

# The Village Courier



National Accelerator Laboratory

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## PROGRESS REPORT FOR FEBRUARY, 1973

Vacuum leaks in two of the ceramic insulators in a main ring RF cavity caused some problems this month, but the trouble has been corrected, and 300 GeV operation resumed.

An intensive effort is being made to increase the intensity of the booster beam. Beam studies are under way, and correction magnets have been installed. The 8 GeV intensity was raised by 20 per cent in February, to  $4.2 \times 10^{11}$  protons per pulse.

Experimental data were taken in the meson, neutrino, and C-Zero areas this month.

## NAL EMPLOYEES PARTICIPATE IN ACCELERATOR CONFERENCE

The National Accelerator Laboratory was well represented at the 1973 Particle Accelerator Conference, "Accelerator Engineering and Technology," held March 5 through 7 at the Sheraton-Palace Hotel in San Francisco. Donald E. Young, of the Accelerator Section, was on the organizing committee for the meeting. Richard Cassell, Robert Daniels, and Young were invited by the organizing committee to present papers on their particular specialties: main ring power supplies, computer controls, and NAL operations, respectively. Eight other papers were presented orally by NAL employees, and an additional twenty-one were selected for inclusion in the final proceedings of the conference, to be published in the June issue of Transactions on Nuclear Science.

The purpose of the conference, which is held every two years, is to provide a means of communication for accelerator scientists and engineers, and those concerned with the medical and industrial applications of accelerators.

"It was an extremely good conference," commented Don Young. "Of course, a great deal of interest was expressed in NAL and the Los Alamos Meson Facility, the newest machines to be put into operation. Many people were quite surprised to discover how deeply engrossed in our experimental program we are at NAL. One of the highlights of the meeting was the closing statement by Wolfgang K.H. Panofsky, Director of SLAC. He discussed the importance of high energy physics research, and commented that he felt we needed yet another 10 years of higher energy -- and a machine 10 times larger



*...Russian visitors who stopped at NAL on their way home from the conference, viewing the Control Room...*

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than the 500 GeV possible at NAL!"

Between 700 and 800 people from all over the U.S. and some foreign countries attended the meetings. They had a chance to tour Lawrence Berkeley Laboratory, where it all began in big accelerators, and SLAC, still the largest linear accelerator. Some of the international visitors stopped in Illinois to see Argonne and NAL on their way home at the end of the week.

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NEW OPERATIONS GROUP TO STAFF OPERATIONS CENTER

Dr. Robert Wilson announced the establishment of a new laboratory section, the Operations Section, last week. He has appointed Halsey Allen, now NAL Safety Officer, as Section Head.

Although its functions have not been completely defined, this new group will have two important tasks: to provide a means of communication among NAL operations personnel and users in the experimental areas, and to coordinate all activities related to the operation and use of the accelerator facility.

Plans for use of the beam by each of the many research groups, for accelerator studies to improve the quality of the beam, and for machine shut-down to carry out routine maintenance are prepared on a long range basis by Jim Sanford, and in much greater detail at the weekly Experimental Planning meeting. It will be the task of the Operations Group to implement the schedule, and post daily changes as necessary. Thus, the Operations Center being set up will become the nerve center for the accelerator system, the experimental areas, and in fact, the entire Laboratory.

These duties are currently being supervised by Jim Sanford and Art Greene at an operations desk in the Main Control Room. Three Operations Assistants, Jim Liebau, Warren Light, and Anthony Malensek, man this desk from 8:00 a.m. to midnight, seven days a week. These three will be the backbone of the new section. Two more people will be added to the staff in the near future, so that the Center can remain in operation 24 hours a day.



The Center will eventually be located on the first floor of the Central Laboratory, in the north portion of the east wing. Thus, it will be easily accessible to anyone desiring information about the current status of operations.

Commented Halsey Allen, "The Laboratory is large, and spread over a wide area geographically. A lot of problems arise from lack of communication. My hope is that the Operations Center will be a source of information and a center for communications, whereby laboratory personnel and visitors will be able to get a maximum of information with a minimum of effort. In other words, we hope to be a catalyst in keeping the Laboratory running smoothly and efficiently."

...Halsey Allen...

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THEORY GROUP HOLDS CONFERENCE

"Diffraction Phenomena: Issues and Answers," the second topical conference planned by the Theoretical Physics Group for 1973, was held in the Curia on March 2 and 3. About one-hundred people attended the two-day session, and discussions throughout were lively. D.W.G.S. Leith, from SLAC, spoke on Friday afternoon, and F. Zachariasen of Cal Tech spoke on Saturday morning. Panel discussions followed each talk.

The meeting was planned by H.D.I. Abarbanel and E. Paschos, of the NAL Theoretical Physics Group. The success of the first two topical conferences has encouraged the Theory Group to begin thinking about plans for similar meetings next fall and spring. Topics are now being considered, and all suggestions are welcome.

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ARTS AND CRAFTS, NAL STYLE



The NAL community has some very talented and creative members, as evidenced by the 1973 Arts and Crafts Exhibit in the Village Cafeteria the week of March 5. Not only oil paintings, water colors, collages, sketches, but also paper tolle (three dimensional paper painting), eggery (jeweled eggs), macrame (fringes of coarse string tied in ornate knots), leatherwork, sculpture, lapidary, and all manner of models were displayed. The radio-controlled aircraft entered by the Barnstormers caused much comment, as did one miniature railroad car which had over 160 pieces. As Denise Augustine, who organized the show, commented, "We had 48 people enter, all their things were really good."

The viewers were equally enthusiastic. As one visitor was overheard to remark, "This cafeteria hasn't looked so good in years. Why don't they leave it all here?"



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*"It's a pretty nifty sweater," comments Quentin Kerns as he proudly models the sweater his wife designed and made for him this past Christmas. If you look closely, you will see the NAL logos, in red on a blue background of course, which encircle the sleeves and the body of the sweater. They represent the two types of magnets in the Main Ring system, dipoles and quadrupoles. (Unfortunately, the pattern doesn't show well in the photograph, as the colors are too close in intensity.) The white design on the front was adapted from the cover of the NAL 1968 Design Report, although as Quentin observed, the shape of NAL on the landscape has changed considerably since then, with the addition of two more beam lines Faye Kerns, shown here with her husband, says she taught herself to knit as a child, with "nails string, and a 25¢ learn-how book," although she just began making garments about three years ago. She'll be happy to help anyone wishing to begin a similar project.*

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## CHECK IT CAREFULLY

An annual statement was mailed last week by TIAA-CREF, the insurance carrier for the NAL retirement program, to each employee participating in the program. It is a record of how much has been contributed to each contract by the Laboratory and by the employees, through payroll deduction, as well as an analysis of what amount each person would receive monthly upon retirement if contributions were continued at the same rate.

Any employee who has not received a statement should notify Ralph Wagner, in Personnel, Ext. 3324, or write directly to TIAA-CREF, at 730 Third Avenue, New York, N.Y., 10017.

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## MEET YOUR NALREC BOARD

NALREC, which sponsors many of the recreational, social, and cultural activities enjoyed by the NAL community, consists of 25 employees, from all sections of the Laboratory. The Board coordinates activities, provides equipment, and as much advice as is necessary. The Committee is presently attempting to centralize recreational activities on site, and hopes to expand their present programs as well as initiate new ones as desirable. Their meetings are held on the first Wednesday of each month, at 5 p.m. in the Snake Pit, and anyone is welcome to attend.

*Pictured here are the members of the present NALREC Board, who were elected for one-year terms last November. (Standing (L-R): Mark Kibilko (Vice President, Athletic Activities), Mildred Meyer (Treasurer), and Liz Foster (Secretary). Seated (L-R): Eric Jarzab (President), Carol Weissert (Vice President, Social Activities), and Marilyn Paul (Vice President, Cultural Activities).*

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Photos by NAL Photographers

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## NAL ALBUMS AVAILABLE

Colorful albums, containing the same photographs and descriptive material as the display boards have been prepared by the Public Information Office. They are intended to introduce the Laboratory to people who may not have a chance to tour the site. Two of the volumes are already being used by the EEO Office in their recruitment of students for the Summer Physics Program.

The display boards, pictured at left, are available to schools and libraries for one-month periods.

If you are interested in borrowing either a display board or book, stop by and see Claudia Robertson, Public Information Office, 35 Blackhawk, or call her at Ext. 3351.

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ARCHERY ANYONE?...Anyone interested in having a Archery Club and Range at NAL, please notify Tony Frelo at Ext. 3349.

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## CLASSIFIED ADS

FOR SALE - Pirelli Radial Tires, like new! 650-14, 5 tires, 3 wheels - \$100. Call Dick Figlik, Ext. 3287 or 365-9102.

FOR SALE - Two tickets to the Van Cliburn concert, Wheaton College, Thursday, March 29 - \$4.50 each. Call Cyril Curtis, Ext. 3724 or 879-2974.

WANTED TO RENT - 2 or 3 bedroom house in Wheaton/Warrenville School District. Call Ray Brown, Ext. 3580 or 393-9103.

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