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CASEY'S POND PUMPING STATION COMMISSIONED



...Jack Morphy opening valve at new Casey's Pond station...



...(L-R) Arthur Cobbs, Bob Carlton, Archie McGee, Jack Stahl, Jr., at beer/pizza gathering after commissioning...



...(L-R) Jack Stahl, Fred Moore celebrate end of Jack's care of temporary pumps...

NAL's Plant Management Section commissioned the new Casey's Pond pumping station on August 23. Casey's Pond is the water reservoir located north of Wilson Road opposite the Bubble Chamber Area. For more than a year, Plant Services and Plant Maintenance and Operations' personnel had been "nursing" three temporary gasoline engine-powered pumps in a temporary station. These pumping stations provide water used in the cooling ponds of the Booster and Main Ring accelerators, and water lines for fire protection in the Main Ring-Central Laboratory Area, referred to as "industrial water."

During the first two weeks of August, all fire hydrants in that area, pressures of the water system and the Central Laboratory Building fire protection water systems were tested and found ready to meet the requirements of the functions they will perform. These systems are now connected to "FYRUS," the Sitewide fire protection supervisory system, which provides immediate alarm in the event that sprinklers or smoke detectors are set off. Plant Management and the Controls Section will soon also connect all sitewide "Halon" systems into the FYRUS supervisory system. The Halon system provides a chemical fire extinguisher in areas where water damage must be considered.

The new pumping station includes four 1500 gpm pumps and three 250 kilowatt gas turbine generators to power the pumps in the event of power failure. Industrial water supplied by this station now passes through an underground filter sized for the full capacity of the pumping station. Normally, one pump operates continually to supply cooling pond make-up water, but in the event of a fire and a large water requirement, a second or third pump would start automatically to supply as much as 4500 gallons per minute into the system. In the event of a power failure, all three generators start and synchronize automatically and one, two or three pumps will automatically restart as required by system pressure and water flow. The generators also supply emergency power to the Bubble Chamber Area.

(Photos by NAL Photographers)



...Nick Smith (L) and Al Schweisthal, both from NAL Plant Services, recently completed a course in locksmithing with a 100% score. Involving both theory and shop work, Nick and Al's training gives them a valuable expertise on the NAL site. Secretaries, they specialize in file cabinet drawers! Unless they're busy with one of the 100-odd doors on the Main Ring interlock. You can reach them at Ext. 3421 if you need them...



...Christopher J. Petit, son of Lt. Daniel Petit of Advance Security, has been awarded a scholarship by the Aurora Foundation to attend the University of Wisconsin at Madison. A graduate of Marmion Academy, Christopher is an avid swimmer...

NAL INFORMATION AVAILABLE

The NAL Public Information Office continues to offer photographic material about the Laboratory for use in meetings, lectures, classrooms, libraries, etc. The materials include a 3 ft. by 4 ft. display of 13 current general photos of prominent NAL facilities, with captions. The same photos and captions are available in a table-top flip-over album which fits in a brief case or suitcase. Recently, sets of slides of the photos have been added to the collection. Any of these materials may be borrowed by calling Claudia Slater, Ext. 3351, 35 Blackhawk. The board is currently on display at the Warrenville Public Library and at the West Chicago Public Library. General purpose slides to illustrate talks, for example, are also available on loan from the NAL Library.

Four photographs of NAL features are for sale at \$1.00 each at the Exhibit Hall, 18 Sauk.

The Public Information Office also conducts group tours. Arrangements for tours may be made by calling <u>Helen Severance</u> at the Exhibit Hall, Ext. 3341.



... Experimenters from U.S.S.R. returned to their homeland after 18 months at NAL, (L-R): V. Bartenev, V. Popov, B. Morozov, L. Zolin, A. Kuznetsov, V. Nikitin, and Y. Pilipenko. (See Open

AN OPEN LETTER TO PROFESSORS R. WILSON, E. GOLDWASSER;

F. MATTMUELLER, A. MRAVCA, ALL NAL and AEC EMPLOYEES

September 13, 1973

Dear Friends:

The group of Soviet scientists has finished its first experiment at the NAL accelerator, the biggest and the most powerful in the world.

Now we leave the hospitable Illinois land for the Soviet Union.

In very close cooperation with our American colleagues, we obtained new and important results on some characteristics of elastic proton-proton scattering. That joint experiment has shown that the proton's radius increases with energy. We have been observing new and very interesting phenomena: 1) Potential force between two colliding protons also depends on energy; 2) It changes a sign at an energy about 250 GeV. That force, repulsive at lower energies, turned out to be attractive when we came up to higher energies.

We believe both mentioned facts provide an important basis for a wide theoretical analysis of hadron interactions.

The good "start" and successful "finish" of our experiment were essentially determined by the whole, warm, friendly atmosphere and constant attention to needs of the experiment and the personal needs of our group.

Leaving for our Motherland, we'd like to thank from the bottom of our hearts the Director's Executive Office staff of NAL and AEC, and all of the NAL and AEC staff for the opportunity to carry out the experiment, the constant support, and the hospitable conditions that members of our group and our wives met here at NAL. We are very grateful to our colleagues and their wives, and to all C-Zero technicians for their sincere, friendly and cordial attitude and for their help in our work, and in our new life here, in NAL.

We bid you a final "good bye" knowing that we bring home not only good scientific results, but a lot of friendships and pleasant memories of the days we spent in the U.S. and at NAL in particular.

Our group was the first representative in the developing effort for cooperation between Soviet and American scientists in the scope of high energy physics, but we believe that effort will become wider and deeper, year after year.

GOOD-BYE 40 chugar

Bartenev

Hurumur

V. Nikitin

Kuznetsov

Y. Pilipenko

V. Popov

L. Zolin

NALWO FALL FESTIVAL

12 - 5 p.m., Sunday, September 23
 The Village Barn

FUN FOR THE WHOLE FAMILY

Potted plants Hand crafted arts Book Sale Casserole and Baked Goods Sale

Hand-painted sweatshirts, your design or artist's. (Bring your own sweatshirt.)

White Elephant Booth

Children Games Horse rides Cotton Candy Helium Balloons Food and Drink

(Proceeds for the benefit of the National Accelerator Laboratory Women's Organization - NALWO.)

NOTICE FROM THE ARGONNE CREDIT UNION

The Board of Directors of the Argonne Credit Union has authorized the issuance of \$250,000 in Promissory Investment Notes (Certificates) at 6.6% (quarterly compounded annual yield) interest when held to maturity. These Certificates will be issued in multiples of \$1000 and will mature in one year. Contact Ralph Wagner, Ext. 3324 for more information.

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THEATER PARTY RESERVATIONS NEEDED

Reservations must be made by October 10 for the NALREC theater party at the Candlelight Dinner Playhouse on Saturday, November 10. Price of \$10 per ticket includes bus transportation from NAL, dinner at 9:30 p.m. and the show at 10:45 p.m. "Oliver" is the musical production being offered. Call Marilyn Paul, Ext. 3453 for reservations.

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.. International Folk Dancing group will meet Friday, September 21 in the Village Barn, at 8 p.m..

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CLASSIFIED ADS

FOR SALE - 1972 Buick Electra 225, with pwr. steering, disc brakes, elec. seats/windows/door locks, air cond., cruise control, tilt wheel, fac. AM/Stereo 8 track, new tires, rear window defroster, 27,000 miles - \$3750. Call Kurt Kasules, Ext. 3470 or 232-9692.

FOR SALE - 1970 Maverick, 5 new tires, new muffler. Good condition. \$1000; Cornet, practically new, \$150. Call Homer Branch, Ext. 3621 or 668-8524.

FOR SALE - 1965 Ford pick-up, ½ ton, needs tires, \$500; Silvertone Guitar amp. w/15" Jensen speaker, \$50. Call Maury Teren, Ext. 3734 or 584-9056.

FOR SALE - One 6.95 x 14 Goodyear Tire, \$7. Call Daniel Freedman, Ext. 3750 or 231-0736.

FOR SALE - 1969 CB-350 Honda parts (tank, seat, fender & other misc). Call Darrell Sigmon, Ext. 3575 or 554-9223.

FOR SALE - Sears 8 ft. pool table, used 6 mos. New, \$230, asking \$150. Call Chuck Ankenbrandt, 858-9071.

FOR SALE - 15" Portable TV, Sears blk/white. Call G. Christenson, Ext. 3728 or 541-8333.

FOR SALE - FRESH FARM PRODUCE, featuring tomatoes & squash. Hines Farm, 1st farm on Eola Road, south of Butterfield Road. Call 357-3847 or Ext. 3788.

WANTED - One or two persons to share driving to Macon, Georgia, weekend of 10/13 & 14. No expense to you; FOR RENT - Air conditioned house, Pine Island Florida, on water best fishing near Ft. Meyers. Thanksgiving & Christmas avail. Call Art Streccius, Ext. 3580 or 392-4905.