

# The Village Courier

 national accelerator laboratory

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

Vol. 5 No. 28

August 9, 1973

## CHICAGO MAGNET CONTINUES PARTICLE RESEARCH AT NAL



*...NAL's Neutrino Section becomes the second generation to prepare the magnet shown above for particle physics experiments...*



*...NAL staff successfully testing magnet, brought to NAL from the University of Chicago include (front row, L-R): B. Williams, C. Worel, K. Roy, P. Burton (Oxford); (Back row, L-R): G. Woods, G. Ross, J. Walker, and D. Williamson...*

NAL's Neutrino Section is completing its refurbishing of the 2500-ton magnet brought to NAL in 1971 and 1972 from the University of Chicago. Once the world's largest particle accelerator, a synchrocyclotron with an energy of 450 million electron volts, the Chicago machine's life ended July 12, 1971. Within a few months it had been dismantled and the magnet from the machine began its journey by rail to NAL. The 53 pieces were re-assembled in the Muon Area of the NAL Neutrino line where the magnet will now serve as a spectrometer to sort particles by momentum for experiments to be done there.

Gene Woods, NAL engineer who directed the magnet power supply installation, reports that the magnet was brought to a field of approximately 13.6 kilogauss at 3,800 amperes on June 21. A change was made to an SCR-controlled power supply instead of the original generator-driven power supply, and the magnet was reworked to have a wider gap.

The synchrocyclotron was an important facility at the University of Chicago and is referred to with affection by scientists who have used it. Many of the important original discoveries about sub-atomic particles were made by experimenters there. Among the people working there were Herbert L. Anderson and S. Courtenay Wright, professors in the Department of Physics and the Enrico Fermi Institute at Chicago. These two men and Luke Mo, assistant professor in the Department of Physics and the Fermi Institute, will direct the University of Chicago portion of the first collaboration to use the magnet at NAL. Their installation also includes massive steel blocks carved from the remains of a cyclotron built at the University of Rochester in the 1950's and discontinued about the same time as Chicago's.

And now, a second generation of workers has claimed the venerable piece of equipment, and

(Continued on Page 2)



...J. Walker (L) and L. Beverly checking circuit board in controls for magnet power supply now complete in the Muon Area of NAL's Neutrino Section...



...C. Worel, R. Doyle, P. Burton, completing assembly of the device on the top of the magnet which measures the magnet field for Experiment 98 in the Muon Area, the first experiment to use the magnet in its new home...

it begins what Dr. Wright refers to as "its phoenix" -- a second life emerging from the ashes of its first.

The work at NAL has been under the direction of the NAL Neutrino Section headed by R. Orr, assisted by T. Toohig and W. Nestander. Installation of the coil was done by R. Rihel, Frank Mallie, Ross Doyle. R. McCracken and E. Laukant of Technical Services performed valuable liaison.

Electrical controls' installation and fabrication was handled by W. Williams, J. Walker, K. Roy, C. Worel, G. Ross, L. Beverly, and P. Burton of the Oxford Experimental Group.

\* \* \* \* \*

PLEASE NOTE...All books signed out of the NAL Library prior to March 30, 1973 are being recalled for the purpose of inventory. Each book must be compared with its corresponding catalog card. If you have books signed out before this date, which you would prefer not to return yet, please call the Library, Ext. 3401, and give them this information.

...Colored prints of four photos of NAL scenes may be purchased at \$1.00 at the Exhibit Hall Public Information Office, 18 Sauk, NAL Village.

\* \* \* \* \*



...Mrs. Laura Fermi recently visited NAL as a guest of Herbert L. Anderson, professor of physics at the University of Chicago and an NAL experimenter. Mrs. Fermi is well-known as the author of "Atoms in the Family," "Atoms for the World," "Illustrious Immigrants: the Intellectual Migration from Europe," as well as biographical studies of Galileo and Benito Mussolini. Dr. Anderson was associated with Mrs. Fermi's late husband, Enrico Fermi, in his work at Chicago...

\* \* \* \* \*

RUTH THORSON TO GIVE EDUCATIONAL PLANNING ADVICE

NAL employees attended 21 area colleges within the past year, plus taking correspondence courses and special seminars under the Laboratory's tuition reimbursement plan. Giving advice and assistance to this important facet of employees' attention is Ruth Thorson, a new addition to NAL's Personnel Office. Ruth comes to NAL from North Central College in Naperville where she had been Vice President for Student Affairs for three years, after five years as Associate Dean of Students. A graduate of Miami University in Business Administration, Ruth also earned her M.S. in Personnel Counseling at Miami.



...Ruth Thorson...

With Fall college class schedules now available, Ruth becomes the source point for information on tuition reimbursement. On a longer range, she will be working on a program of employee development tailored to the specific needs of NAL. She has already begun to interview supervisors in each NAL area to learn of these requirements. In addition, the individual employee's desire will also be folded in.

If you have any questions in the area of class work or training, you will find Ruth Thorson in the Personnel Office, 18 Sauk, Ext. 3324.

\* \* \* \* \*

NAL'S INTERNATIONAL FILM SOCIETY

presents

"The Fabulous Baron Munchausen"

Friday, August 10 at 8:00 p.m.

The Village Barn

This is a Czech film, made in 1962 by Karel Zeman based on the book of The Fabulous Baron Munchausen. It uses an experimental style combining live action, animation and old engravings. The voices are dubbed so that young people will find it easier to follow. The film follows Munchausen in a series of episodes, including his visit to an Eastern potentate, his adventures in a whale's body, his trip aboard a pirate ship, his ride on a cannonball and, finally, his trip to the moon. Admission \$1.00 for adults; 50¢ for children under 12.



...NALWO's Pool Party on Wednesday, July 11 brought together a number of wives and children of NAL employees and visiting experimenters for an afternoon of fun in the sun. Photo at left (L-R): Mary Grant, Mary Lou Satti, Mary Schroeder, and Diana Escalera. Center photo (L-R): Amalia Ruggiero, Marjorie Appel, and Eva Kautzky. Photo at right (L-R): Mei Lie Wong & son, Dottie Knapp, and Cynthia Underwood...

\* \* \* \* \*

## NAL FAMILY PICNIC JUST AROUND THE CORNER

NAL's largest family activity is just around the corner. The 6th annual Picnic for NAL families will be held on Sunday, August 19, starting at 11:00 a.m. in the recreation area at The Village Barn. There will be FREE soft drinks, beer, potato chips, ice cream, cotton candy, hay rides, games and prizes for all ages of children. The NAL Barnstormers will present their unusual model airplane show during the afternoon.

Due to the shortage of meat, NALREC was unable to secure the large amount of hot dogs and hamburgers needed for the crowd that usually attends this popular event. BRING YOUR OWN PICNIC LUNCH. NALREC will provide charcoal and starter fluid for the large grills in the area.

Interested in giving a helping hand with picnic activities? Eric Jarzab, Picnic Chairman, Ext. 3396, needs YOU.

## NAL WOMEN INVITED TO AUGUST 14 PICNIC

NAL Women are invited to bring a picnic lunch and join the NALWO-sponsored get-together on Tuesday, August 14 at 12:30 p.m. in the picnic area near the Village Barn. All NAL women and children are cordially invited. Make it a family affair if you wish, with husbands included during the lunch hour. NALWO will provide punch and dessert. For further information, call Mary Lou Satti, chairman, 355-4430.

### CLASSIFIED ADS

\* \* \* \* \*

FOR SALE - FRESH HOME GROWN PRODUCE - "Hines' Farm," 1st farm on Eola Rd., south of Butterfield Rd. Phone 357-3847 or Ext. 3788.

RIDE NEEDED - From Hampton Pk. in Lockport, Ill. to the Lab daily & round-trip. Call Doris Pinneo, Ext. 3278.

FOR SALE - 1971 Ford Galaxie, 8 cyl., p/s/b, 35000 miles. Very good condition. Call Carl Lindemeyer, Ext. 3595 or 898-1099.

FOR SALE - '68 Galaxie 500, vinyl top, p/s/b disc, fac. air, \$400 or best offer. Call Curtis Danner, Ext. 3595 or 638-6681.

FOR SALE - 1968 Chevy Malibu V-8, 2 door hdtop., 94,000 miles, \$600. Call Peter Milanowicz (DUSAF) 840-3617 or 927-8677.

FOR SALE - Brand new Admiral Portable, 9" screen, VHF-UHF receivers, gd. for outdoor/indoor use, instant on, \$80. Call Claudia Slater, Ext. 3351.

FOR SALE - 1968 Mercury Monterey, full power, stereo, air, excel. cond., \$950; Kitchen set with extensions, dk. walnut-formica, 6 high back tan plastic chairs, excel. cond., \$70; Double Hibachi, \$3.50; 3 h.p. lawn mower engine, \$5.00. Call Frank Mehring, Ext. 3782 or 424-3429.

FOR SALE - Zenith 24" color TV; 6 place setting Noritak Progression China w/extra pieces; Man's bowling ball; Colonial 3-seater davenport; 2 Zenith radios. Call Betty Osborn, 355-2107 after 5.

FOR SALE - 5 pc. Walnut Bedrm. set, 5 yrs. old. Beautiful condition. Asking \$200 or best offer. Call Sandy LaMontia, Ext. 3770 or 969-5373.

FOR SALE - Davenport, kitchen dinette set. Call Edward Brezina, Ext. 3580 or 323-0794.

FOR SALE - White Magic Chef full size gas stove-\$75. Call Ernie Guzman, Ext. 3210.

FOR RENT - 1 bdrm. apartment in Warrenville, \$160 mo. Call 393-1554 after 6 p.m.

APARTMENT TO SUB-LET - 1 bdrm., very roomy. Utilities pd., stove & refrig. furnd. Gd. location (at the end of P-West in West Chicago). Call Cathy Nissen, Ext. 3701.

FOR SALE - 1968 12' x 50' mobil home w/porch, bottom trim. Excel. cond. Call B. Kohler, Ext. 3555.

FOR SALE - 1971 Classic 19' Boat, 165 h.p., stern drive, complete equip., E-Z loader trailer 16' x 7' flush panel garage door. Call Semmelman, Ho 9-4624.

FOR SALE - 1 baby high-chair. Call Dr. Horn, Ext. 3752 or 851-0667.

FOR SALE - Arthur Ash Competition Head tennis raquet, med/wt., 4 5/8" grip. New, \$65, but will sacrifice for \$24 or best offer. Call Dave Awschalom, Ext. 3205 or 325-3957 after 6 p.m.

\* \* \* \* \*