

# The Village Courier

 national accelerator laboratory

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

Vol. 6 No. 8

February 21, 1974

## TRANSFORMER STARTS OPERATION

NAL's Plant Management Section has completed major alterations to the Master Substation where electrical power from the Commonwealth Edison lines enters the NAL electrical system. On Wednesday, February 13, a new 100 Megawatt transformer was energized at the Substation. The first Main Ring load was placed on the transformer on February 15, and by February 17 the transformer was routinely handling 300 BeV operation in the main accelerator.

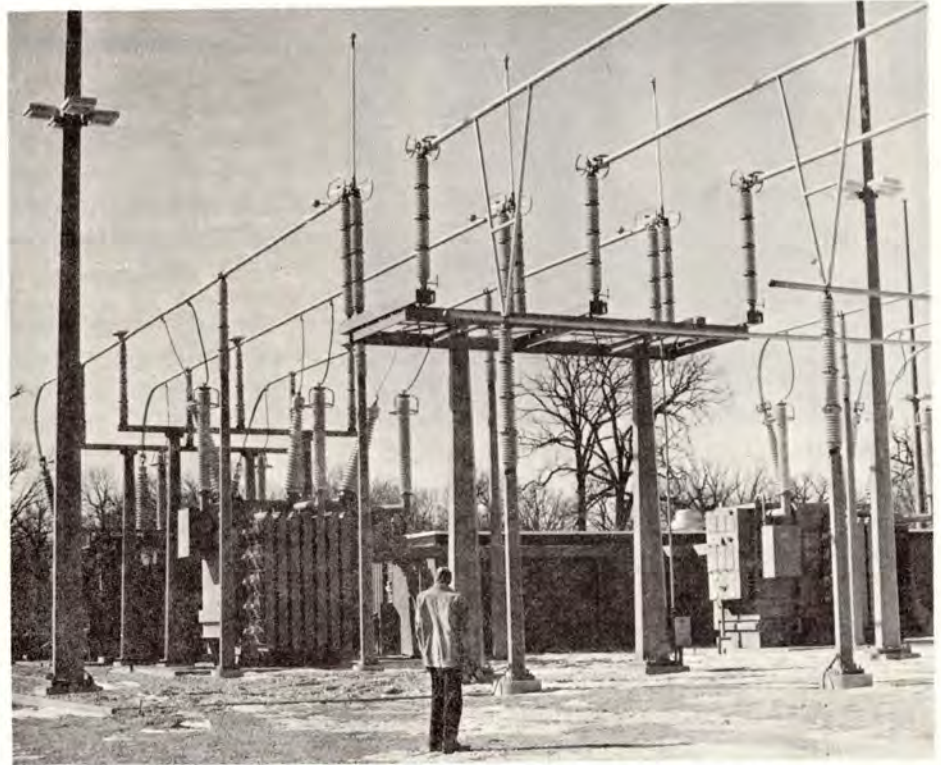
The new installation greatly enlarges the capabilities of the Substation and of the accelerator. Two smaller transformers had been used in combination for some time to raise the accelerator operation over the 200 BeV level. This new transformer gives 500 BeV capability and returns one of the smaller transformers to service for the experimental areas.

The Substation effort continued through sub-zero weather and several blizzards. The transformer arrived on January 8 by rail from Federal Pioneer, Winnipeg, Canada. The huge piece of equipment was rigged down Road A-1 from the railroad siding, on the northern NAL boundary, to the Substation. The installation continued as far as possible while the accelerator was in operation, and once the 10-day shut-down began, the people working on the project started a concentrated effort and completed the job on schedule.

Plant Manager William Riches comments, "The successful completion of the project on schedule was possible only through complete cooperation between NAL Plant Management, DUSAF, and the construction contractors. Ken Sceper, Hank McGreer and Eugene Valdes of Plant Utilities are to be particularly commended for their outstanding performance and the long hours they spent on the job. Our thanks go to other NAL groups, such as the Transportation Department which picked up many critical items that enabled us to maintain the tight schedule."

The new transformer is unique, Riches notes, in that it has two secondary windings, each supplying 13.8 Kv pulsed power for half the Main Ring load. The core and windings are specially braced to withstand 300 MVA peak pulsing loads at 500 BeV accelerator operation. The new installation included extending the outdoor 345 Kv primary bus system, installation of 13.8 Kv secondary bus duct and metering cubicles in the Substation building, as well as rebuilding of switch-gear cubicles, and new instrumentation.

A microwave antenna mounted 60 feet high on one of the static wire poles in the Substation will provide future relaying channels between NAL and the Commonwealth Edison substation at Electric Junction, some five miles away. By May, 1974, this will replace the present Illinois Bell underground cabling between the two substations.



*...W. Riches at Master Substation as new transformer is activated...*

ANY IDEAS?

The Laboratory is looking for original artistic designs for table tops in the Central Laboratory cafeteria. Angela Gonzales of the Directors Office has designed and hand painted four table tops. Another large table displays an enlargement of a bubble chamber track photo. The tables are not only interesting to look at from the upper floors of the building, but they're fun to eat on.

Scale drawings for designs for table tops may be submitted to Don Getz, Directors Office. Tables are being made in three sizes - circular, 4, 6, and 8 feet in diameter; and oval, 6'x8' and 8'x12'. Oval tables will be covered with enlarged black and white photographs, and circular ones painted to introduce color. Indicate on your design whether you wish to take a table top home to do the art work yourself, or if the design must be carried out by the Model Shop. For further information on size, design specifications or details of requirements for materials and shapes, call Jose Poces, Model Shop, Ext. 3235. It is hoped that a number of unique table tops will result from employees' ideas.



...(L-R) J. Buffenmeyer, V. Smith, R. Huendorf assembling table for cafeteria. Hand painted design was done by Angela Gonzales...

If your design is chosen for a table top, you'll be able to see the table built and installed, then have your first three lunches free at it, as guests of the Cafeteria.

Interesting ideas are also needed for other areas (such as walls) of the Central Laboratory. Employee contributions are welcome here, too.

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HOUSING NEEDED FOR NAL VISITORS

NAL's Housing Office/Visitors Center is combing the NAL community for houses that might be available for short periods of time this summer, to be rented by NAL visitors and their families. If you know or hear of anyone who might have a house available, call Ext. 3440 and give the information to Fran Nease. The need is urgent and your leads and information will be very helpful in making visitors welcome for the summer.

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NAL ON-SITE BUS SCHEDULE - February, 1974

CROSS GALLERY - VILLAGE ROUTE								VILLAGE - CROSS GALLERY ROUTE							
C.G.	C.L.	M.F.	S.S.	P/C.	P/St.	Curia		Curia	P/St.	P/C.	S.S.	M.F.	C.L.	C.G.	
Lv 8:10 a						8:20 a		Lv 8:20 a	8:23 a	8:26 a	8:32 a	8:34 a	8:38 a	8:40 a	
8:40 a	8:42 a	8:46 a	8:48 a	8:54 a	8:57 a	9:00 a		9:00	9:03	9:06	9:12	9:14	9:18	9:20	
9:20	9:22	9:26	9:28	9:34	9:37	9:40		9:40	9:43	9:46	9:52	9:54	9:58	10:15	
10:15	10:17	10:21	10:23	10:29	10:32	10:35		10:35	10:38	10:41	10:47	10:49	10:53	10:55	
10:55	10:57	11:01	11:03	11:09	11:12	11:15		11:15	11:18	11:21	11:27	11:29	11:33	11:35	
11:35	11:37	11:41	11:43	11:49	11:52	11:55		11:55	11:58	12:01 p	12:07 p	12:09 p	12:13 p	12:15 p	
12:15 p	12:17 p	12:21 p	12:23 p	12:29 p	12:32 p	12:35 p		12:35 p	12:38 p	12:41	12:47	12:49	12:53	12:55	
12:55	12:57	1:01	1:03	1:09	1:12	1:15		1:15	1:18	1:21	1:27	1:29	1:33	1:35	
1:35	1:37	1:41	1:43	1:49	1:52	1:55		1:55	1:58	2:01	2:07	2:09	2:13	2:15	
2:15	2:17	2:21	2:23	2:29	2:32	2:35		2:35	2:38	2:41	2:47	2:49	2:53	3:10	
3:10	3:12	3:16	3:18	3:24	3:27	3:30		3:30	3:33	3:36	3:42	3:44	3:48	3:50	
3:50	3:52	3:56	3:58	4:04	4:07	4:10		4:10	4:13	4:16	4:22	4:24	4:28	4:30	
4:30	4:32	4:36	4:38	4:44	4:47	4:50		4:50	4:53	4:56	5:02	5:04	5:08	5:10	

CROSS GALLERY - BUBBLE CHAMBER						BUBBLE CHAMBER - CROSS GALLERY				
C.G.	C.L.	M.	P.	B/C		B/C	P.	M.	C.L.	C.G.
Lv 8:20 a	8:22 a	8:27 a	8:30 a	8:34 a		Lv 8:34 a	8:38 a	8:41 a	8:46 a	8:48 a
8:48	8:51	8:56	8:59	9:03		9:03	9:08	9:11	9:16	9:18
9:18	9:21	9:26	9:29	9:33		9:33	9:38	9:41	9:46	9:48
10:04	10:07	10:11	10:14	10:18		10:21	10:23	10:26	10:31	10:33
10:33	10:36	10:41	10:44	10:48		10:49	10:53	10:56	11:01	11:03
11:03	11:06	11:11	11:14	11:18		11:19	11:23	11:26	11:31	11:33
11:33	11:36	11:41	11:44	11:48		11:49	11:53	11:56	12:01 p	12:03 p
12:03 p	12:06 p	12:11 p	12:14 p	12:18 p		12:19 p	12:23 p	12:26 p	12:31	12:33
12:33	12:36	12:41	12:44	12:48		12:49	12:53	12:56	1:01	1:03
1:03	1:06	1:11	1:14	1:18		1:19	1:23	1:26	1:31	1:33
1:33	1:36	1:41	1:44	1:48		1:49	1:53	1:56	2:01	2:03
2:03	2:06	2:11	2:14	2:18		2:19	2:23	2:26	2:31	2:33
2:48	2:51	2:56	2:59	3:03		3:04	3:08	3:11	3:16	3:18
3:18	3:21	3:26	3:29	3:33		3:34	3:38	3:41	3:46	3:48
3:48	3:51	3:56	3:59	4:03		4:04	4:08	4:11	4:16	4:18
4:18	4:21	4:26	4:29	4:33		4:34	4:38	4:41	4:46	4:48
4:48	4:51	4:56	4:59							

KEY TO ABBREVIATIONS: C.G. = Cross Gallery; C.L. = Central Laboratory Building; M.F. = Magnet Facility; S.S. = Support Services; P/C. = Personnel/Cafeteria; P/St. = Purchasing/Stock Room; M. = Meson Detector Building; P. = Proton Area; B/C = Bubble Chamber Area.

CLIP and SAVE

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## KICK THE GASOLINE HABIT, JOIN THE NAL BUS FORCE

A survey questionnaire is being distributed to NAL employees this week asking for sign-ups and/or opinions and comments on bus service for people who work at NAL. The survey is part of a study made by five members of an Employees Volunteer Transportation Committee, to see if such a service is feasible, and if it would provide a service employees need and want.

The two largest concentrations of NAL employees' residences are in Aurora, and in the communities directly east of the Laboratory. Over 230 NAL employees live in and around Aurora. Another 175 live directly east of the Laboratory, on both sides of Roosevelt Road. The committee has recommended that one trial route in each direction be started immediately. Details of the routes and the fares suggested to finance the service are explained on the survey form.

A bus service needs solid support -- week after week. The buses are not cheap -- \$50 per day for a 40-passenger bus for the Aurora route, and \$65-\$85 a day for the eastern route. The service must be self-supporting. The committee's recommendations are aimed at conserving gasoline and also starting a service that will not only give you relief from the gas station lines, but will cut your insurance costs, save your car, and let you relax while someone else drives.

A number of details are still to be solved before the service begins. But they are not important unless interest is high enough. It is often difficult to re-arrange lifestyles, working hours, and family needs to meet the demands of a bus schedule. Many companies in the metropolitan area are trying many different schemes to help employees' transportation problems. Few seem to be able to come up with a smooth, simple proposal. NAL employees are fortunate to be able to take advantage of the neat pattern of residential locations and with a minimum of effort, start a regular service. The committee urges that a three-month trial arrangement begin as soon as possible.

Your support, your opinions, and your comments are needed immediately, -- all are valuable to the committee. Fill in the form sent to you and return it to the Village Crier Office before February 27. Describe your needs for further considerations of routes and stops.

For further information, call any member of the committee. Committee members are: Doris Ferrell, Director's Office, Ext. 3211; Will Hanson, Magnet Facility, Ext. 3555; Eric Jarzab, Personnel, Ext. 3396; Margaret Pearson, Public Information, Ext. 3351; Ken Williams, EEO, Ext. 3415.

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...(L-R) George Tuma, Walter Gorecki, and Bill McCaw of the NAL Model Shop made a last check of the energy doubler prototype they recently completed in the Village. The model allows exact design calculations to be made for the doubler, saving much money and time in the plans for the doubler project...

EMPLOYEES' LECTURE SERIES

"The NAL Accelerator -- How it Works"

Friday, February 22, 1974

11:00 a.m. - Auditorium

James Griffin, Accelerator Division, will speak on "RF Systems"

(Video re-run of this lecture will be given in the conference room of the Cross Gallery at 12 noon, on Wed., February 27.)

REMINDER...

A Wine Tasting Party will be held in the Atrium, Friday, February 22, at 8:30 p.m. Admission is \$2.25 per person with reservations, \$3.00 at the door.

Reservations will be accepted until 10:00 a.m. Friday, February 22, at the Visitors Center, Ext. 3560, or with Ellen Ljung, 231-8513.

Come and enjoy the new plantings in the Atrium; one of the hibiscus is in flower.

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PING PONG TOURNAMENT MATCHES are now being scheduled by John Satti, Chairman of the Tournament. Sign up immediately if you want to play in the matches which will begin the first week in March in the Village Barn. How about some female entries? Call John Satti. Ext. 3676 to register.

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FOR YOUR INFORMATION... There will not be an issue of THE VILLAGE CRIER on Thursday, February 28, 1974. The CRIER office and several offices of Personnel Services will move to the Central Laboratory Building on Monday, February 25. Ads for THE CRIER for the March 7 issue (due by March 4) may be left in the new office on the Atrium floor of the Central Laboratory Building.

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CLASSIFIED ADS

- FOR SALE - 1967 Plymouth Fury; new exhaust, battery, tires; front-end rework. Excl. transportation. 50,000 miles. M. Palmer, Ext. 3734, or 665-2949.
- FOR SALE - Double bed with like-new mattress & box spring. \$50; RCA console stereo, orthophonic hi fidelity and AM-FM radio, \$70. John Satti, Ext. 3676.
- FOR SALE - Oak firewood, \$40 ton delivered. Hal Johnson, 1-815-496-2676 or Tom Baird, Ext. 3575.
- FOR SALE - Ladies' size 7 & men's size 8 insulated figure skates, Canadian blades, \$8 each or will exchange for ladies' 8½ and men's 11. Jim Falk, Ext. 3734, or 892-1338.
- FOR SALE - Brand new Kastle skis, 70% off list. Reid Rihel, Ext. 3416; after 5 pm, 969-0205.
- FOR SALE - Command control elec. football game, like new, \$8. Complete Eldon roadway racing car set with board, \$18. Duane, 892-1338.
- FOR SALE - Panasonic 8-track car stereo indoor/outdoor, outdoor bracket only, excl. shape. Also 2 Craig speakers. All for \$75. Greg Lawuna, Ext. 3677.
- FOR SALE - Ampex micro 70 stereo cassette tape recorder w/2 speakers, 2 microphones, carrying case, battery or AC, \$55. Randy Thompson, Ext. 3355.
- FOR SALE - 1972 VW Bug, lt. blue, 26,000 mi., excl. cond. \$2300. Lyle MacNicol, Ext. 3171.
- WANTED TO BUY - Used motorcycle any cond. Prefer 4 cycle engine, over 250 cc, for street use. John Houkal, Ext. 3673 or 969-2579 evenings.
- FOR SALE - Slide Projector, manual w/stack loader. Takes Sawyer trays & roto files. \$20. G. Nicholls, Ext. 3117 or 892-1829.