

EXTRA! EXTRA! TWO MILESTONES IN EIGHT HOURS AT NAL

As the Village Crier went to press for this week, NAL again was the locale of two more milestones in its construction and development history.

At approximately 4 o'clock, Monday afternoon, November 30, the final pre-cast concrete section was placed in the Main Accelerator Enclosure to complete the four-mile-in-circumference ring that will be NAL's largest single component. A repeat of the "final closing" was held for the news media at 1 o'clock Tuesday afternoon, December 1.

At about midnight on Monday, November 30, NAL Linear Accelerator Section reported that it had achieved full design energy of 200 Million Electron Volts to become the first NAL operating section to meet its design peak. On September 25, the NAL Linac had produced a beam of 139 MeV to become, at that time, the world's highest energy proton linear accelerator. However, the AGS Conversion Group working on the 200 MeV linear accelerator at the Brookhaven National Laboratory achieved their full design energy of 200 MeV Wednesday, November 18, at 1:44 a.m.

See the Village Crier next week for details and photographs.

The Village Crier

 national accelerator laboratory

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DESIGN UNIQUE POWER POLES FOR NAL

As NAL develops, it promises to be the home of many significant architectural features...both the site and its buildings will reflect something of the spirit and adventure of the esoteric business of discovery that is to be carried on here.

One of the latest architectural innovations with a high degree of visibility, both literally and figuratively, crosses 2.2 miles of the 6,800-acre site. The creations are unique, modern and matching power poles, designed by Robert R. Wilson, NAL's Director, to bring in the electrical power required to service major components of NAL's accelerator system.

The power poles add much to the aesthetic beauty of the Fox River Valley prairie. They promise to stand as one of the many new landmarks to adorn the NAL site, which already includes such scenic centers as the Curia, the Village Barn, the Booster pond and other architectural achievements as well as the "new look" of the re-painted houses in the Village. The new power poles are soft on the eyes and combine function and form with contemporary design. They provide excellent subjects for camera fans.

The power poles are modified "H" structures built of two wooden poles with two curved cross-arms to link the poles. All have been erected and work on the electrical cabling is

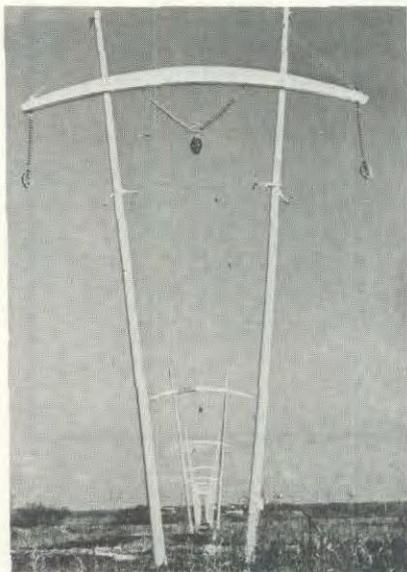


...NAL's distinctive power poles cross the Illinois prairie...

(Continued on Page 2)

DESIGN UNIQUE POWER POLES FOR NAL (Continued from Page 1)

beginning. Their purpose is to link the power offered from Commonwealth Edison Company's transmission lines, along the eastern boundary of NAL, with the Master Substation at the Main Site.



...Modified "H" structures are 100 feet long...

It is expected that construction of the 345 Kilovolt transmission line will be completed in late 1970. Work on the Master Substation is more than 90 percent complete. The exterior electrical work running to the substation consists of a three-wire overhead transmission system carrying electrical power at 345 Kv, 3-phase, 60Hz, with two static wires, supported on single circuit wooden pole structures.

There are 19 new Wilson-designed pole structures in the main power line linkage system. Each pole is 100 feet in length. The conductors are supported 65 feet above grade level. In addition, there are 20 more feet to the top of each pole with 15 feet below ground level. The NAL power line taps the Commonwealth Edison transmission line, near the northeastern boundary of the 6,800-acre Laboratory site, not far from Roosevelt Road between West Chicago and Geneva. Several months ago, the Commonwealth Edison line was relocated to an easement on the site's boundary.

Each power pole structure will support three conductors with a safety cable attached to the top of its two supports for men assigned to aerial installation and repair work. When each structure is completely installed, it will be anchored to the ground with down guys.

Installation of the new power lines is under the general direction of William Riches, NAL Plant Manager, a resident of Geneva. Ken Sceper, of Woodridge, is the NAL electrical engineer assigned to the project.

Once the power is brought to the master substation via the new poles, it will be transformed from 345 Kilovolts to 13.8 Kilovolts and then distributed about the entire main site through an underground distribution system via plastic conduit encased in concrete, a minimum of 24 inches below grade. Linac, Booster, the Transfer Gallery and the Experimental Areas, of course, will be among the major accelerator system units serviced in such a manner.

In the case of the Main Accelerator, which is four miles in circumference and 1.24 miles in diameter, direct burial cable is utilized for the distribution system. There will be substations adjacent to each of the 29 service buildings around the Main Ring. At the individual substations, the voltage will be reduced from 13.8 Kv to 480/277 volts. This voltage reduction also will be done for each of the other Laboratory components -- Linac, Booster, Beam Transfer, Experimental Facilities.



....Workmen complete conductors 65 feet above grade level....

NOTICE OF DIVIDEND

The Argonne Credit Union share dividend for the fourth quarter of 1970 will be paid at the rate of 5½% (per annum) on November 30, 1970.

Dividends are added to share balances and are identified on the quarterly statements with a code number 9.

CHRISTMAS PARTIES SCHEDULED FOR NAL, DUSAF EMPLOYEES

Picture a candle-lit room with the fragrance of pine from freshly cut greens that gaily decorate the entrances...the cheery warm fireplaces and frosty windows...snow covered lawns and shrubs.

Such will be the setting for the third annual NAL Christmas Dance---"Happy Holly Day"---to be held at the Villa Olivia Country Club in Elgin Friday evening, December 18. Gayle Notley, chairman of this year's affair, urges NAL employees to mark their calendars and arrange for their baby-sitters now.

This year's dance promises to be a party to remember, she says. The festivities will start at 7:00 p.m. with a buffet and cocktails. At 8:30 p.m. you can relax and enjoy the mellow sounds of "Pat and The Playboys." At 9:00 p.m. (for you livelier people) we will be featuring "The Sons" from St. Charles. The bands will be alternating every half hour until midnight.

Tickets are now on sale. They may be purchased through the social committee member of your NAL section or at the cafeteria. Tickets are \$6.00 and they cover dinner, dancing and all drinks.

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The DUSAF Christmas celebration this year will be a dinner-dance to be held at the Brookwood Country Club, in Addison, Illinois, on December 18. All DUSAF employees and their spouses, or a guest, are invited to join the merriment and good cheer that are sure to be part of this evening. DUSAF's architectural staff has arranged a family party for all DUSAF families on Sunday, December 6, starting at 2:00 p.m. NAL has graciously permitted the use of the Village Barn, located at Sauk Boulevard and Batavia Road in the NAL Village. Santa Claus will be present to greet the children and give presents. Good food and carolling.

EF AND PR STAFFERS HOLD FALL FESTIVAL

On Saturday, November 7, 1970, the Experimental Facilities (EF) and Physics Research (PR) Sections had a Fall Festival. The festival was attended by approximately 100 EF and PR employees.

The festival which was held in the Village Barn started at 7:30 p.m. with a buffet dinner being served at 8:00 p.m. The dinner was followed with a presentation of slides by Frank Nezrick and Jim Walker of their recent visit to CERN. Of course, Jim went a little further by going around the world! The group then moved to the lower level of the Barn for dancing. It was later found out by one member of the committee that there was a guest at the festival Saturday evening, who never made an appearance until Monday morning when the corn stalks were being removed from the Barn. (Anyone interested in knowing who this guest was might contact George Nosal.)

PROTONS TO PLAY FOURTH GAME

The NAL Protons will play their fourth game of the season in the Naperville YMCA league Thursday evening December 3, at 9:00 p.m. in the old gymnasium at the Naperville High School. Their opponents will be the Netzley Imperials.

So far this year, the Protons have won one game and lost two in league play. On Thursday night, November 19, NAL was defeated in a nip-and-tuck thriller by the Standard Oil Naperville Technical Center team. The final score, after see-sawing throughout the game, was 53 to 42. A last-minute surge by the Standard Oil team assured them of the victory.

Once again, Clarence Bowling, Main Ring, captain of the NAL team, was the high scorer. This time, he achieved a season high of 26 points. Bowling, who plays forward, formerly was a basketball player on the Harlan High School team on Chicago's South Side.

Bobby McNeal, Booster, also a forward and formerly a member of the Chicago Vocational High School team, scored 16 points. Coach Jim Thompson, Personnel, complimented Jim Vesley, RF, for the aggressive game he played in picking up the rebounds.

DUPLICATE BRIDGE GROUP

The Duplicate Bridge group will meet in the Cafeteria on Thursday, December 10, 1970, its regular meeting night. Since this will be the last meeting of the year a special evening is being planned to celebrate the holiday season. Come out and join the fun! Call Spike, on Extension 351, to be sure your name is on Santa's list!!

CLASSIFIED ADS

FOR SALE - Very large, very old desk - walnut, green finish, best offer over \$45. Maple dinette set, formica top, with 4 chairs, \$25. 9x12 multi-colored wool braided rug with pad, very good condition, \$5. Antique wicker flower stand, \$20 firm. Antique smoking stand with copper lining, \$15 firm. Antique wicker baby or doll bassinette, \$7 firm. Collector's item, Scott 6-band radio, \$250 firm, originally owned by Harper family, University of Chicago. Call Sandberg, 355-3312.

FOR SALE - Ludwig drum set, complete, Zildgin, seat, lights, and record cabinet. \$295. Call D. Hoffman, Extension 366.

FOR SALE - '66 Mustang 6 yellow, 3 speed. Very, very clean. \$1100. Call 668-2659 or 879-1185.

PORTABLE TYPEWRITER for sale. Underwood noiseless; good condition. Best offer. R.C. Juergens, Extension 275 or 355-1613.

FOR SALE - General Electric portable stereo 300 phonograph, solid state, diamond needle, excellent condition. \$50. Also Conrad electric guitar; Ray amplifier with reverb, used 2 months. \$95. Call Wally Pelczarski, Extension 391.

FOR SALE - '69 Oldsmobile Vista-Cruiser, three seat, air, tinted glass, P.B. and P.S., roof rack, 885-14 tires (2 snow), hitch, undercoated, immaculate condition, Aztec Gold. \$3,400. Call 668-2659.

FOR SALE - Acrosound stereo pre-amp model s 1001, \$15. Acrosound stereo amplifier model 20-20, \$20. Weingard T.V. antenna complete with rotor & mast, \$30. Childs electric sewing machine "Sister", \$12. Maple Doll High Chair, \$3. Call C. Anderson Extension 266.

FOR SALE - Registered Siamese Seal Point kittens. Six weeks old Christmas Eve. \$25 each. Call 879-2379.

FOR SALE - Old Time AM radios: RCA radola 46 model, AR-596 and Brunswick Super Heterodyne model 17. Both without speakers. Best offer. Call Bob Ducar, Extension 271 or 898-2114.

FOR SALE - Boys 3-speed sting-ray bicycle; gold. 16" front wheel, 20" rear wheel; front & rear suspension. One year old - like new. \$50. Call Helen, Extension 251.

FOR SALE - '66 Pontiac Catalina, 4 dr. sedan, \$1200. Includes 1 snow tire, new shocks, new rear axle bearings. Can be seen at mail room. Ernie, Extension 210.

FOR SALE '69 Dodge Charger RT. Sharp. Everything but air. Dave Sanders, Extension 236.

FOR SALE - set (2) studded Union Premium snow tires, size 700x13 w.w. mounted on Chrysler wheels - less than 3,000 miles. Can be used on Darts and Valiants thru '69. \$35. Call Bill Johncox, 879-2900, Ext. 211. Also for sale ¼ midget trailer (rail type) with leaf springs - small wheels - can be converted to transport motorcycles or snowmobile. \$50.

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