

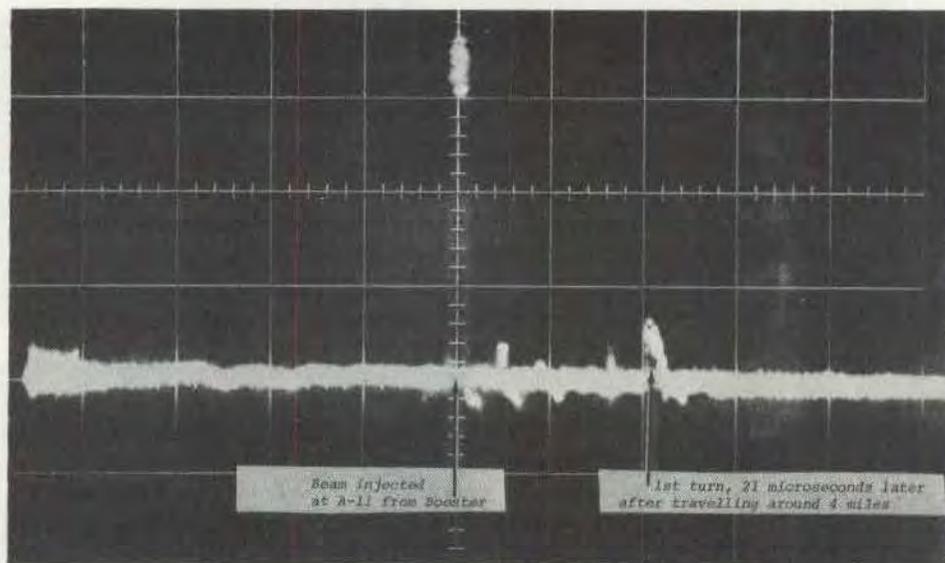
The Village Crier

 national accelerator laboratory

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

Vol. 3 No. 27

July 8, 1971



....Oscilloscope trace of the first turn of the beam in the NAL Main Ring....

PROTON BEAM GUIDED THROUGH ENTIRE NAL ACCELERATOR SYSTEM

The formal announcement was terse, but behind it there was almost unbelievable hard work and creativity. Physicists, engineers and technicians worked around the clock; even Nurses Dorothy Poll and Glenys Smith were on hand during the "owl shift" to observe and to assist, but, fortunately, they were not needed.

No one jumped up and down with joy; not even a champagne cork was popped. In the Control Room at the Central Laboratory area, there was an atmosphere of accomplishment, but not of celebration, because there was more work to be done in the weeks and months ahead before total victory could be acclaimed. In the Control Room, about 20 persons observed the tiny closed circuit television sets that seemed only to blink on and off, but which really were recording another milestone in the development of the National Accelerator Laboratory.

At mid-morning Wednesday, June 30, the U.S. Atomic Energy Commission and the Laboratory issued a brief statement. It read:

"A proton beam was guided through the entire National Accelerator Laboratory accelerator system for the first time at 6:44 a.m. CTD, Wednesday, June 30, 1971. The beam was accelerated to 7 BeV in the linear accelerator and the booster accelerator system and then 'coasted' through the largest component in the NAL accelerator system -- the main accelerator, which is four miles in circumference.

"Present plans call for the main accelerator staff to continue beam studies until Thursday night and then to shut down for the holiday weekend. The next

Continued on Page 2

milestone facing the accelerator system crew is to accelerate the protons in the main ring, working up to the system's full original design energy of 200 billion electron volts."

Later, a look at the official log revealed a brief, light-hearted but significant observation by a physicist: "Only 50,000 more turns to go." Obviously the detection of the first beam through the entire NAL accelerator system was only the beginning of a new era and the beginning of the end of the first major phase of construction at NAL.

Don Young, Operations head, held several meetings after the first success. With his colleagues, he discussed various operational alternatives. One such meeting was held at 3:00 p.m. Thursday. Then it was decided to run the machine until at least midnight.

At 3:20 a.m. on Friday, July 2, 1971, Frank Cole, physicist working with Young's group, read a statement:

"Operation was shut down a few minutes ago at 3:15 a.m. During the operation, up to eight complete turns in the Main Ring were observed with some losses during this coasting. The operation is being shut down for the holiday week-end and will resume some time next week."

....IN THE CONTROL ROOM: The Main Ring Control center was a quiet but intense locale of NAL activity last week as the first proton beam was sent around the Main Accelerator to achieve another NAL milestone. In this photo, taken a short time after the beam completed one turn through the Main Ring, several members of the NAL staff check the "evidence" in the official log book and also on the closed circuit television screens returning various data to physicists and engineers. From bottom to top they are: Barry Barnes, Al Maier, Ernie Malamud (back to camera), E.L. Goldwasser, Shigeki Mori, and Robert R. Wilson....

Photo by Tony Frelø, NAL



ALL-STAR FOOTBALL GAME BUS TRIP IS PLANNED

A bus trip for NAL employees to attend the football game featuring the College All-Stars of 1970 and the Baltimore Colts at Soldier Field in downtown Chicago on Friday night, July 30, has been arranged by Chuck Marofske, Personnel Manager.

Some 50 tickets are available for NAL employees. They will be sold by Daniel Matias, Linac; Bob Bennett, Machine Shop; and Eddie Stapleton, Personnel. Tickets are \$9 per person and checks should be made payable to "Nalrec Inc."

Present plans call for the bus to leave from the NAL cafeteria at 6:30 p.m. for the field. There will be free beer and refreshments on the air-conditioned bus.



...EEO and Community Relations Office Summer Students, 1971: (standing, left to right) Larry Harris, Nathaniel Wooten, Charles Gregory, William Pollard, Don Parker, Julien Patterson, Dallas Scott, Roosevelt People, Charles Gideon, Girardeau Henderson; kneeling; left to right; David Escudero, Leroy Jackson, Irvin Hayes, Ron Griego, Clarence Taylor.

Photo by Tony Frelo, NAL

15 COLLEGE STUDENTS IN NAL SUMMER WORK PROGRAM

Fifteen young men from nine colleges and universities, based in the southern and eastern portions of the United States, are working this summer in various sections at NAL.

All members of the group are majoring at their colleges either in the physical sciences, mathematics or engineering. They were specially selected under a "Youth Opportunity Program" administered by the Laboratory's Equal Employment Opportunity office. The young men presently are residing at North Central College in suburban Naperville. In addition to working in various departments of NAL, arrangements have been made for the summer employees to attend various lectures, and discussions scheduled by NAL in the Village. They also will receive an in-depth tour of the accelerator system. For the week-ends, tours of various museums and recreational centers in the Chicago metropolitan area have been scheduled by the EEO group under the direction of Kennard Williams. Several of the students will receive credits from their colleges for their work at NAL.

The group began working at the Laboratory on June 14 and will continue until August 27. Members of the NAL Personnel office, including William Butler, Eddie Stapleton, Warren Cannon, and Ken Williams, began their efforts to recruit the group in April and worked with guidance counselors at various colleges to select the 15. Said Kennard Williams: "Our experience in working with the Bio-Medical Careers program in Chicago shows us that the second year of college is a particularly important time for the minority student majoring in the sciences and medicine. He is often beset at this point with financial and academic problems and he needs a 'lift' to strengthen his motivation to continue. This is what we are trying to do in this summer job program."

Following is a brief profile on each of the members of the group: David Escudero is 21 years old, single, and makes his home in Las Vegas, New Mexico. He just completed his third year at New Mexico Highlands University where he is majoring in mathematics and minoring in physics. David is working in the NAL Main Ring section. Charles Gideon is 20 years old, single, and lives in High Point, North Carolina. He just completed his third year at North Carolina A&T State University, majoring in engineering physics. He is working in the NAL Physics Research section. Charles Gregory, 19, single, lives in Birmingham, Alabama. He has completed his third year at Tuskegee Institute, majoring in physics and mathematics. He is

in the NAL Physics Research section.

Ronald Griego, 22, married, lives in Las Vegas, New Mexico. A first year student at New Mexico Highlands University, he is majoring in mathematics and physics and is working in Accelerator Operations. Larry Harris, 20, single, from Simsboro, Louisiana. Completed his third year at Tuskegee Institute, majoring in physics, working in NAL Beam Transfer. Irvin Hayes, 19, single, from South Hill, Virginia. In his second year at Virginia State College majoring in physics, working at NAL Experimental Facilities.

Girardeau Henderson, 22, married, from Perry, Florida. Received his BS degree in physics from Florida A&M University and is working at NAL in Radiation Physics. Leroy Jackson, Jr., 21, single, from Beaufort, South Carolina. Has completed his third year at Virginia State College majoring in physics. He is working in NAL Experimental Facilities. Donald Parker, 18, married, from Baton Rouge, Louisiana. A first year student at Southern University, majoring in physics. He is in NAL Accelerator Operations.

Julien Patterson, 20 married, from Norfolk, Virginia. He just completed his second year at Norfolk State College majoring in electrical engineering. Julien is working at NAL in Radio Frequency. Roosevelt People is 18, single, and lives in Collinston, Louisiana. A first year student at Southern University majoring in physics, working at NAL Accelerator Operations. William Pollard, 20, single, lives in Opelika, Alabama. Second year student at Alabama A&M University, majoring in mathematics, working at NAL Accelerator Operations.

Dallas Scott, 21, single, from Patrick Springs, Virginia. He has completed his third year at Howard University, majoring in physics. He is working at NAL Radiation Physics. Clarence Taylor, Jr., 21, single, from Baton Rouge, Louisiana. He has finished his third year at Southern University where he is majoring in Nuclear Physics. Clarence is working at NAL in Beam Transfer. Nathaniel Wooten, 25, is married and resides in Norfolk, Virginia. He has just completed his third year at Norfolk State College, majoring in physics. Nathaniel is working in Experimental Facilities.

MARK YOUR CALENDAR: The annual NAL picnic will be held Sunday afternoon, August 29. Volunteers are needed to assist in arranging the various games and events to be staged for children. If you are able to assist, please call Bernie Lensmeyer, NAL cafeteria, Ext. 402.

SOFTBALL LEAGUE SCORES: Tuesday, Radio Frequency 21, Physics Research 18; Machine Shop 15, Main Ring 14. Thursday, Beam Transfer 30, Radio Frequency 19; Personnel 19, Physics Research 18.

CLASSIFIED ADS

TO BE GIVEN AWAY - 6 short hair kittens, 3 fe. & 3 male., Blk. & wh. 1 German Shepard, 5 mos. silver & blk. markings. Very friendly. 1 shaggy terrier, friendly, 2 yrs. old, housebroken. Call Dottie, Ext. 307.

FOR SALE - BSA Cycle, '57, rebuilt, 500 c.c., like new tires & spare, recently painted, plus extras. \$550 or best. Call LaDuane, Ext. 555.

FOR SALE - '62 rebuilt Volkswagen engine. Good running condition. \$150. Call Judy, Ext. 555.

FOR SALE - '64 Pontiac Catalina, \$200. P.S., P.B. A good second car. Call B. Martin, Ext. 721.

MUST SACRIFICE - Delux Electrolux sweeper & shampooer. 6 mos. old. \$125 or best offer. Rainbow vacuum cleaner. Brand new. \$225. Call Eugene Stark, Ext. 337.

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

U. S. Postage Paid
Non-Profit Org.
PERMIT No. 204
Batavia, Illinois