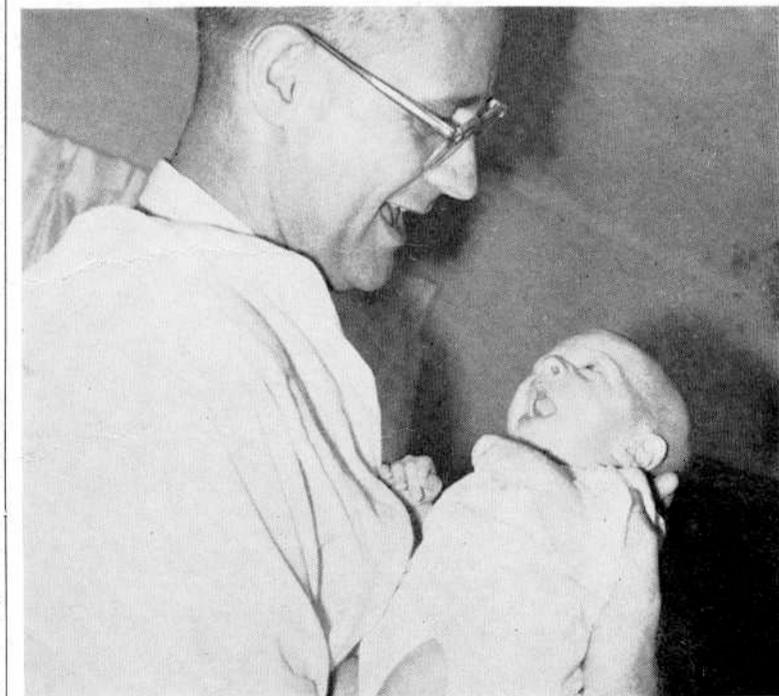
The best wishes of all fellow employees go with July's retirees.

CONFUSING THE ISSUE

Mother to daughter: "For heaven's sake . . . go get a haircut! Do you want people to think you're a boy?"

MORE THAN LEGS

Fashion experts say a gal has to have nice legs to wear a miniskirt. (She also has to have a lot of nerve!)



GREGORY LESSEL LONG MADE HIS DEBUT April 23, at UT Hospital, in Knoxville. Actually, he'll be called Greg . . . but that middle name comes from a relative way back during the Civil War who was taken prisoner by the Rebs and held in Andersonville. The Yank brought out a book "Twelve Months in Andersonville." Greg was born on papa Paul J.'s 16th anniversary with Union Carbide. The proud papa is in Y-12's Physical Testing Department.