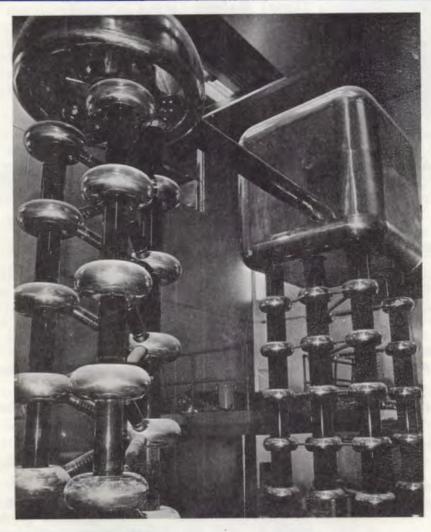


VOL. 2 NO. 12

MARCH 26, 1970



TESTING BEGINS ON NAL PRE-ACCELERATOR

Pictured above is the Cockcroft-Walton accelerator which will provide the first stage of acceleration in the NAL system.

In the photo can be seen the 750,000 volt d.c. power supply (shown at the left) and an insulated enclosure (at the right) that houses the electronics that operate the ion source.

In the ion source, the protons are formed by ionizing hydrogen gas. These protons are then accelerated from 750,000 volts to ground potential through an accelerating column.

The equipment is contained in a special metal-shielded, air-conditioned room to minimize sparking and prevent electrical interference with other electrical components in the linac building. Testing of this equipment, manufactured by the Haefely Company of Switzerland, started in February.

CALL FOR FIRST AID STUDENTS

Employees interested in taking a course in First Aid leading to an "Advanced First Aid" rating are asked to register with Dorothy Poll, NAL nurse, Ext. 232.

The course will meet on Wednesdays from 2:30 to 4:30 p.m. beginning April 1 and continuing for 14 weeks. It is hoped that each group will send one representative.

Already registered for the course are the following Village Service night shift employees: Clarence Dillard; Lionel Whaley; Virgil'Sutcliff.

A "standard" rating may also be obtained, by attending only the first four weeks of the classes.

HAPPENINGS AT THE AEC AREA OFFICE (By Minerva Sanders)

We extend a warm welcome to <u>Frank A. Durckel</u>, our <u>new</u> Assistant to the Area Manager for finance matters. Prior to joining our staff, Mr. Durckel was the Deputy Director of the Finance Division at our Chicago Operations Office at Argonne... Another addition to our staff, although temporary, is <u>Loretta Miller</u>, Construction Division, CH. Loretta is filling in for <u>Ruth Salach</u> who has just added an 8 lb. 2 oz. boy to her family. Congratulations are extended to Ruth and her husband, Ken.

NEW NAL EMPLOYEES - (February, 1970)

Accelerator Theory Janice M. Robbins, Secretary II, Lockport, Illinois

Beam Transfer

Michael Armstrong, Technician II, Chicago, Illinois

Steven R. Smith, Engineer, Middleton, Wisconsin

Booster

Robert Horbus, Technician II, Batavia, Illinois

Robert Russell, Technician II, Joliet, Illinois

Contracts

Ellen Topps, Secretary I, Lombard, Illinois

Material Services

Bonita Vickers, Clerk I, Aurora, Illinois

Fred Assell, Clerk, Aurora, Illinois

Planning & Scheduling Virginia Kula, Clerk I, Batavia, Illinois Plant Management Robert Vanecek, Engineer II, Glendale Hgt's, Illinois

Radiation Physics Harry Howe, Jr., Physicist Blue Island, Illinois

<u>Site Management</u> Lionel Whaley, Maintenance Man I, Maywood, Illinois

Technical Services Walter Ever, Machinist, St. Charles, Illinois

> Pedro Herrera, Machine Shop Asst., Downers Grove, Illinois

William Martin, Machinist, Chicago, Illinois

Charles Matthews, Machinist, Chicago, Illinois

James Schmidt, Inst. Machinist, Bridgeview, Illinois

Louis Severa, Jr., Technician II S. Elgin, Illinois

Village Services Virgil Sutcliff, Maintenance Man I, Oswego, Illinois

NAL FAMILY EASTER EGG HUNT - SATURDAY, MARCH 28TH - 1:00 P.M. - KUHN FARM.

THAT WAS THE WEEK THAT WAS (By Hazel Cramer)

(On Saturday, March 14, more than 100 members of the NAL staff joined a celebration in the NAL Cafeteria to observe the fact that the Main Accelerator section had "beat the protomain deadline." Robert R. Wilson, NAL director, and Ernest Malamud, physicist, Main Ring, were among those in attendance. The event observed the completion of the prototype of a Main Ring section, dubbed the "protomain." The prototype includes a sample magnet and the components for one complete cell of the Main Ring system which eventually will be a part of the single largest element in the NAL accelerator system. It is located on Shabbona between Neuqua and Winnebago Streets, across from the NAL Model Shop.) ****

Would you believe blue paint on the secretary's tennis shoes, on almost everyone's hands and faces, and even in the Associate Section Leader's hair? Well these were standard sights around the Main Ring in the frantic game of "Beat the Protomain Deadline".



(L. to R.) Ryuji Yamada, R.R. Wilson, Richard Cassel and (kneeling) Ernest Malamud, assembling lower coil in bending magnet in Main Ring Lab Building #5.

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When the protomain date of March 20 was first announced it all seemed a long way off. Why we have plenty of time to make that date. But in the way of all such deadlines, it approached inexorably closer and closer.

The American College Dictionary tells us that a magnet is a body (as a piece of iron or steel) which, like a lodestone, possesses the property of attracting certain substances. So far so good! Even we lay people could understand that much. But to our secretaries to whom a magnet was one of these little horseshoe-shaped toys, with which you could pick up a nail or a pin, the actual size of the magnets was really a surprise. Boy, look at all those little things (lay language for laminations) that go into that other thing (lay language for half cores)! Is that all really going to be only <u>one</u> magnet?

The fellows in the laboratory looked like they were having all the fun hammering down laminations with that hammer - or is it a mallet? The girls in the office couldn't wait to try it. A few minutes and a few sore arms later, they "reluctantly" returned the hammers to the technicians and spent a few more minutes figuring out how to type with only one arm.

All of a sudden our laboratory seemed to have taken on the aspects of a hospital with all the men in their white coats and that "goo" (translation: epoxy) that they were brewing out there did smell a little antiseptic - or even worse. First you spread it all over the two half-cores, press them together and clamp them in place. Voila - we've got a magnet or almost.

Not all the work of getting the protomain ready was making magnets. Various groups were working on controls, vacuum system, and other not so obvious aspects. Also we musn't neglect the esthetic side of the protomain. So one weekend our bunch of budding Picassos - in reality technicians, draftsmen and staff people - took paintbrushes in hand and painted magnets, bases, endplates and - by the looks of their once white coats - a considerable portion of each other.

From being content to meet the deadline, we became intent on beating the deadline. So the week of March 9 the countdown began. It became a "fantasyland" with such sights as a mighty mite of 150 pounds jumping on a two-ton half-core to move it a little (sorry to say he didn't make much of an impression), and the count going on and on. As hourly reports were posted - ten, nine, eight, seven, six - we all worked amid admonitions of "Don't get up tight, anybody." Come on vacuum, come on controls! Five, four, three, two, one - BLAST OFF. We made it - a whole week ahead of schedule.

As our magnet-making for the protomain becomes history, we look forward to the other 99% of the Main Ring with high hopes for another game of "Beat the Deadline".

GETTING IT STRAIGHT

The article published in the March, 19th issue of the Crier entitled "Tax Tip" quoted at some length from a publication of the Chicago Association of Commerce and Industry. This article implied that it was applicable to the tax year 1969 for which tax returns will be filed on April 15, 1970. However, upon information received from the Business Office, the source was checked and it was found that it is applicable to the tax year 1970 and to the return to be filed on April 15, 1971. The Business Office suggests that the memorandum dated February 26, 1970 circulated by their office on this subject should be taken into consideration in the preparation of returns to be filed April 15, 1970.

YOUTH AIRLINE DISCOUNT CARDS AVAILABLE

"Youth Fare Plan" student discount cards are now offered by all airlines for young people up to the age of 22 years. Applications and further information may be obtained from <u>Beverly Braun</u>, <u>Personnel</u>, 22 Sauk, Ext. 225. The card is interchangeable among all airlines and entitles holders to 25-33% discounts.

AMONG RECENT NAL VISITORS

Two busloads of students from Yorkville Community High School toured the Laboratory. on Thursday, March 19th with their teacher, Mr. Gordon Campbell and Ronald Cuny who is practice teaching at Yorkville. Ron had worked with the Laboratory guard service last summer and was anxious to have the students see "the world's largest proton accelerator" under construction. <u>Chuck Schmidt</u>, Main Ring, and <u>Bob Kolar</u>, Booster, spoke to the group in the protomain and the service building in the Village; <u>Phil Livdahl</u>, Linac, was the guide in the linac building at the permanent site.

Frank Haven, managing editor, Los Angeles Times; Richard Cooper, Chicago bureau chief and Bryce Nelson, staff correspondent, toured the Laboratory and the construction site on March 18th.

The Science Club of the Geneva Community High School, accompanied by their sponsor, James Vial, visited the Laboratory on Wednesday, March 25th.

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CONDOLENCES

As the CRIER goes to press, we have learned of the death of <u>Jean Luniac</u> who was the first secretary with the NAL project. Those who have been with the Laboratory since the beginning feel a keen sense of personal loss.

CLASSIFIED ADS

- FOR SALE 1967 Yamaha motor bike. 100 cc. \$225. Joe Mistal, Ext. 364.
- LOST Sterling silver charm of a surf board, with lite blue markings. Lost on site in January. Pat O'Leck, Ext. 278.
- FOR SALE '68 Dodge Charger, RT, 2 dr. Hrd. Top Dark green; Blk Vinyl Top, Blk. interior; console, 440 cu. in., automatic. Call 968-1663 after 6:00 p.m. R. Salach.
- FOR SALE Bell & Howell zoom turrent movie outfit. Includes, sun-o-meter turrent 1.9 camera, projector with reverse, and 15/20 m.m. zoom lens. Bell & Howell two lite bar with lamps, camera case, 400' take-up reel, type A filter, and handle grip. Call Milton Carter 879-2360.

National Accelerator Laboratory P.O. Box 500 Batavia, Illinois 60510

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