

The Village Courier



national accelerator laboratory

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

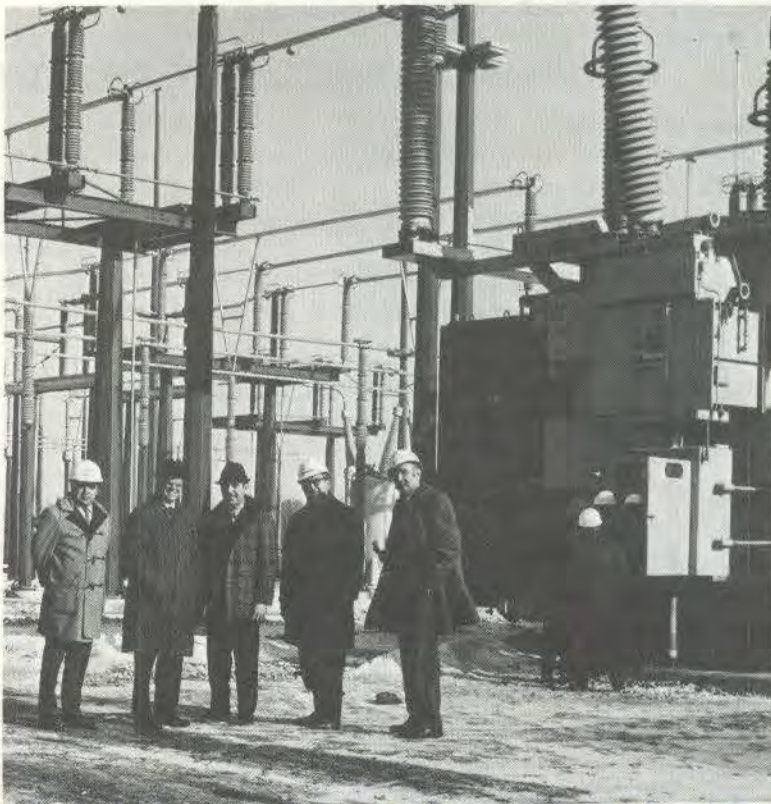
Vol. 3 No. 4

January 28, 1971

345 KV POWER LINE SERVICES NAL

Precisely at 1:45 p.m., Thursday, January 21, 1971, the Master Power Substation, located about a quarter of a mile from the "footprint area" at the NAL Main Site, became operational.

At that time, Robert R. Wilson, NAL Director, turned the simple control switch in the substation which closed the 345,000-volt (345 KV) main oil circuit breaker in the substation yard and sent the first power through the first 40-megawatt power transformer. His action literally "turned on the lights" in the substation building as part of an informal ceremony, but it also was the premiere of the transmission of the heavy power load that will be required to operate NAL's accelerator system at an energy level of about 500 billion electron volts.



....Standing near Master Substation linking 345 KV power line with NAL are (l. to r.) Aris Tsapras, DUSAF; RRW; Bill Malm, United Power; E. Parke Rohrer and Bill Power, DUSAF.

Standing beside Dr. Wilson as he pulled the lever was D.A. Schindelbeck, Commonwealth Edison's Aurora Area Manager, who said that he expects NAL will become one of the top five users of electricity in the state of Illinois.

Also present were E. Parke Rohrer, Project Manager for DUSAF, William Riches, NAL Plant Manager, Aris Tsapras, Chief Electrical Engineer of DUSAF, responsible for the substation design, as well as other DUSAF Engineering and Construction personnel involved in developing the substation.

Although the first load on the transformer was very light, on Saturday, January 23, the first major load to supply power to the Transfer Gallery and the Cross Gallery was cut over from the temporary Giese Road Substation to the 345 KV Master Substation. On Saturday, January 30, Linac and Booster also will be cut over to the power supplied from the Master Substation, placing the entire "footprint area" and machine operation, for the first time, on NAL's permanent substation.

During the next month, the remainder of the electrical installation at the substation, including the testing of the two additional 40 megawatt transformers and the operational testing of the 13.8 KV switchgear and controls, will continue with all three transformers

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....NAL's William Riches notes important moment as Aris Tsapras, DUSAF, points at control clock....

Photo by Tim Fielding, NAL



....RRW turns control switch as D.A. Schindelbeck, Edison official, watches....

345 KV POWER LINE SERVICES NAL (Continued from Page 1)

ready for normal service by approximately February 15, according to Riches.

The NAL substation is unique in that here power is being supplied from the Commonwealth Edison Company directly off of their 345 KV transmission lines. This has never been done before.

Arrangements are being made for maintenance work on the transmission line to be performed by the Edison Company. Operating and switching will be arranged by NAL personnel, in coordination with the Edison Company's load dispatcher.

In summary, the NAL 200-megawatt substation, connected directly to the Commonwealth Edison Company line, will function much as if it were one of the many substations on the Edison system, but it will be under the control and operation of NAL.

The contractor for construction of the Master Substation at NAL was United Power Contractors and Engineers of Seattle, Washington.

URA FELLOWSHIP PROGRAM OPEN

Chuck Marofske, NAL Personnel Manager, has announced that applications are being accepted for the 1971 Universities Research Association, Inc., Fellowship program. "This excellent benefit provides financial support to sons and daughters of URA and NAL employees entering college. Currently, ten fellowships are in effect for children of NAL employees," said Marofske.

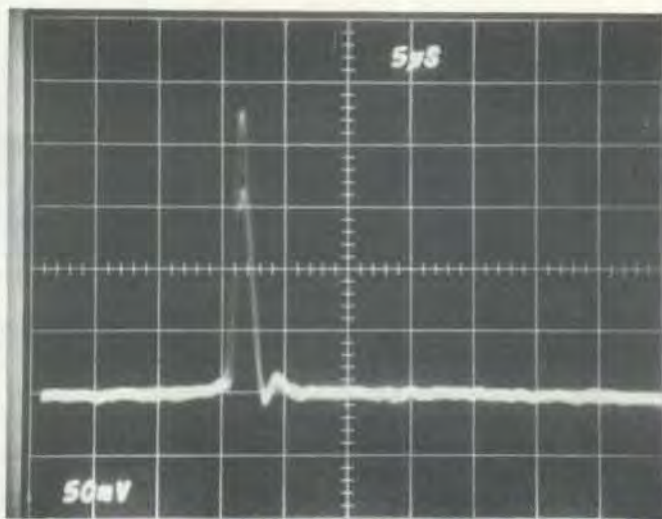
The following regulations prevail regarding candidates: 1. Only students entering their freshman year of college in 1971 are eligible. 2. Children of all NAL and URA employees are eligible. 3. Candidates must be enrolling at an accredited school in a scholastic program leading to a baccalaureate degree.

The fellowship provides a maximum of \$1200 toward tuition and fixed fees, renewable on an academic calendar basis for four years. URA hopes to give seven awards this year.

To submit someone as a candidate, the following information should be provided to Personnel: name of student, high school attended, school of intent, SAT verbal and math test scores. Names of candidates must be submitted to Marofske by March 1. Due to the scheduling of SAT exams, the test scores may be provided at a somewhat later date.

BOOSTER BEAM GOES FULL CIRCLE

Another milestone was achieved by the Booster section at about 12:30 a.m. Saturday, January 23, 1971. At that time, a proton beam was injected from the Linac and "coasted" around the entire Booster accelerator of 96 magnets. The success came that night after three hours of intensive work by members of the Booster and the Linac sections. One by one, the 24 detectors in the Booster system registered the fact that a quality beam was passing through. Among those present for the occasion were Roy Billinge, Helen Edwards, Donald Young, Mike Shea, Jeff Gannon, Greg Urban, Donald Edwards, Frank Cole, Lowell Klaisner, Paul Mellick, Keith Rich, Mel Storm, and Robert R. Wilson.



...One of first beam detector traces from NAL Booster. The large pip is the injected beam....

RETIREMENT PROGRAM "VESTING" EXPLAINED

The Laboratory's retirement program is provided through the TIAA-CREF Association. Unlike most plans, ours involves individual contracts with TIAA and CREF for each employee. A distinct advantage of this system is that the individual contracts allow for personal decisions regarding the main features of his retirement program. This, essentially, provides individual retirement planning. One disadvantage of a wide variety of options is the complexity of explaining and understanding the "cafeteria type" features of the policy. One most-often-misunderstood and questioned area of the TIAA-CREF system is vesting.

A unique feature of the retirement plan is "immediate vesting." This means that when you terminate you can take with you the full value of the contract regardless of your length of service (unless you repurchase - see below). You may continue it as a private investment plan and continue to contribute to it; you may retain it as a paid-up insurance policy; you may begin to draw an annuity (early retirement is your option); or you may transfer it to a new employer if that employer has a TIAA-CREF program. (Many universities, colleges, scientific laboratories and other not-for-profit organizations are covered by TIAA-CREF.)

If you die while employed by the Laboratory, the full value (both of your contributions and the Laboratory's) will be paid to your beneficiary.

If the policy you hold is less than five years old and you leave the Laboratory, you may exercise a repurchase option (cash the policy in for a lump sum settlement). If you elect to repurchase, you receive a refund of your own contributions and any accrued investment earnings on that portion of the investment. However, the Laboratory's investment and earnings are returned to the Laboratory, if you elect this repurchase option.

ARE YOU INTERESTED?

An appeal for a show of interest by NAL, DUSAF, and AEC employees in taking part in a research project sponsored by the Chicago Heart Association, has been made by Mrs. Dorothy Poll, R.N., Personnel.

Under the program, a qualified team of nurses and technicians would come to NAL to take the health histories, conduct electro-cardiograms, give blood tests for cholesterol and diabetes measurements, as well as take the blood pressure and height and weight of each participant. Results would go to your family physician, not to the employer. In addition, a report also will be sent to the individual employee at his home. There is no charge for these tests under this program.

The Heart Association has requested that a minimum of 150 men and women must be interested if the tests are to be done at NAL. Tests would be given during the work day at the First Aid House, NAL Village. Please call Mrs. Poll at Ext. 232 by Monday, Feb. 15, if you are interested.

MARK YOUR CALENDAR! The DuPage Tuberculosis Association X-Ray Unit will be at the NAL Village on Wed., Feb. 3, from 8:30 a.m. to 1:30 p.m. Employees who have not had an X-Ray for a year or longer are urged to take advantage of this free service. The mobile unit will be parked in the Cafeteria parking lot. No appointment is necessary.

REMEMBER: The Adult Swimming Party Saturday, Feb. 6, 7:30 p.m., at the Holiday Inn, on Rt. 31 in North Aurora. Tickets at \$2.50 per person can be bought from Jodi Eskey, Ext. 348.

NAL PROTONS WIN IN NAPERVILLE LEAGUE

The NAL Protons defeated the Doolin Realtors, 59 to 54, in a Naperville YMCA basketball league game at the Naperville High School's gymnasium Thursday, Jan. 21.

With the season almost half-way over, the Protons are scheduled to play the Amoco Chemicals at 7:30 p.m. Thursday, Jan. 28. So far, NAL has won two and lost six games in the league competition. The final game will be played March 4.

James Thompson, of Personnel, reports that Roy Justice, Physics Research; Casey Cahill, R.F. and Robert Knowles, Linac, recently have joined the Protons. "We now have 12 regular players turning out for our games," say Coach Thompson.

NALWO CALENDAR

Mrs. Nancy Teng, Editor

February 6 Gourmet. A traditional Jewish dinner has been planned for Sat., Feb. 6 at 7:30 p.m. at the Club House of Carriage Woods, Rt. 59. For information, call Mary Ann Ryk, 968-8651.

February 12 Music. The next meeting will be held on Fri., Feb. 12. For further information, call Herta Laukant, 665-0439.

ATTENTION PING PONG SPECIALISTS: NAL will hold its second annual Table Tennis Tournament. For information and registration, please call Ralph Wagner, Ext. 225 before Monday, Feb. 8.

REMINDER: The ice skating area on the tennis courts near the NAL Village Barn is now open to employees and their families on evenings and weekends. You are asked not to skate on the layer of ice atop the swimming pool because hitting the walls of the pool will be almost unavoidable and will damage the tile.

CLASSIFIED ADS

FOR SALE - '69 Dodge Custom 88, 2 dr. hard-top. Good condition. \$425. Call Richard Douglas, West Chicago.

WANTED - 10 horsepower outboard motor with reserve tank in good condition. Call Dick Biwer, Ext. 366.

FOR SALE - '70 Honda SL 350. Very low mileage. \$675 or best offer. Call Dorothy Poll, Ext. 232.

National Accelerator Laboratory

P.O. Box 500

Batavia, Illinois 60510

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