

The Village Courier



national accelerator laboratory

Operated by Universities Research Association Inc.
Under Contract with the United States Atomic Energy Commission

Vol. 3 No. 30

July 29, 1971

DISCARDED BEVERAGE CAN PANELS COMPLETED FOR GEODESIC DOME

The first NAL project to find a use for discarded empty beverage cans is nearing completion. More than 120,000 cans, collected by, among others, the youth organizations in the Fox River Valley, were used in the effort.

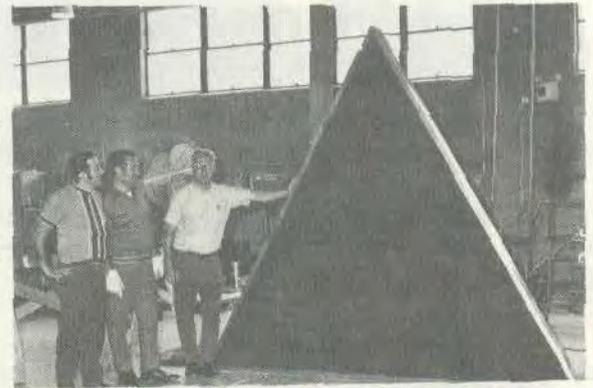
John O'Meara, Technical Services, reported last week that some 120 panels made up of empty beverage cans had been put together by employees at the West Chicago annex for the unique geodesic dome of the Neutrino Laboratory now being built near McChesney and Wilson Roads on the NAL Site.

"The panels have been crated and we are awaiting completion of the steel structure for the Neutrino Building," said O'Meara.

Each panel is an equilateral triangle with a ten-foot side. The panels have been made within one-eighth of an inch dimensional accuracy and have been tested to carry a 2,500-pound sandbag load.

The team working under O'Meara produced six panels per day with about 1,000 cans in each panel. The crew consisted of five male and two female employees, working on a temporary basis for the Laboratory.

O'Meara credited Norman Engler, Technical Services, a temporary employee, with introducing several innovations that sped completion of the geodesic dome effort. One was the



....(left to right) Steve Barath, Norm Engler, John O'Meara give final check to an assembled panel....

Photo by Tim Fielding, NAL

(Continued on Page 2)



....Linda Brunoehler operating the special automatic can opener developed for this unique operation by the NAL Machine Shop....



(Left to right) Harry McQuinn, Cliff Brown, and Phil Gerhardt set cans on an epoxy-coated panel....

Photos by Tim Fielding, NAL

DISCARDED BEVERAGE CAN PANELS COMPLETED FOR GEODESIC DOME - Continued from Page 1

automatic pre-portioning and mixing of the epoxy required to bind the cans to the polyester reinforced fiberglass.

In addition, O'Meara said, the Machine Shop helped to expedite the effort by developing a simple "pop can opener" to remove the tops and bottoms of the empty cans simultaneously. The "openers" were developed after Hank Hinterberger, Technical Services Section Head, asked Bill Jones, NAL Central Machine Shop Foreman, for assistance on the problem.

The Machine Shop Staff developed an "opener" which stripped the tops and bottoms of more than 1,000 cans an hour. The cans are hand-loaded into a hopper, a wheel is turned, and a valve is tripped. Then, both ends of the cans are removed at the same time. The can is blown from the machine, minus its top and bottom. It all happens in about 3 or 4 seconds. "It was a marvelous contribution by our machinists," said O'Meara.

The NAL Model Shop, under the direction of Jose Poces, furnished a number of layout fixtures for application of the epoxy.

The panels are both rainproof and fire-retardant. Design of the steel structure which will hold the panels is being directed by DUSA.

Mrs. Angela Gonzales, of the Director's Office, coordinated color selection. As a result, the panels will provide generally a red, white and blue effect when they are emplaced.

The development of the geodesic dome roof with empty beverage cans was suggested by Robert Sheldon, Main Ring.

NAL's appeal for thousands of empty beverage cans to produce structural building panels brought a flood of response. Major can producers, local civic organizations, schools and NAL employees joined in the effort to stockpile cans for the unusual NAL construction effort. One can producer offered the Laboratory nearly 100,000 cans; another discussed the possibility of donating 1,500,000 cans to NAL.

Scores of telephone calls were received by NAL from individuals and groups offering cans. One call came from the Melrose Park Public School, where Mrs. Janet Badynski, teacher, had read of NAL's need for cans. In response, NAL sent a truck to the suburban school Feb. 2 to pick up 950 used beverage cans and they were dropped off at the West Chicago site. The 530 students enrolled at the grade school began their collection on a Friday afternoon and by Tuesday had assembled the 950 cans from vacant lots and nearby homes. Bulletin board signs stressed the relevant theme of gathering cans to fight pollution.

"The future of these panels is not limited to geodesic domes, "Hinterberger says. "Perhaps many other forms of building materials and building panels could be developed from this unique effort now going on at NAL."

NEW ACQUISITIONS IN THE NAL LIBRARY

The following books recently were received by the NAL Library:

The Special Theory of Relativity, L. Essen, Clarendon Press, 1971; My World Line: An Informal Autobiography, George Gamow, Viking, 1970; International Conference on Bubble Chamber Technology, 3rd Argonne, 1970, ANL, (1971); Conversations with Einstein, Alexander Moszkowski, Horizon, 1970; Proton Linear Accelerator Conference, NAL, 1971; Peaceful Uses of Nuclear Energy, Glenn T. Seaborg, Oak Ridge, 1970; Radiation Monitoring, James E. Wade, Oak Ridge, 1967; and World Nuclear Directory, 4th Edition, Harrap, 1970.



....Beam Transfer's Team, 1971 Champions of the NAL Softball League (Left to right):
FRONT ROW: Rick Colton, Jim Edwards, Jack McCarthy, Larry Tate; REAR: Leon
Bartelson, Mike Armstrong, George Krafczyk, Theophilus Gordon, Fran Juravik,
Kirby Anderson, Claus Rode, Clarence Taylor, Al Guthke, Jerry Czop, Richard Andrews...

BEAM TRANSFER CAPTURES '71 NAL SOFTBALL CHAMPIONSHIP

The 1971 sixteen-inch Softball League season ended Tuesday, July 20. Beam Transfer finished with a perfect season record of 10-0. Second was the Personnel team with a record of 7-3. The remaining final standings were: Third - Machine Shop 5-5; Fourth - Physics Research 4-6; Fifth - Radio Frequency 3-7; Sixth - Main Ring 1-9.

Next on tap for the champion Beam Transfer team is to play the Second Annual All-Star game against the All-Stars from the other five teams. The game will be played at the Laboratory picnic on Sunday, August 29, 1971.

21 SAUK ANNEX TO HOUSE EMPLOYMENT OFFICE; CLOSE RECREATION HALL

NAL soon will be host to many scientists, some of whom will live on the site as they plan and perform their experiments. As a result, there is an urgent need for more housing units for them and it is planned to convert a number of the houses in the NAL Village as soon as possible towards this end. The 21 Sauk Annex will become the NAL Employment office so that the house at 20 Sauk can be used for temporary housing for visitors. The Recreation Hall, presently situated at 21 Sauk Annex, will be shut down for a time and the equipment now there will be placed in storage. It is thought that those seeking recreation during the summer months can use the tennis courts, basketball courts, softball diamond and the swimming pool instead. At a later date, it is anticipated that the indoor sports equipment will be placed into use again, perhaps at another location.

SEEK BOOKS, ART WORKS FOR NAL HOUSING UNITS

Books, both hard cover and paperback, are needed to furnish housing units being completed for visiting scientists on the NAL site. Do you have any extra ones at home? Also, do you have any paintings that you might wish to donate to NAL for inclusion in a "pool" of such works that could be used by visitors to decorate their austere rooms? If so, please contact Roger Thompson, NAL Librarian, who is working with the Housing group on adding some renaissance-like touches to the apartments and rooms being developed for visitors.



.... A party for the wives of NAL scientific visitors and their families was held at the NAL swimming pool on Wednesday, July 7. Here Mrs. Janice Roberts registers the guests as Mrs. Isobel Walker, wife of James Walker, Experimental Facilities, watches. Mrs. Walker is chairman of NALWO, the NAL Women's Organization.

Photo by Tim Fielding, NAL

REMINDERS: The annual NAL picnic will be held Sunday afternoon, August 29.

A bus trip for NAL employees to attend the football game featuring the College All-Stars of 1970 and the Baltimore Colts at Soldier Field in downtown Chicago, Friday night, July 30, has been arranged. For details, call Eddie Stapleton, Personnel.

Early history of the NAL Site, including Indian artifacts, etc., will be presented in a talk by Miss Ann Early, archeologist, in NAL Village Barn at 7:30 P.M. Thursday, Aug. 5. Bring your family, friends.

YOUR A.C.U.

Did you know that your A.C.U. has the largest amount of outstanding educational loans per member? This comparison was recently made with all Illinois credit unions. Some fifty-five children of ANL, NAL and the AEC (C.O.O.) families will benefit from these low cost loans.

For further information on low cost loans, call Ralph Wagner, on Ext. 396.

CLASSIFIED ADS

FOR SALE - '65 Corvette Convertible with 2 tops, 250 HP, 4-speed, posi, AM/FM. Excellent Condition. Call Bruce Chrisman, Ext. 595, Home, 852-2762.

FOR SALE - '64 Corvette, custom paint & body, 327 cu/400 HP, Close Ratio 4 speed Hurst linkage, AM/FM Radio, Convertible - 2 tops. \$2,500. Call Betty Sowa, 815-722-8527.

FOR SALE - 3 MAGS, 15" Painted Black with tires. \$25 or offer. Bob Kreml, Ext. 516.

RIDE WANTED - To Lab from Brookfield vicinity. Call Ed Ziganto, 485-1719.

National Accelerator Laboratory
P.O. Box 500
Batavia, Illinois 60510

U. S. Postage Paid
Non-Profit Org.
PERMIT No. 204
Batavia, Illinois