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13/415



Sylvester Satcher

'United For One Priceless Moment ...'

As man first set foot on the moon and said, "One small step for man, but one giant leap for mankind," I couldn't help but pause to think that for one moment, American seemed to be united.

As the television camera showed pictures of the "Eagle" resting down in the Sea of Tranquility, I also felt at peace sitting here on earth. I'm sure that during those first few moments of live broadcast, we Americans were truly one great nation of people, united in one common goal . . . composed of all races, creeds, and nationalities who in some mysterious way seemed to unite and contribute each in his own small way to this great feat.

As the news reporters talked with groups of people from a small town in Ohio, to a large city as New York, the thing that was most impressionable was the proud smiles on black, yellow and white faces alike. All the animosities of the past months and years seemed to have disappeared completely. Their glowful smiles seemed to say, "Look what we have accomplished. This is a goal that our nation set, and through the strength of God and the great technological advances of our own people, we have lived to accomplish."

As I watched the T.V. camera move from face to face, there was nothing in the general attitude to signify that one person or group of persons was solely responsible. They all thought, I believe, in terms of "we" which can be thought of as being inclusive of all American citizens.

"We" seems to have been an important word in our forefathers' vocabulary and has appeared in important documents down through the years. ("We the people of the United States," right down to "We came in peace.") If man can be united during the celebration of a great victory, we

Continued on Page 4

Box Score Gives Y-12 A Big Hand

While philosophically all mankind was involved in Armstrong and Aldrin's stroll on the lunar surface July 20 . . . Y-12ers were involved in a real and tangible manner.

Take a look at the impressive list of equipment labelled "made in Y-12:"

- Two moon rock boxes.
- 20 Polyethylene sample moon soil bags.
- Two weigh bags in which to weigh the moon rocks.
- A moon gas analysis container.
- A solar wind composition bag.
- Design of the Lunar Receiving Lab.
- Design of the Radiation Counting Lab under the Lunar Receiving Lab.

Overall involvement in the space program is much more extensive than the above listed items, involving the whole of the Atomic Energy Commission complex.

Special Days Are Forever Frozen, Locked!

The human mind is a peculiar instrument. Frozen into memory are those special days . . . like the recently experienced July 20th. Etched into the brain are minute details of exactly what we were doing when a special event comes along. Who was present. What was being whispered as Neil Armstrong's foot gingerly touched the surface of the moon, returned to the rungs of the ladder, then back again to the moon. What our fears were. What we were thinking. What we had for dinner. All these things are forever carved in our recollections.

One highlight of that momentous hour was the President of the United States talking by phone to the astronauts as they stood stiffly at attention in awkward space suits . . . straight out of Buck Rogers . . . "For one priceless moment in the whole history of man all of the people on this earth are truly one."

A Y-12er shared his president's thoughts and the attached memoirs reflect the emotions he experienced at that time.

Sylvester Satcher, who returned from Korea early this year, after serving 14 months under the United Nations command there, penned the attached thoughts while man was experiencing one of his greatest moments.

Satcher, born in Anniston, Alabama, is a graduate of Morristown College. He came to Y-12 June 6, 1966, and left for service September 15, 1967. He returned in May of this year . . . gaining five months on his tour of duty by extending a month over there!

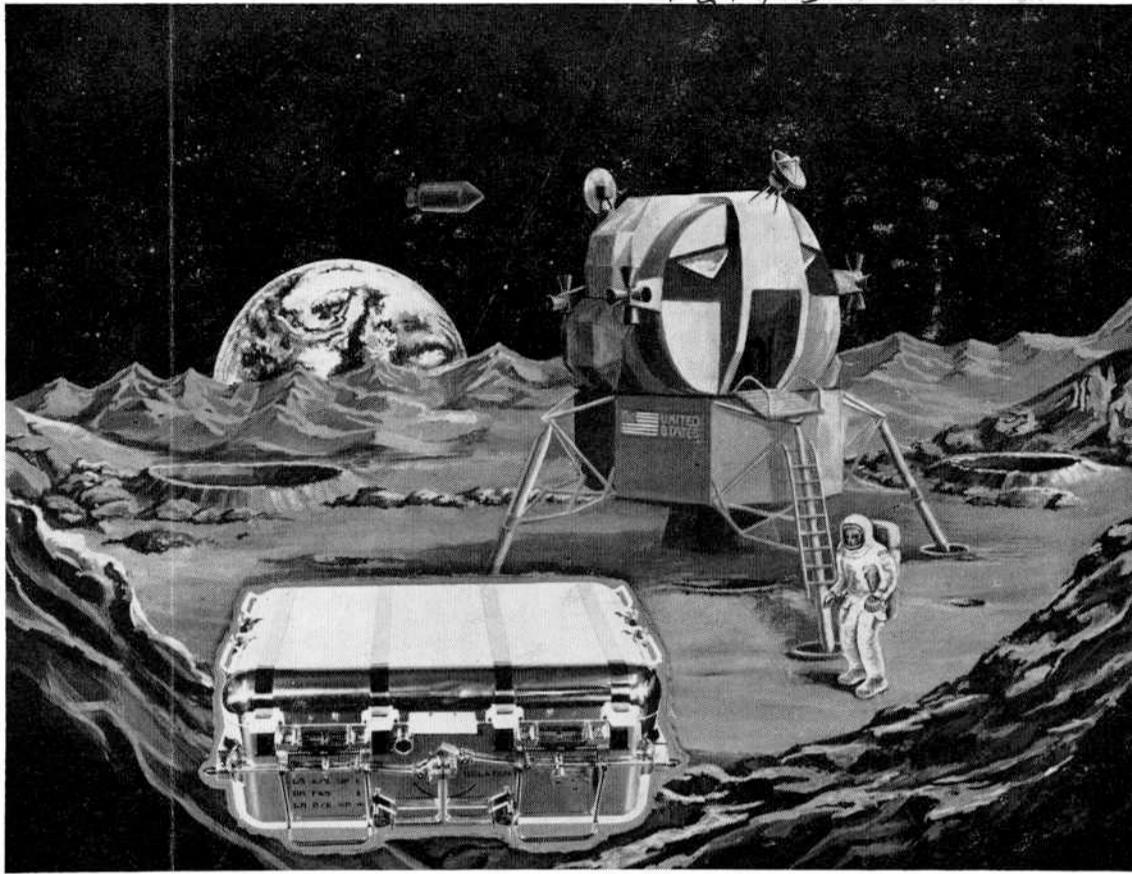
During his stay in Korea Sylvester kept his co-workers in Personnel Services informed of his activities there in no-man's-land. (One of the highlights of his stay there was helping the members of the crew of the Pueblo across the Bridge of No Return back in the winter. Satcher was one of the eight aids assigned to assist the returning crewmen.)

Sylvester plans to extend his education by attending night school in the near future.

His thoughts on the momentous events of the past few days should prove of interest to all of us.

ONCE A YEAR

About the only time a child can truly be called as good as gold is on April 15.



A FAMILIAR SIGHT . . . ISN'T IT? The moon box in the foreground was designed, fabricated and cleaned for final inspection in Y-12 for the National Aeronautics and Space Administration. Bobby Samples, Technical Information, visualized the above scene long before it actually happened on July 20.

Y-12 'Washes' Luggage For Moon Voyagers For Extra-Clean Containers

Astronauts who landed on the moon in the Apollo 11 and those taking subsequent trips into space carry with them the cleanest luggage ever taken on a trip.

The "luggage" consists of antiseptically clean valise-like containers used in transporting lunar samples to the Lunar Receiving Laboratory in Houston. Each container, made of aluminum, measured 19 one-half inches by 10 one-half inches by seven inches high.

The containers were designed, fabricated and cleaned in Y-12.

The pre-flight decontamination operation was performed to enable scientists to make a true appraisal of the lunar samples uncontaminated by dirt originating on earth.

The containers for each Apollo moon landing flight are processed through a lengthy cleaning operation in a Y-12 clean room. The room is equipped with absolute filters and undergoes some 386 air changes per hour. Personnel working in the room wear gloves, caps and special nylon coveralls.

Cleaning the Apollo hardware involves dipping and ultra-sonically vibrating the equipment in a series of chemical baths to remove bacterial and chemical contaminants.

The first bath is hot, distilled water, followed by immersion in a mixture of isopropyl alcohol and benzene. Bath number three is in freon, followed by another dip in the isopropyl alcohol-benzene solution. The container then is dried by nitrogen gas.

The final step consists of pouring five gallons of benzene over a container in two successive rinses. One gallon of the second rinse is retained for analysis and future reference.

The batching and rinsing operations now completed, the container is partially dried by nitrogen and moved into an ultra-clean vacuum chamber for about one hour. It is then inspected un-

der a fluorescent black light for possible lint particles before being sealed in a specially cleaned teflon bag. The container and bag then are placed inside two additional polyethylene bags, each of which is sealed and evacuated.

The containers then are shipped to the National Aeronautics and Space Administration's Manned Spaceflight in Houston for final pre-flight preparation.

ORNL's Morgan Guest At Health Physics Meet

Dr. Karl Z. Morgan, director of Oak Ridge National Laboratory's Health Physics Division, will be the featured speaker at the next meeting of the East Tennessee Chapter of the Health Physics Society. The meeting will be held next Monday, August 4, in the Oak Ridge Holiday Inn.

The technical session begins at 7:30 p.m. with Ken Bahler serving as moderator. Dr. Morgan's topic will be "Health Physics Profession — Where Do We Go From Here?"

A social hour begins at 5:30 p.m. and a buffet dinner will follow. Dinner reservations will be made through D. J. Nelson, extension 3-6841.

Technical Society News Is Welcome In Bulletin

The Bulletin welcomes news of special meetings of technical societies in the area.

The deadline for submitting text and photos is Thursday noon before the desired Wednesday publication. Remember, we need it in advance . . . you need to publicize it in advance.

Government Vehicles Included In Spot Sale

A spot bid sale of used government vehicles is in progress through the Sales Office. Featured are used Chevrolet, Ford and Dodge trucks and carryalls; Chevrolet, Studebaker, Plymouth, Ford, Rambler and Dodge sedans; a Caterpillar pan scraper and a force feed loader.

Inspection may be made of the vehicles between 8 a.m. and 4 p.m. up until the bids are closed on each lot. Inspection and sale are to be held at the Oak Ridge Gaseous Diffusion Plant's Power House area, building K-722, off State Route 58.

The sale begins at 9 a.m., Wednesday, August 13, and it is anticipated that successful bidders may pay for and remove their purchases after 2 p.m. of that day.

Additional information may be obtained by contacting the Sales Office, P. O. Box M., or on extension 3-4601.

SAFETY SCOREBOARD

The Y-12 Plant Has Operated
247 Days Or
247 Days Or
7,984,000 Man-Hours
(Unofficial Estimate)
Through July 27
Without A Disabling Injury
SAFETY AT HOME,
AT WORK, AT PLAY

The Bulletin

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
Telephone 3-7100

Two Y-12ers Will Retire Thursday



Garrett McFarland

Only two Y-12ers retire Thursday, as Guy D. Garret and Thomas A. McFarland, both of Area Five Maintenance, retire.

Guy D. Garrett

Born: Lancing, Tennessee.
CSD: February 4, 1953
Home: Route 2, Lancing.

Thomas A. McFarland

Born: Woodbine, Kentucky.
CSD: April 14, 1953
Home: Route 1, Clairfield.



Will join car pool from Halls Area to any portal, straight day. R. B. Bentley, plant phone 3-5445, home phone Knoxville 687-7797.

Will join car pool from Kingston Woods, West Knoxville, to North Portal, straight day. W. B. Snyder Jr., plant phone 3-5373, home phone Knoxville 584-5198.

Ride wanted or will join car pool from Kingston to Central Portal, straight day. W. A. Mattson, plant phone 3-7805, home phone Kingston 376-7707.

Ride wanted or will take riders from I-40 at Bearden, Knoxville, to West Portal, G Shift. Harley Hanna, plant phone 3-5291, home phone Knoxville 584-7879.

Riders wanted from Lenoir City to any portal, straight day. C. E. Manis, plant phone 3-5308, home phone Lenoir City 986-3383.

Ride wanted from 208 College Homes, Knoxville, to West Portal, H Shift. Clifford Tate, plant phone 3-7701, home phone Knoxville 525-0190.

Ride wanted from 1200 Highland Avenue, Knoxville, to West Portal, H Shift. Harry D. Scruggs, plant phone 3-5956, home phone Knoxville 522-0498.

I THEE WED

Young bridegroom: "With all my worldly goods I thee endow."
Father: "There go his fraternity pin and stamp collection!"

HE LAUGHS BEST

He who laughs last . . . is not the one who laughs best . . . he is merely the last one to catch a joke.

Many Y-12ers Active In Karns Fair Staged At Schools This Week-End

Karns Community residents will hold their annual Community Fair, Friday, August 1, and Saturday, August 2, on the grounds of Karns Elementary and Karns High School.



Etheredge

Ben F. Etheredge, Y-12's Machine Tool Engineering, is chairman of the Fair. Many other Y-12ers living in the Karns Community are taking active parts in the event. Net receipts in each of the last three years have been in excess of \$3,000.

One of the principal events at the Fair is the exhibition of farm products, vegetables, canning, honey, needlework and flowers. Approximately one thousand exhibits are expected in this category. The Beaver Ridge Garden Club will have their annual flower show at the Fair. Other shows will demonstrate art, antiques, and hobbies. Art objects and pictures will be available for purchase. Antiques will be representative of home furnishings and equipment of past generations. The Antique Guns Show is well worth a trip to the Fair. The Hobby Show will feature coin and stamp collections as well as crafts. Control-line model aircraft will perform acrobatic flying demonstrations.

The Midway will have approximately 20 games in which prizes may be won. These include bingo, pitching a baseball at bottles, tossing a softball into a basket, basketball goal shooting, greased pole climbing, dunk-the-clown, dart throwing, shooting gallery,

and other games for young and old alike. The Sidewalk cafe will supply delicious food and drinks, including barbecued chicken, hamburgers, hot dogs, cakes, pies, ice cream, watermelon and other delicacies.

Merchants will exhibit their wares, and civic organizations will have display booths in other exhibits. An old-time country store will operate to sell canned goods, vegetables, jewelry, clothing, and many other items. A display of chewing tobacco and snuff will also be on hand.

The Fair will be climaxed Saturday night by the crowning of the Karns Community Fair Queen. Nine beautiful girls are contesting for this honor. The queen will be selected on the basis of beauty, talent, charm, personality, poise and service to her community. The winning contestant and first runner-up will represent Karns in the Tennessee Valley Agricultural and Industrial Fair held annually in Knoxville. Friday, the contestants will compete in the talent show and swimsuit competition.

Proceeds from the Fair will be utilized in the development of a youth center in the community.

Postma Is Seminar Speaker On Fusion

Herman Postma, director of the Thermonuclear Division will lead this week's Physics Division seminar. His topic will be "Fusion Physics at ORNL."

The seminar is set for Friday, August 1, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.



BUILDING FUND DONATION . . . Union Carbide Corporation has given \$2,000 to the building fund of the Oak Ridge Unit of Recording for the Blind. Receiving the check from Roger F. Hibbs, president of the Nuclear Division, is Mrs. Charmian E. Cohn, chairman of the Oak Ridge unit. In a letter to Mrs. Cohn, Hibbs explained that "it is our sincere hope that you will have continuing strong local support for the erection of the building to be known as the Margaret Despres Weinberg Center of Recording for the Blind."



NEWLY CERTIFIED PROFESSIONAL SECRETARIES ARE the above Union Carbide employees achieving the coveted rating from the National Secretaries Association. They are from left, Wilma Housewright, Mary Cusman, Fay B. Duncan and Sallie Jansch. Rigid examinations are given in the NSA-sponsored tests. Congratulations.

Four Nuclear Division Secretaries Earn Coveted Certified Professional Status

Add four more Certified Professional Secretaries to Union Carbide's ranks! The Nuclear Division saw four more CPS's added recently to the status of CPS, bringing to 24 the number of CPS's now employed at the Nuclear Division facilities in Oak Ridge.

The four are: Mary Cusman, Oak Ridge; Fay B. Duncan, Clinton; Wilma Housewright, Oak Ridge; and Sallie Jansch, Wartburg.

The Certified Professional Secretaries program is sponsored by the National Secretaries Association. In order to qualify as a CPS, candidates must pass a comprehensive examination covering such subjects as personal adjustment and human relations, business law, business administration, secretarial accounting, and secretarial skills and procedures.

Usually, a minimum of a year of study is required before a candidate can successfully complete the examination. This year, 19 secretaries in the Nuclear Division took the examination.

Mary Cusman has been secretary to Roger Hibbs, recently named president of the Nuclear Division, since 1956, and is now secretary to Paul R. Vanstrum, who is the new vice president for production. She is a native of Ashtabula, Ohio, and has been with Union Carbide since 1950.

Fay B. Duncan, who recently joined the staff of AEC Combined Operations, has been here since 1951. She was employed in the metals preparation facility at Y-12 before joining AECOP. In addition to her regular work, she has taken several courses at The University of Tennessee.

Wilma Housewright has more than 15 years of service with Union Carbide. She is secretary to C. A. Fritts, Purchasing.

Sallie Jansch joined Union Car-

bide in 1945, and was employed at various Nuclear Division facilities before becoming secretary to G. Wilson Horde, chief counsel for the Nuclear Division. Sallie has completed two years of course work in business administration at The University of Tennessee under Union Carbide's educational assistance program.

Space Industry Is 'Stuck' By Carbide

It could be said that the aerospace industry is stuck together by products from Union Carbide. The corporation sells a wide variety of resins for this purpose. Spacecraft sealants employ numerous resins and polymer intermediates. Other resins are used as tackifiers and vulcanizing agents for various rubber products which eventually find their way aboard the spacecraft as seals, gaskets, hoses, etc. Union Carbide's vinyl resins and plasticizers are widely used to make the vinyl-coated fabrics for upholstery and interior finishing. Our epoxy and phenolic resins are used as liquid adhesives and in bonding and laminating applications.

In addition to the resins, silane and silicone adhesions promoters also play an important role in the fabrication of laminated epoxy/fiberglass structural members, where they improve strength and durability. The adhesion promoters are being used increasingly in adhesives, sealants and coatings to strengthen the bond with the craft. Many of the modern fabrication techniques would not be possible were it not for adhesion promoters.

THE LAST WORD

The latest thing in gifts . . . for the man who has everything. A good burglar alarm.

Babb-Baker Top Melton Hill Greens

The Babb-Baker duet came into the Melton Hill Golf League lead recently . . . despite last week's sharing of three points with Phillips-Alvey.

Sweeping six point wins went to Pagano-Tuck over Wright-Butler; Gresham-Bell over Roberts-Cook, and Dunaway-Wright over Morehead-Poly.

Five points went to Sherrod-Wyrick over Tiller-Clabough, Stinnett-Ladd over Carter-Butler . . . and Roberts-Cook over Parrott-Parker.

Four points were picked up by Riggs-McElroy over the Sewells, Ellis-Ridings over Parrott-Parker and Nixdorf-Holdaway over Ferguson-Winstead.

J. R. Baker and Frank Tuck scored 38 for lows of the week . . . and Bill Sise, Tuck and Fred Wetzel turned in 37 handicap scores.

League standings follow:

Team	W	L
Babb-Baker	41	18
Pagano-Tuck	41	19
Wright-Butler	39	21
Parrott-Parker	39	21
Riggs-McElroy	38	22
Sherrod-Wyrick	32	28
Gresham-Bell	32	28
Stinnett-Ladd	32	28
Tiller-Clabough	31	29
Phillips-Alvey	31	29
Dunaway-Wright	30	30
Sewell-Sewell	27	33
Ferguson-Winstead	26	34
Ellis-Ridings	26	34
Nixdorf-Holdaway	24	36
Morehead-Poly	20	40
Carter-Butler	19	41
Roberts-Cook	11	49

Case-Allmon Toss Hoss Shoe Tops

Week before last saw Case-Allmon leap into a lead in the Horseshoe League with sweeping wins over Gossage-Norris and Gray-Copeland. Durham-Harness also took nine from Gossage-Norris.

Posting seven were Reed-Stephens over Helms-Fowler and Raper-Luckett over Wyatt-Wagner. Taking six were Gray-Copeland over Helms-Fowler . . . and Wyatt-Wagner put five away at the expense of Reed-Stephens.

Last week Raper-Luckett took six from Helms-Fowler and Gray-Copeland downed Nichols-Norris by the same score.

Reed-Stephens took five from the league-leaders Case-Allmon.

League standings follow:

Team	W	L
Case-Allmon	43	11
Reed-Stephens	33	21
Durham-Harness	31	14
Raper-Luckett	30	24
Gray-Copeland	26	28
Wyatt-Wagner	21	34
Helms-Fowler	20	34
Nichols-Norris	3	51

Goss-Stanton New SW Point Kings

The 10th match at the Southwest Point Golf Course for Y-12's six-team league there sees Goss-Stanton in the lead by a five-point margin. They took four last week from Jones-Morgan.

Sweeping wins were posted by Smith-Henderson over Argo-Gropp and Bolt-Bush over Mee-Wright.

Hugh Henderson and B. B. Stanton both scored 36 on the nine-hole competition of the week's low.

League standings follow:

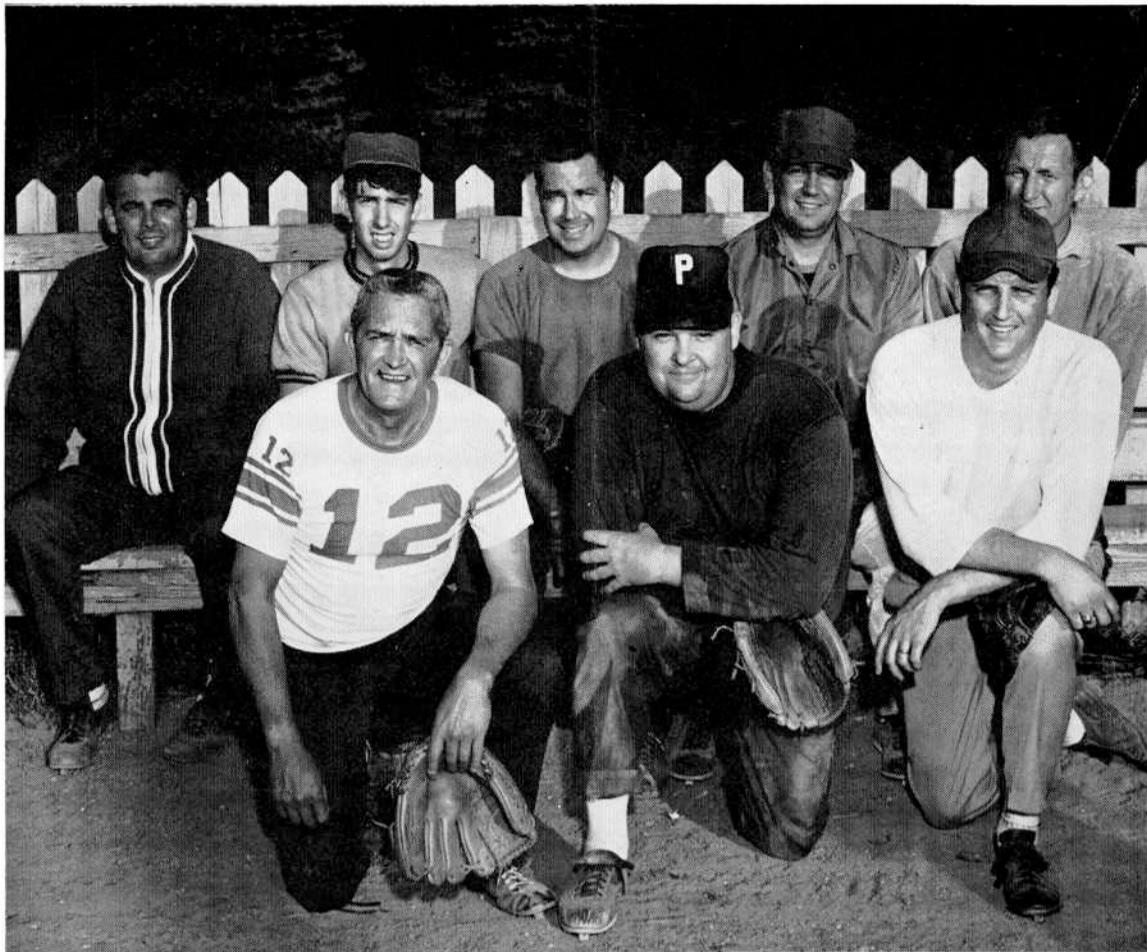
Team	W	L
Goss-Stanton	42	18
Jones-Morgan	37	23
Smith-Henderson	35	25
Bolt-Bush	27	33
Mee-Wright	25	35
Argo-Gropp	14	46

A VOTRE SANTE!

Thanks to jogging, more and more people are collapsing in perfect health than ever before.

GOOD REASON

There is a good reason that it's called cold cash. You don't have it long enough to get it warm!



THE Y-12 YANKEES MANNED A TOTAL of eight men for photographic night on the Softball field recently. They are, from left on the front row, Manager George McPherson, William Elliott and Assistant Manager Doug Kelley. In the back row are J. B. Peters, Billy Patrick, Walt Porter, Jerry Davis and Mack Wright.

Recreation



Sunday, August 3

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

Monday, August 4

SOFTBALL LEAGUE: 6:15, 7:30, 8:45 p.m. Pinewood Park. Yankees vs. 69ers; Beta 2 Miners vs. Bat Boys; All Stars vs. K-25 Gashouse Gang.

VOLLEYBALL: 7 p.m. Informal play. New Jefferson Junior High School Courts.

Tuesday, August 5

SOFTBALL LEAGUE: 6:15, 7:30, 8:45 p.m. Pinewood Park. Y-12 Snakes vs. A-Wingers; NC Squad vs. J-Birds; Braves vs. Buccaneers.

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

WHITTLES GOLF LEAGUE: After Work, Whittle Springs Golf Course, Knoxville.

Wednesday, August 6

MELTON HILL GOLF LEAGUE: After Work, Melton Hill Golf Course, Clinton.

VOLLEYBALL: 7 p.m. New Jefferson Junior High School Courts. Informal play.

Thursday, August 7

SOUTHWEST POINT GOLF LEAGUE: After Work, Southwest Point Golf Course, Kingston.

SOFTBALL LEAGUE: 6:15, 7:30, 8:45 p.m. Pinewood Park. Eagles vs. Colts; Show Ups vs. Beta 4 Astros; Go Go Gophers vs. Big Shops.

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

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

Coming August 21

GOLF TOURNAMENT: At Whittle Springs, Knoxville.

WHAT IS A VACATION?

A vacation has been defined as a period of travel and relaxation when you take twice the clothes you need and half the money.

Braves Still Team To Beat As Slow Pitch Action Reaches Homestretch

Catching up on Softball action . . . let's begin with Friday July 11 . . . make-up games.

The Show-Ups took a forfeit win from the Big Shops; the Go Go Gophers showed . . . the A-Wingers did not; but live action—

The Braves beat the K-25 Colts in the last inning of the game . . . taking the total score 12 to 10. The big Y-12 team scored three runs in the last inning . . . then held the Colts scoreless.

Jim Shoemaker, Bobby Hopkins and Jack Cowan all poled needed homers.

On Monday, July 14, the Yankees took a forfeit win from the Beta 4 Astros.

The Go Go Gophers got the best of the 69ers 7 to 4 . . . as Wayne Watts whacked one over the fence.

Eagles Win Big

The Eagles blanked the Beta 2 Miners 26 to 0 . . . with Ron Greene and Rick Gallman getting good homers.

Tuesday's July 15 saw the NC Squad take a forfeit win from the Big Shops.

The Buccaneers belted the Bat Boys 8 to 5 also Tuesday. Floyd Wells felled a long homer for the winners.

The Gashouse Gang from down the road beat the Y-12 Show-Ups 28 to 6 in a one-sided affray Tuesday. Wes Hightower and Jim Regner earned homers.

J-Birds De-Nested

Y-12's Eagles threw their fellow plantsmen out of the nest, Wednesday, July 16, downing the J-Birds 21 to 3 . . . Ron Greene homering again.

The Yankees yanked the rug from under Beta 2 Miners 16 to 4 in make-up action Wednesday. Jerry Davis dunked two homers; Bill Patrick one.

The All Stars overcame the 69ers 10 to 2 . . . as the Stars took 10 hits for 10 runs.

On Thursday, July 17, the Braves posted a forfeit win from the A-Wingers.

Colts Clip All Stars

The Colts kept a firm grip on

second place by downing the All Stars 14 to 9 . . . as Sam Woodfin and Harold Conners poled long homers.

In the final game the Snakes edged by the J-Birds 21 to 19. For the winners it was Earl Nall, Horace Mooreman and Loyd Wyatt all with homers . . . Phil Mason with two.

Mac Hill took a four-bagger for the losing team.

Monday's (July 21) action came fast and furious and the J-Birds put the Beta 2 Miners down 18 to 2.

One of the two runs across the plate for the Miners was a homer by Jack Davis.

The NC Squad squared off and belted the Bat Boys 15 to 6 . . . as Jim Snyder and Lee Wickham poled four-baggers for the winners. Doug Sparks and Sammy Stair socked one for the losers.

Gang Gallops Fast

The Gashouse Gang galloped over the Buccaneers 13 to 5 in last Monday's final game. Wayne Langenburg had two long ones for the winners . . . Harold Soard and Jack Jones poled one each for the losers.

Tuesday opened with no play as the 69ers showed . . . the Beta 4 Astros did not.

The Braves put the Show-Ups down 44 to 2 . . . in a lopsided game. Fred Wetzel, Jim Shoemaker and Bobby Hopkins all cleared the fence twice . . . John Evans, Larry McDonald, and Gary Ellis earned one four-bagger each.

Leonard Ingram knocked one of the runs for the losers.

Four Home Runs

The Eagles soared over the Big Shops 23 to 9 in another rout. Ronnie Green was at bat four times . . . knocked four homers for what must be a record! Dave Hendrickson wasn't going to be outdone much so he knocked two . . . Jim Thompson poled one long one.

The K-25 Colts took a forfeit win over the A-Wingers Thursday, July 24, as the Wingers took to the wings.

The All Stars . . . earning 10

Crass, Dorr Par SW Point Tee-Race

Benny Crass and Carl Dorr came up with 72 par to tie for first place at the Southwest Point tournament staged last Saturday. (Y-12ers experienced a change of venue as the Niota site was cancelled at the last minute.)

In scratch counting behind Dorr and Crass came Roland Plemons with a 74; John Griffin with 79.

Handicap winners were Raymond Plemons, 68; John Baker, 70; H. E. Wright and Frank Tuck, 72.

Jim Pugh and W. B. Goss each scored 13 pars.

SECOND FLIGHT

Jack D. Elkins took honors in the second division, with a scratch tally of 77. He was followed by D. G. Lincoln and Tudor Boyd, each with 82. Ed Sise scored an 83.

Handicap lows were carded by Al Sawyer and Mac Wright, 72; J. C. Thompson, 73 and J. H. Wiley, 74.

H. H. Pratt counted nine pars . . . and a four-way tie for second most pars saw George Dorsey, Paul Johnson, Merle Emery and Ed Crowder count eight.

THIRD FLIGHT

Hubert Tripp topped greensmen in the third division with an 83. He was followed by E. W. Smith, 85; Carl Redding and Jim Bryson, 87.

In handicap tallies it was Tom Smith with a 70. He was closely followed by J. L. Cadden, 71; Dave Hendrickson, Jim Milligan, and Jim White, all with 72.

J. A. Basford came in from 18 with seven pars . . . Jack Smiddy and Frank Winstead totalled six.

FOURTH FLIGHT

Fred Hammond turned in a 90 card for lows in the fourth division. He was followed by A. G. Bryant, 95; Larry Phillips and O. H. Dunaway, 97 each.

Handicap honors went to I. W. Jeter, 69; Bill Chapman, 71; J. B. Branum and W. J. Barker, 74.

O. K. Bush scored five pars . . . Sam Gallman, three.

A total of 128 golfers awaited the fogs to lift off Watts Bar Lake before teeing off Saturday.

August's tournament is set for Saturday, August 23 at Whittle Springs Golf Course, Knoxville.

Piranha Fish Are Confiscated In Shop

Tennessee law forbids the "importation, transportation, use and/or possession of the following fish: Stickleback, Piranha, Lamprey, and the Mexican Banded Tetra." Recently Game and Fish Commission personnel confiscated a number of deadly Piranha fish from a pet shop in Nashville. The nine-member G & F commission is considering adding the Walking Catfish to the list of forbidden fish.

hits for 10 runs dealt the Go Go Gophers a defeat . . . who socked out 12 runs, but only crossed the plate six times.

Final action saw the Snakes ease by the Yankees 13 to 11 in the week's climax. Billy Patrick put one over the fence for the losing squad . . . Horace Moorman and Chuck Holland for the winners.

Team	W	L
Braves	12	0
Snakes	11	1
Colts, K-25	11	2
Eagles	10	2
69ers	8	4
All Stars	8	4
K-25 Gashouse Gang	8	4
Buccaneers	7	5
J-Birds, K-25	7	5
Yankees	6	6
NC Squad	5	7
Big Shops	4	8
Go Go Gophers	4	8
Show-Ups	3	9
A-Wingers	3	10
Bat Boys	2	10
Beta 2 Miners	0	11
Beta 4 Astros	0	13



NEW ART . . . WEN YING TSAI demonstrates his sculptures of vibrating steel wires in his Manhattan studio, as one of the outstanding examples of new art forms influenced by today's science and technology which will be seen in 'The 21st Century' broadcast, 'Art for Tomorrow,' Sunday, August 3 at 6 p.m., EDT, in color over the CBS Television Network. The program is carried here by WBIR-TV, Channel 10.

'Art For Tomorrow' Is 21st Century Topic Sunday, August 3, WBIR-TV

The influence and inspiration of today's science and technology on new directions in the world of art will be shown in "The 21st Century" report on "Art for Tomorrow" Sunday, August 3, at 6 p.m., EDT, in color on the CBS Television Network, carried here by WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite is principal reporter for the series which is sponsored in the public interest by Union Carbide Corporation.

"The 21st Century" broadcast will examine the efforts of a number of leading artists and engineers, pioneers in the new and controversial art forms that may be paving the way today to the art of the future.

"The most common complaint about modern art is that it doesn't make sense," Cronkite observes.

"Today's artists," he continues, "are borrowing the discoveries of science and technology in an attempt to by-pass that complaint."

One of their objectives is to stimulate the spectator into participating actively through a variety of optical, sonic, tactile and electronic techniques designed to involve the viewers' sense so that they can forget — for a moment anyway — what it all means.

At the Brooklyn Museum, an exhibition produced by artists and engineers with the help of a number of large corporations will show the use of reflectors, colored and polarized light and acoustical vibrations.

Visual Heart Beat

In the same exhibition, an example of how the spectator is encouraged to participate in a very intimate fashion will be seen in the prize-winning entry, "Heart Beat Dusts." Simply put, red dust is made to dance in a beam of light by acoustic vibrations from a latex membrane. The vibrations are produced by the beating of a

human heart, either recorded on tape, or picked up directly from a stethoscope.

The sculptor, participating in a science-oriented program at the Center for Advanced Visual Studies at Massachusetts Institute of Technology (M.I.T.), will explain the untraditional use of electric signals, turning disks and wheels to express the invisible forces of nature. His object: to use modern technology to create an artistic environment.

New Paris Tower

"The 21st Century" cameras will go to Paris to report on the use of large metal structures as a distinctive feature of modern sculpture. Nicolas Schoffer will demonstrate his model of a cybernetic tower, 1007 feet high, 24 feet higher than the Eiffel Tower, scheduled to be built in Paris in the next three years. It will have thousands of computer-programmed lights that will flash in response to sounds and other stimuli from the city.

John Mott-Smith, a computer scientist by day, a computer artist by night, will be seen organizing computer-produced patterns into new compositions and sequences. The work of Bridget Riley, another artist, will show the use of mathematics to create her designs. Computer experts believe that what she is doing could be programmed. However, she claims it takes more: the eye and emotions of the artist.

Harmonious motion as the basis of a new art form will be seen in the sculpture of Wen-Ying Tsai, whose engineering background is reflected in his art. Vibrations of steel rods and rapid flashes of stroboscopic light create illusions of living objects in motion.

"Art for Tomorrow" on "The 21st Century" Sunday at 6 p.m. over WBIR-TV, Channel 10.



During these historic times, many more Y-12ers cross important landmarks with Union Carbide Corporation. Congratulations.

25 YEARS

- William L. Beeler**, Area Five Maintenance, July 31.
- Sallie F. Durham**, Building Services Department, July 31.
- William K. Forrester**, Tool Engineering, August 1.
- John L. Howard Jr.**, H-1 Foundry, August 2.
- Elmer E. Green**, Buildings, Grounds and Maintenance Shops, August 2.

20 YEARS

- Ronald D. Smith**, Process Analysis, August 1.

15 YEARS

- Howard J. Lee**, Building Services Department, July 30.
 - Cary A. Stalaland**, Assembly Operations, August 2.
 - Arthur C. Neeley**, Development Operations, August 2.
 - Roy P. Russell**, H-2 and F-Area Shops, August 2.
 - Charles W. Wampler**, Process Maintenance, August 2.
 - Jonathan B. Peters**, Utilities Administration, August 2.
 - Dan H. Friar**, Metallurgical Development, August 3.
 - George G. Bittner**, Metallurgical Development, August 4.
 - Bradley Napier Jr.**, Chemistry Development, August 4.
 - Ralph E. Hackworth**, H-1 Foundry, August 4.
 - Paul W. Cofer Jr.**, Process Maintenance, August 5.
- #### 10 YEARS
- Bobbie R. Berrier**, Fabrications Systems Development, August 3.
 - Ruth K. Young**, General Machine Shop, August 4.

Ball-Leach Win Whittle's 1st Half

The Ball-Leach team, after winning the Whittle Springs Golf League's first half, jumped into an early lead in the season's second half.

They downed Holland-Willson for four . . . after winning six from their opponents the previous week.

Norris-Thompson posted a sweep over Poe-Lovett and Dake-Tharp downed Troutman-Chitwood for the full six.

Virgil Lovett carded a low score of 38 . . . as well Thompson put a 32 handicap score on the books. Lovett tallied seven pars on the nine holes!

League standings follow:

Team	W	L
Ball-Leach	10	2
Norris-Thompson	6	0
Dake-Tharp	6	6
Poe-Lovett	6	6
Holland-Wilson	4	8
Cowen-O'Neal	4	2
Chitwood-Troutman	0	12

Harry Shatley Aces Number 3 In Ridge!

Folks around the Oak Ridge Country Club were just 'wild about Harry' Shatley Friday, July 11, at least!

Y-12er Shatley fired a hole-in-one at the ORCC course's number three hole. The 150 yard drive was made with a number seven iron . . . and a Max Fli ball.

Witnesses in the foursome included Harry's wife Ann and Mr. and Mrs. Dave Clark. Woweeeeeee!



Harry

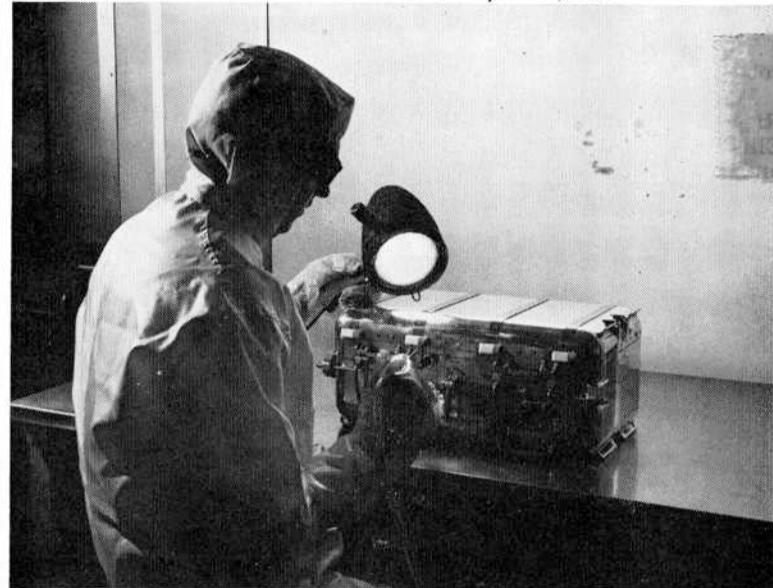


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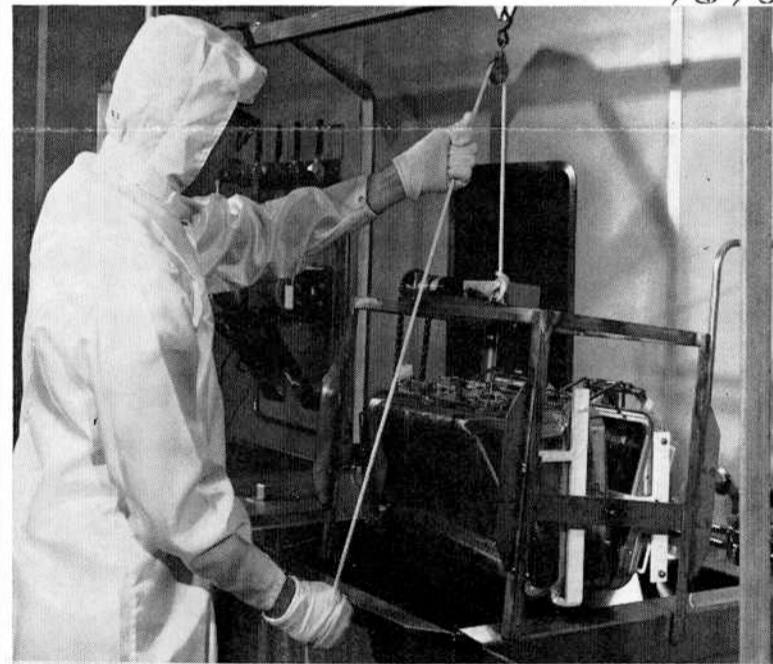
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CLEANING A MOONBOX . . . C. H. McCallister uses a fluorescent light and a needle-sized vacuum cleaner to remove lint particles from an Apollo moonbox. The cleaning operation is one of a series of pre-flight decontamination steps to assure that there was not earth dirt in the box to contaminate soil samples obtained from the moon. 131348



MOONBOX TAKES A BATH . . . R. K. Edwards prepares to bathe an Apollo moonbox in one of a series of chemical baths designed to remove earth contaminants. The container was used by Apollo astronauts recently to return lunar geological specimens to technicians on earth for study.

United . . .

Continued from Page 1

should also be able to live in peace and harmony with each other during the stages of preparation for a mission and at all other times.

America has always been considered a great 'melting pot' where any person with sufficient brains, initiative, and opportunity could climb to heights unknown. Is there any doubt then that the pooled talents of the people of this great nation could attain such a goal as the one accomplished July 20, 1969? This line of thinking brings to mind another question: Is there any doubt that the pooled talents of the people can attain another goal as equally important to mankind, which is justice and a good life for all citi-

zens? The answer has to be No.

I am a firm believer that although our primary advances have been geared toward outer space, advances are well in the making here on earth; among the people of the United States, to be exact. I do not believe that all is lost; but that through more and better human relations and hard work, we will equal the great triumph that occurred in outer space, right here on the soil of the USA.

I believe that great moments like the landing of man on the moon should encourage all citizens to redouble their efforts to be completely one nation under God with a unity that will outlast time itself!

DEFINITION

Eitiquette is knowing which finger to put in your mouth when you whistle for a waiter.