


The Village Crier

 national accelerator laboratory

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April 30, 1970

A REPORT ON PROGRESS AT NAL

(The following is an edited version of a statement made by Dr. Robert R. Wilson, director of the National Accelerator Laboratory (NAL) at the second annual meeting of the NAL Users Organization on Friday, April 10, 1970.)

Construction of the synchrotron at the National Accelerator Laboratory is on, and in some cases, ahead of schedule. It now appears possible to have an accelerated proton beam by mid-1971, a year earlier than the originally scheduled date and considerably before the experimental areas and the rest of the Laboratory are completed. It also appears possible that the protons can be accelerated to an energy close to 500 BeV at reduced intensity not long after the synchrotron is brought into operation.

This advance in the schedule and increase in energy has come in spite of the fact that funding for construction has become available more slowly than the optimum rate projected in our design report. In fact it has been in response to the reduced rate of funding that internal schedules have been rearranged by postponing construction of some parts of the Laboratory. We have also been able to move rapidly because actual bids on many components and structures have been low, which is a measure of the simplifications that have been made in the design. Almost all the accelerator components and structures have been purchased, but the experimental areas and laboratories have not.

Our main accelerator design has included from the start the capability of extending the proton energy from 200 to 400 and perhaps to 500 BeV. Recent tests on production magnets have made it clear that they will be good up to field levels corresponding to 500 BeV. Furthermore, the technology of thyristors, which are used as rectifiers in the power supply, has been advanced considerably. This and other technical developments have made it possible to install from the beginning a power supply adequate for 500 BeV at smaller cost than was originally estimated for 200 BeV.

The cooling capability that is being installed corresponds to year-round operation at 200 BeV with the design intensity of 1.5×10^{13} protons per second. Operation at higher energies will mean choosing cooler days or lowering the repetition rate. The average intensity at 500 BeV will probably be down by one or two orders of magnitude. Nevertheless, there are exploratory experiments that can be carried out and it is expected that some experiments will begin as soon as possible, making use of whatever facilities are available. It is expected that at a later date a greater capacity for cooling, deposition of radiation, and correction for loading of the electrical services will be added.

The first area for electronic detector experiments is presently projected to come on in July, 1972. It will be limited to 200 BeV, in order not to delay it. The second area is projected for completion by January, 1973, and will provide a neutrino beam for weak-interaction experiment, a bubble chamber for use in the study of both weak and strong interactions and will be designed for incident protons with energies up to 500 BeV.

Any attempt to predict an exact date and energy of the initial operation is hazardous; as better information is forthcoming, the expected date will be corrected. Great effort and continuing good luck will be required to meet the advanced schedule.

TIPS ON TORNADOES

Spring and early summer bring with them the threats of tornadoes in the NAL area.

The following memo for NAL employees was issued last week by Ray Brown, Laboratory safety officer. If you have any questions about procedures, please communicate with Brown at Extension 580. His office is in the Director's Complex. The memo is as follows:

This is TORNADO season. NAL's location is considered to be in TORNADO ALLEY. TORNADOES can strike anytime, anywhere. We expect to have some warning via the area tornado watch system, through the Civil Defense Agency in Geneva.

A Tornado sky watch will be established at the Observation Tower near Schimelphenig Farm by DUSAF and in the Village Fire House by NAL when a Tornado Warning is received. Upon sighting a Tornado approaching, the Warning Signals will be activated.

The best shelters in the Village are: The Proto-Main Tunnel; the Booster Tunnel; the basement of the house at 21 Sauk Boulevard. When a tornado warning is issued, employees in the Village should seek shelter in the closest of these places, as follows:

1. Persons in the Director's Complex, Main Ring Complex, RF Complex, Machine Shop, Model Shop, Experimental Facilities Complex - proceed to the Proto-Main Tunnel on Shabonna Street.
2. Persons in the Beam Transfer Complex, Booster Complex, Village Linac Complex, Computer House, Radiation Physics Complex - proceed to the Proto-Booster Tunnel in the basement of the Booster Building.
3. Persons in the offices on Sauk Boulevard should proceed to the basement of the house at 21 Sauk Boulevard.

At the NAL Main Site, take shelter in the lower level of the Linac Building. Any of the tunnels at the Main Site are ideal tornado shelters.

DUSAF employees at the Phillips Farm Barn are instructed to take shelter in the lowest level of their building and to seek additional protection beneath a desk or other heavy furniture and occupants of the Phillips Farm House should take shelter in the basement.

DUSAF employees at the Annex should move to the basement of the building.

Any person caught out in the open should lie flat in the nearest depression or ditch.

If you must remain in a building, seek protection under a desk or heavy table. Open windows slightly to equalize pressure. Do not stand in front of windows.

PUT ON A HARD HAT IF YOU HAVE ONE.

Think ahead. Get acquainted with the above-mentioned shelters when the weather is clear.

NAL PROMOTIONS DURING MARCH, 1970

<u>NAME</u>	<u>GROUP</u>	<u>FROM</u>	<u>TO</u>
Edward J. Steigmeyer	Physics Research	Sr. Tech. Aide	Tech. Spec.
Aspasia Georgoulakis	Theory	Programmer I	Programmer II
Harold E. Minster	Technical Services	Instrument Maker	Working Foreman
Gene Morel	Materials Services	Material Serv. Clk.	Driver-Mover
Ralph Huggins	Main Accelerator	Tech. II	Sr. Tech. Aide
Delmar Miller	Booster	Tech. I	Tech. II
Arcilla Magee	Materials Services	Warehouseman	Driver
Jack Jagger	Main Accelerator	Designer	Factory Supervisor
Mae Riggs	Cafeteria	Cafeteria Attendant	Food & Bev. Handler
Richard Mau	Technical Services	Instrument Maker	Working Foreman
George Eastland	Technical Services	Instrument Maker	Working Foreman
Thomas Bulter	Technical Services	Instrument Maker	Working Foreman
Jerry Peterson	Technical Services	Instrument Maker	Working Foreman
Nancy Sefcik	Business Office	Secretary II	Secretary III

DIGGING UP THE PAST AT NAL

Early in January, Prof. Stuart Struever, of Northwestern University's department of anthropology, proposed that a yard-by-yard survey be made of the NAL grounds for prehistoric sites. He noted that no area of the type such as NAL's 6,800 acres in north-eastern Illinois ever had been properly surveyed by anthropologists and archaeologists.



SUSAN HOWSER

Much could be learned about buffalo hunting camps, agricultural base camps and transitory Indian tribes that once were apparently present in this general geographic region, Prof. Struever suggested.

Dr. Struever proposed that, as soon as the snow left the ground, a walking survey be started of the NAL site after development of a tightly-knit grid system so that any historical item that might be found could be identified later as to the precise location of its discovery, etc. He urged NAL employees and others who find artifacts on the site to note exactly where they were located so that their discovery could be correlated with other data.

Through the years, there has been relatively little, if any, systematic exploration of the Fox River Valley by scholars although it promises to be an interesting sector because of its proximity to high points in land, water and fertile grounds. Time is fleeting for archaeological "digs" in this area as suburbia expands and major construction developments such as new factories and highways proceed.

With the encouragement of Dr. Robert R. Wilson, NAL's director, a group of archaeologists from Northwestern University now is conducting a survey of NAL land to locate and analyze remains of prehistoric Indian settlements in the area. To date, they have located a few areas which seem to be small hunting camps, perhaps inhabited for a day or two by a small band of Indians. They are hoping to locate several more as the survey proceeds.

Two of the archaeologists, Ann Early, of Massachusetts, a graduate student advisor, and Susan Howser, are on the site nearly every working day. They would be glad to meet with any NAL staff members to talk about what they have found to date -- and what the prospects are of finding artifacts at a later date. Phase One of their activities will end in the month of June.



ANN EARLY

The girls can be reached by phone at 231-1128. The farm is number 64, on Batavia Road.

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Last week, Dr. Wilson issued the following "message to NAL archaeologists:"

"Because the remains from the sites already discovered have been widely scattered and a positive identification of sites is move difficult than under ordinary conditions, the archaeologists have asked for, and I would like to declare, a one month moratorium on collecting activities on NAL land except for certain areas.

Those of you who just can't wait and want to do collecting during this period should stop at the Archaeology House (former Mensing Farm on south side of Batavia Road between main gate and village entrance) between 8:30 and 9:30 a.m. or 4:00 and 5:00 p.m. any day, to find out what areas are excepted from the moratorium."

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BOWLING LEAGUE PICKS LEADERS - By Gayle Notley

The NAL Bowling League elected new officers for the next year's bowling season at its April 17th meeting. President will be Mike Hitt, DUSAF. (Mike is one of the league's best bowlers, but we elected him President anyway.)

Bob Wagner, also of DUSAF, will be Secretary-Treasurer. This will be Bob's third year in this office, breaking all previous records for terms of office in the league's history.

Corresponding Secretary will be Marilyn Paul, or "Quick-Pen" as she is affectionately known by her friends. Marilyn is a member of the Experimental Facilities section staff.

In order to finish out the season on time it was decided that the league would bowl on Wednesday, April 29, and also Wednesday, May 6, in addition to the regularly scheduled Friday nights. This will enable us to hold the banquet on May 15th, in the cafeteria.

Jerry Reid, of Construction, will be Master of Ceremonies again this year and the buffet dinner will be prepared by NAL's Master Chef, Bernie Lensmeyer.

Plans for next year's league are underway. There has been some discussion of changing from 3-man to 5-man teams. Definite plans will be announced at a later date, so all of you would-be bowlers establish those averages so we can get rolling early next Fall.

ONLY A FEW GARDENING PLOTS LEFT

As this week began, only 24 of the 94 gardening plots offered this spring to NAL employees were unclaimed. Rudy Dorner, site manager, said that he has been impressed by the enthusiastic response of the offer of free plots to NAL families on which they can grow garden vegetables. Last year, only 50 plots were assigned.

This year, the plots generally are 20 feet by 40 feet in size. They are ready for planting now, Dorner reminds. The plots are located just west of the new fire barn and north of the new parking lot behind Construction. Plots may be claimed by calling Gayle Notley in the site manager's office at Extension 404.

It has been suggested that a unique contest might be developed among those who claim the sites. It would be to see who can grow the largest pumpkin. An effort is being made to determine whether there would be any interest in such a competition.

CREDIT UNION BEGINS THIRD DECADE OF SERVICE

Five new directors were elected to serve on the Board of the Argonne Credit Union at the Annual Meeting held in March. Mr. Herb Adler was elected to serve a second year as President and Mr. John Chonko will continue as Treasurer and General Manager.

The credit union is now in its twentieth year of operation and has assets of approximately \$5 million. It provides "banking" type service for NAL and Argonne employees and is a Not-For-Profit corporation owned and operated by its members. All employees are invited to join.

A representative of the Credit Union will be in the NAL Village at 22 Sauk regularly on Friday afternoons, to give information to NAL employees and to answer any questions that might arise.

NEW NAL EMPLOYEES - March, 1970

Beam Transfer

Robert Oudt, Sr. Tech. Aid
Lockport, Ill.

Jesus Guerra, Lab. Tech.
Aurora, Ill.

Avelardo Cortez, Lab. Asst.
Aurora, Ill.

Anatol Dmytriuk, Design
Wooddale, Ill.

Thomas Wollquist, Tech. I
Chicago, Ill.

Wilbert Edmondson, Draft.Asst.
Aurora, Ill.

Nicolas Cadena Jr., Draft. Asst.
Aurora, Ill.

Booster

John William, Tech. I
Batavia, Ill.

Willie Washington, Tech.
Maywood, Ill.

Ernest Matt, Draft. Asst.
Polson, Montana

Percy Herbert, Lab. Asst.
Fairbanks, Alaska

Experimental Facilities

Maurice Harland, Lab. Asst.
Aurora, Ill.

Edward Fuentes, Lab. Asst.
Aurora, Ill.

Farm Management

Gabriel Provancial, grndman
Aurora, Ill.

Linac

Lester Wahl, Tech I
Bedford Park, Ill.

Robert Mau, Tech. I
Joliet, Ill.

Main Ring

Donald Morton, Sr. Tech Aid
Lockport, Ill.

Ralph Oliver, Tech.Spec.
Lutherville, Md.

Andrew Begay, Lab. Asst.
Chicago, Ill.

Herminio Rosario, Lab.Asst.
Aurora, Ill.

Benjamin Nelson,Draft. Asst.
Chicago, Ill.

Material Services

Betty Patches, Clerk I
Elgin, Ill.

Richard Williams, Clerk
Chicago, Ill.

Samuel Gallégos, Whseman
Aurora, Ill.

George Smith, Whseman.
Millington, Ill.

Personnel

Beverly Braun, Clerk
Aurora, Ill.

Physics Research

Carl Dolnick, Programmer
Chicago, Ill.

Purchasing

Kathleen Leonard, Clerk
Warrenville, Ill.

Gerald Neumann, Pur. Admin.
Chicago, Ill.

Radiation Physics

Steven Cooper, Lab. Asst.
Chicago, Ill.

Ellen Dawson, Clerk
Naperville, Ill.

Radio Frequency

Larry Tofpi, Lab. Asst.
Anadarko, Oklahoma

Walter Chlibovytsch,Draftsman
Glendale Hts., Ill.

Director's Office

Raymond Brown, Safety Eng.
Princeton, New Jersey

Technical Services

John Stull, Inst. Mach.
Villa Park, Ill.

Gerald Williams, Inst. Mach.
St. Charles, Ill.

HAPPENINGS AT AEC's AREA OFFICE - By Minerva H. Sanders

John B. Kiefer (usually known as "Jack" around the Village and CH) was recently presented with a Special Achievement Certificate and a substantial check by Kennedy C. Brooks, Area Manager of the AEC's 200 BeV Accelerator Facility Office. The Certificate cited Jack, our Contract Specialist, for high level performance on his own job while at the same time taking on additional assignments while Fred C. Mattmueller, our Deputy Area Manager, was attending the Federal Executive Institute in Charlottesville, Virginia.

We extend a warm "Welcome Home" to our counselor, William A. Donato, who has been in Charlottesville, Virginia, for two weeks attending the Judge Advocate General's school. Ronald Hosford, our other counselor, kept our legal matters running smoothly during this time.

Ruth Salach and her month-old son, Kelly Joseph, stopped by to see us on April 14. Kelly weighs 8 lbs. 12 ozs., and is drinking 7 ozs. of milk now. If this keeps up, Ruth will have to return to work sooner than expected to keep up with his food bill. (Smile)



J.B.Kiefer (L), K.C.Brooks

FESTIVAL PLANS DAY OF FUN

Spring is really here, and everyone at NAL and their friends, are invited to "gam-bol on the green" at the NALWO Fair/Fete/Festival/Frolic on May 9th. The White Farm-house on the east side of Eola Road is the site, and is also to be the beneficiary of the profits of the affair on May 9 from 1:00 to 5:00 p.m. Many NALWO groups are now using the farmhouse, and it is badly in need of furnishings and equipment.

There will be a Flea Market, a book stall, a stand selling Crepes, a booth with handcrafts and some fine arts, a Gourmet food booth--it all sounds very Parisian, doesn't it. There will also be good American hot dogs and drinks. You can buy a chance, for 25¢ or 5 for only one dollar, on one of the many prizes that have been contributed by local merchants. Games and pony rides for the children will help to keep them off your hands while you look for bargains.

Bonnie Hubbard, chairman of the Flea Market says they could use more "fleas" or "white elephants", as the case may be. Leave them at the Housing Office.

SEE YOU AT THE FAIR

TIAA DIVIDENDS

Charles Marofske, NAL personnel manager, notes that the Teachers Insurance and Annuity Association has announced two dividend actions of interest to NAL employees:

1. The TIAA Interest Dividend for calendar 1970 will raise to 5 per cent the interest applied on TIAA annuity accumulation during the year.
2. An extra dividend for all TIAA deferred annuitites issued after June, 1941. The extra dividend applies to the portion of your TIAA accumulation resulting from premiums paid on or after March 1, 1969. The interest credited on the portion of you TIAA accumulation will be raised to 7 per cent during the twelve months from March 1, 1970 to February 28, 1971.

REMEMBER THE TREE PLANTING

On Friday, May 1, at 1:30 p.m., 150 trees will be planted at the Kuhn Farm and in the open field just south of the photography house at 14 Sauk, in the NAL Village. All employees are invited to take part. Meet at the Curia.

CLASSIFIED ADS

FOR SALE - 19 ft. center board sloop and trailer. Cuddy cabin, 2 suits sails. Just wash and you're ready to go. Call Harold, Ext. 215.

FOR SALE - Desk-drafting table comb. in good condition. \$85. Joe Heim, Ext. 381 or 879-1327.

FOR SALE - 3-rm. tent approx. 9'x15'. Good condition. \$45. Call Pehta 469-6009.

FOR SALE - Formica & wood dinette table & chairs. Ext. 279 Jose or 668-7509.

FOR SALE - Heavy Duty '64 Chevy. Biscayne Wagon. Big V-8 eng., 4 sp. trans, posi. Ideal for campers or tradesman's work car. \$700. Call Joyce - Ext. 572.

WANTED - Part-time typist to type manuscripts and letters, preferably an elite on executive typewriter. Call James Marshall at 879-2900, Ext. 251.

NALWO CALENDAR

May 2 Bon Vivant Group. 1:00 p.m. at Chateau Louise, Highway 31, West Dundee. An Elizabethan dinner.

National Accelerator Laboratory

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