

# The Village Enterprise



national accelerator laboratory

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

Vol. 5 No. 10

May 10, 1973



*...A recent aerial photo of the NAL accelerator system. A bank of earth forms the NAL logo in the pond in the center of the Main Ring...*

(Photo by Tony Frelø, NAL)

## 400 BeV RUN RAISES NAL CAPABILITY

The NAL Accelerator Division flexed its technical muscle on April 10 and came up with 130 hours of 400 BeV energy logged by May 1 and continued since then for experiments in the Internal Target and Neutrino areas. The run placed the giant machine in a new energy range, just fourteen months after its first appearance on the high energy physics stage at 200 BeV on March 1, 1972. A brief test had been made at 400 BeV in December, 1972; 300 BeV operations have been routine for several months.

Members of the NAL staff last weekend reported to the NAL Users Organization on the status of the machine and the experimental program. NAL Director R.R. Wilson explained to the group, "We now run reliably at 300 BeV; this will be our normal running energy. We have also had our best intensity at 300 BeV." This may vary, he said, because 100 and 200 BeV operations will be more suitable during the summer months when the temperature in the cooling water ponds will not be low enough to accommodate higher energy operation.

Much of the success of bringing the machine up to 400 BeV resulted from the efforts of the Electronics Operation group headed by Jim Hogan in the Accelerator Division. Higher working pressure hoses were needed in the power supplies of the Main Ring for the new operating level which saw water temperatures rise to about 106 degrees F. at 400 BeV. Working as a team, Jack Lockwood, Hugh Christ, Grover McIntyre, Roy Mraz, Tony Salvaggio, Fred Schulze, Lloyd Shepherd, Mike Van Densen, Douglas Dean, Howard Woods, Jim Garvey, and Dave Von Ohlen, have now installed about 55% of the superior hoses and will continue this systematic alteration as operations permit.

No further 400 BeV tests are planned until Fall of 1973. The current test also gave the staff of the Commonwealth Edison Company an opportunity to evaluate the effect on their supply lines of this level of operations. NAL operations are directly dependent on the supply of power

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from Commonwealth Edison and the contractual agreement between the two organizations provides for test runs only at energies over 300 BeV. The annual bill for this power at a 300 BeV operating level is \$3 million, according to Paul Reardon, Head of the Accelerator Division. Successful development of the energy doubler concept at NAL could drastically reduce the cost of power by the use of the more efficient superconducting magnets, he points out.

Deputy Director Edwin L. Goldwasser told the Users, "Our biggest job now is to get all experimental areas going at one time. We plan that two-thirds of the approved experiments will at least be in some stage of operation next year."

"We are hardening all of our experimental areas as quickly as possible," James R. Sanford, Associate Director of Program Planning, reported to the Users. "Twelve experiments have been completed; 69 more are either in operation or in a holding pattern."

"Our future is in your hands," Dr. Wilson noted. "We are a service laboratory, oriented to make it possible for you to do your experiments. You in turn must be expert and aggressive in your experiments."

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FOR PARENTS OF COLLEGE AGE CHILDREN

The Illinois State Scholarship Commission awards non-repayable grants to qualified full-time college students who are Illinois residents. Eligible students can get up to \$1,200 a year from the Commission based on financial need but without test or grade considerations, to cover tuition and mandatory fees at more than 180 colleges, universities, and schools of nursing. The Commission also grants loans on the basis of need. Application deadline is August 1, but it is wise to apply as soon as possible. For further information, contact the Illinois State Scholarship Commission, P.O. Box 607, Deerfield, Illinois 60015, Phone: 945-1500.

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*ABOUT 50 PEOPLE PARTICIPATED in the Arbor Day planting at NAL on Friday, April 27. Rudy Dorner and his Site Management crew dug partial holes for the larger trees, but there was plenty of work left to do. The shovels flew for over an hour. Participants attached name tags to the trees they planted, and they will be able to identify the results of their labors next year and the next.*

(Photos by Tim Fielding, NAL)





## NAL PEOPLE AND THEIR NEWS

...The 1973 Ping Pong Matches concluded on April 24 with Leo Ray (center) of the Meson Section as the new champion and Lee Brown (R), Accelerator Section, in second place, shown here receiving their trophies from Sharon Nila, Chairman of the event. Eric Jarzab and Mark Kibilko acted as referees for the matches in which 20 players competed for 2½ weeks before the final matches...

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NAL'S CHESS CLUB finished in fourth place in their first season of play in the Chicago Industrial Chess League, reports John Stull of the NAL Machine Shop. The CICL includes about 500 players from the Chicago metropolitan area. The NAL club will move from a four-man team to an eight-man team next Fall for the CICL competition. This will give more members of the very active group a chance at this challenging competition.

Ron Walker of the NAL 30" Bubble Chamber, was among the ten finalists in the CICL competition for most improved player, with his 64 point average increase.

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CONGRATULATIONS...to Mr. and Mrs. Wayne Smith

Wayne works in the NAL metal stockroom. The twins' grandfather, George Cleber, works in the Cross Gallery stockroom.

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...Two members of NAL's Fire Protection Department have been certified as Basic Fire Service Instructors in the State of Illinois. They are Firefighter John Bailey (L) and Capt. William Markgraf (R), both of whom are now qualified to teach other fire protection personnel, who will in turn be certified under the provisions of recent Illinois legislation...

Photos by Tim Fielding, NAL



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## HAPPENINGS IN THE NAL AREA

Spurlock and Company, the largest touring mystery review in the country, will be presented by the Avery Coonley School, Downers Grove, in two benefit performances on Saturday, May 19. There will be a 1 p.m. matinee and a second show at 8 p.m., both in the Downers Grove North High School, Grant and Main Streets. Tickets are \$1.50 for either performance.

There are openings in the Wheaton Summer Symphony orchestra at Wheaton College. Rehearsals begin June 11 for the two concerts to be given by the 110-piece group on July 9 and August 13 at Edman Chapel, Washington & Franklin Streets, Wheaton. A \$10.00 charge is made for participation in this program. For further information contact Dr. D.C. Mattison, 137 N. Washington Street, Wheaton, Phone: 668-8612.

The Morton Arboretum in Lisle is again bursting with blooms of the Arboretum's many varieties of flowers and trees. Two restaurants are now open in the Arboretum's Visitors Center. The Ginkgo Tea Room serves soup and sandwiches from 11:30 a.m. to 2:30 p.m. and tea from 2:30 to 4:00 p.m. daily. A limited ala carte menu is offered in Evelyn's Pantry from 9:00 a.m. to 4:30 p.m. daily.

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SWING ON DOWN TO

THE VILLAGE BARN

Saturday night, May 12 - 7:30 p.m.

Brush up on your square dancing or start fresh with instruction by Rex Sterns, caller supreme, at the NAL Spring Hoe-Down. Casual clothes will be in style that evening.

There is no charge for the event, sponsored by NALREC. A light supper will be served without cost, and a cash bar will be provided. Visitors are invited; come with or without a partner. Reservations are necessary. Call Peaches, Ext. 3470 or 3479 before Friday, May 11.

SERIOUS COMEDY HERE FRIDAY

The May film presentation of the NAL International Film Society will be "The Exterminating Angel," a comedy about the paradoxical events that follow an elegant dinner party. The movie will be presented at 8 p.m. on Friday, May 11 at The Village Barn. "The Exterminating Angel" was directed by the noted Mexican director, Luis Bunuel. Admission will be \$1.00 for adults, and this includes cookies and punch to be served downstairs following the film.

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NALWO SPRING MEETING MONDAY, MAY 21

The National Accelerator Laboratory Women's Organization (NALWO) will hold its Annual Spring Meeting on Monday, May 21 at the home of Mrs. Jane Wilson. Dessert will be served beginning at 1 p.m. Board members will give their yearly reports, and new members of the Executive Board will be elected. All wives of NAL employees and visiting scientists are cordially invited to attend. For further information, call NALWO President Mary Lou Satti, 355-4430.

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CLASSIFIED ADS

FOR SALE - 1969 Mustang, p/b, p/s, am/radio, heater, air/cond., 302 engine, excellent condition. Seen by appointment only. Call Nelson Sample, Ext. 3712 or 898-2988 after 5 p.m.

FOR SALE - 1968 Volvo, 144-S, 4 spd. stickshift, radio, new tires/exhaust system & battery. Very clean-\$1200. Call Peter Koehler, Ext. 3236 or 971-0840.

FOR SALE - 2 car "McKee" garage door, 16' x 7' white wood, \$80. Call L.Grumboski, Ext. 3461.

FOR SALE - Westinghouse kitchen range w/self-cleaning oven, 3 yrs. old, excellent condition. Avail. last week in May. Call John Schivell, Ext. 3236 or 393-1327.

FOR SALE - Ward's Sea King 10' Aluminum Jon Boat, 3 seats, 330 lbs. capacity, \$65. Call Harry Barber, Ext. 3391 or 448-8640.

FOR SALE - Ward's Tent Top Camper, sleeps 4, canopy, spare tire, extras, \$300. Call Fred Cload, Ext. 3428 or 968-6551.

FOR SALE - Dk. brown 4 yr. old gelded small horse. (Owned by a young girl, getting married and must sell.) Call Ralph Jackson, Ext. 3222 or 231-9326.

FOR SALE - 1970 Galaxie Mini Bike, 4 h.p., good condition, \$75 or best offer, WANTED: Mini Trail Bike, 50cc or larger, or would trade. Call Art Streccius, Ext. 3788 or 392-4905.

FOR SALE - Bow, 46-pound pull, 9 target arrows, 6 field arrows, 1 fishing arrow, and quiver-\$65.00. Call Betty Kastner, Ext. 3531 or 3593 after 1:30 p.m.

TO GIVE AWAY - 6 kittens. Call Jeanne A. Sutcliffe, Ext 3585 or 554-3657.

FOR SALE - 1966 Mercury Monterey, 4 door sedan, automatic transmission, p/s., \$400 or best offer or will trade for smaller car. Call Jay Ticku, Ext. 3729 or 897-7519.