

The Village Crier



fermi national accelerator laboratory

Operated by Universities Research Association Inc.
Under Contract with the Energy Research & Development Administration

Vol. 9, No.34

September 1, 1977

ACCELERATOR UPGRADING, PART II

Last week's Village Crier spotlighted the Accelerator Division's transfer hall extension. This week we look at another Accelerator project coinciding with a Laboratory maintenance and development shutdown (Aug. 15 - Sept. 12): the second stage of a three-phase project installing a reverse injection (RI) tunnel from the booster area to the Main Ring (MR).

The RI tunnel, according to Accelerator executive assistant Bruce Chrisman, will be used in colliding beam efforts. Colliding beam facilities are an integral part of Fermilab's Tevatron project, a new high energy physics range -- 1,000 GeV (1 TeV).

As in the transfer hall project, Chrisman said, RI work began before the accelerator was turned off. From the MR's F-2 service building west, an earth berm over the MR enclosure was removed and backfill excavated from both sides of the MR for a length of 240 feet. Remaining berm was removed after beam shutdown. Then an eight-inch diameter hole was bored through the 16-inch-thick MR wall for a 70-foot beam pipe extension.

Next, a base concrete slab -- 14 inches thick by 8 feet 8 inches wide and 130 feet long -- was constructed for the beam enclosure, access enclosure and access shaft. The slab will support 13 U-shaped tunnel elements and four comprising a labyrinth. Each element weighs 33,000 pounds and measures 10 feet long by six feet wide and seven feet high. After a power crane places the elements, connections will be welded and joints sealed.

This phase of the RI tunnel is a full scale tunnel that will be utilized for targeting an extracted beam of 80 GeV for anti-proton production.

Beam pipe--10 feet of six-inch diameter sections and 60 feet of 12-inch diameter--will be aligned, field welded and tested by Fermilab personnel. The berm will be reconstructed over the MR and a berm will be constructed over the new MR enclosure to complete the project.

Phase 1 consisted of installing 20 feet of beam pipe from the booster and 80 feet of four-foot diameter sewer pipe enclosure east from the booster. Phase 3 will connect the first two sections with 1,100 feet of tunnel enclosure.

Besides Chrisman, overseeing the reverse injection project are: Marv Warner, Architectural Services; Howard Casebolt, Accel. Safety; Tom Pawlak, project engineer; Mike Mascione, construction coordinator; and Bill Testin, Alignment and Survey.



...Reverse injection construction...



IT'S A GIRL! -- BUFFALO, THAT IS

Labor Day came early for a mother buffalo at Fermilab.

A female calf, the first to be born on site this year, arrived Friday about noon in the pasture near Farm 43 and D Road. Vic Kerkman, buffalo herdsman, reported the mother (designated No. 5) and daughter are doing fine. The delivery took place without human assistance, Kerkman said.

He estimated the calf weighs about 40 pounds, stands 26 inches high and measures 38 inches from nose to tip of her tail. "She's good and healthy," Kerkman said, adding that the calf was almost immediately accepted by the mother.

Several other Fermilab cows show indications that more calves are on the way according to Kerkman. Like a typical new father, he passed out "It's a Girl!"-banded cigars to friends.

The latest mama buffalo is one of the original cows brought in when Fermilab's buffalo farm was established in 1970. Five other cows from South Dakota joined the herd last year. Twelve calves--seven males, five females--were born in 1976. About 30 calves have been produced by the Laboratory's cows and two bulls since the herd was formed.

The purpose of the buffalo herd is to preserve and restore a bit of Illinois heritage that was here some 200 years ago.

* * * * *

MESON USERS: YOUR INPUT IS REQUESTED

Meson department staff members need the advice of users. Plans for the future will be discussed at a "Post-Mesopause Workshop," Friday, Sept. 16, in Curia II. The day-long program will be held to present general outlines for planned possible improvements and also initiate a series of workshops intended to yield a plan for the Meson Laboratory upgrading.

December, 1977, is the tentative target date for a report listing proposed improvements. Workshop No. 1 will open with a welcome by E. L. Goldwasser, Deputy Laboratory Director. After an overview of the Research Division by John Peoples, and Tim Toohig on Meson present realities and plans, Hannu Miettinen will outline Meson physics accomplishments. A series of 15-minute talks on related topics plus discussion will comprise the afternoon session.

A six-month pause starting July, 1978, for capital improvements to Meson beams and facilities was announced last month.

* * * * *

Fermilab Auditorium Science & Humanities Lecture Series Presents

"GENETIC ENGINEERING--ON OUR OWN"

by Dr. Robert L. Sinsheimer

Friday, October 7, 1977 - 8:30 p.m.

Admission by free ticket

The third speaker in the 1977-78 Fermilab auditorium Science and Humanities Lecture Series will be Dr. Robert L. Sinsheimer, chancellor, University of California-Santa Cruz, effective today (Sept. 1, 1977). He assumed new responsibilities after serving as chairman, division of biology, at the California Institute of Technology since 1968.

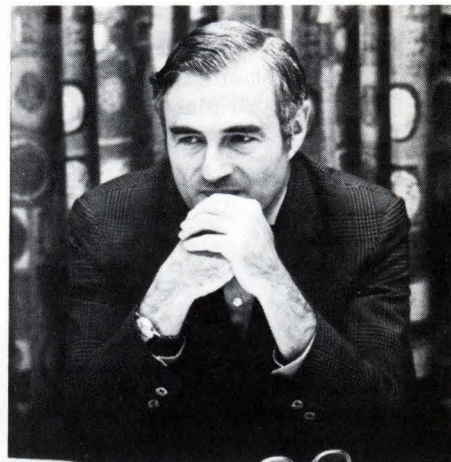
Dr. Sinsheimer is the author of more than 200 publications. His major scientific interests are: physical and chemical properties of nucleic acids; replication of nucleic acids; bacterial viruses; biological applications of ultraviolet and infrared spectroscopy.

He received S.B. (Quantitative Biology), S.M. (Biophysics), and Ph.D. (Biophysics) degrees from Massachusetts Institute of Technology in 1941, 1942 and 1948 respectively.

Awards presented to Dr. Sinsheimer include: D.Sc. degrees from Northwestern University and St. Olaf College, in 1976 and 1974 respectively; Beijerinck Virology Medal of the Royal Netherlands Academy of Sciences and Letters, 1969; and "California Scientist of the Year," 1968. Among his memberships are: National Academy of Sciences; chairman, editorial board, proceedings of the National Academy of Sciences; board of scientific advisers, The Jane Coffin Childs Memorial Fund for Medical Research; American Academy of Arts and Sciences; and American Association for the Advancement of Science.

Fermilab's Science and Humanities Lecture Series is supported by the Illinois Humanities Council and the National Endowment for the Humanities. The free programs are intended to bring together science and the humanities in a way which shows their inter-relationship and make both more understandable.

Admission to the lecture is by free ticket. Laboratory employees may obtain tickets at the Guest Office from 8:30 a.m. Monday, Sept. 6; distribution to the general public will open Monday, Sept. 12. Tickets may be reserved, but must be picked up before the night of the lecture. For reservations or information, phone the Guest Office at Ext. 3440.



LABOR DAY

Monday, September 5, will be observed as a holiday by the Laboratory. Jo Baaske, payroll supervisor, reminds weekly employees that the regular Monday

time sheet mail run, because of the holiday, will be made Friday, September 2, at 10:30 a.m.

Special serving hours will also be observed by the cafeteria. They will be: 8-10:30 a.m., breakfast; 11:30 a.m. - 1:30 p.m., lunch; and dinner will not be served.

Visitors may come to Fermilab between 8:00 a.m. and 8:00 p.m. on Saturdays, Sundays, and holidays. Visitors on weekends and holidays are permitted to visit the Atrium lobby and the 15th floor of the Central Laboratory. Children 12 and under must be accompanied by an adult.

* * * * *

WE'RE ON TV TONIGHT

Fermilab will be featured today (Sept. 1) and Sunday, Sept. 4, in repeat broadcasts of "The Key to the Universe," a science special on WTTW, Channel 11. Tune in tonight at 8 p.m.; Sunday's telecast is set for 3 p.m. The film premiered in the Chicago area in May.

HELP FOR PERSONAL PROBLEMS

Do you have laboratory-related problems? Are you a professional? A member of a minority group? Weekly employee? For all, an ombudsman is available to listen -- and act. The ombudsman is a sympathetic listener who is willing to go to bat for an employee. Three Fermilab ombudsmen want to help. All help is given with discretion and complete confidence. Office hours are on Tuesday and Thursday 11:00 - 1:00 8th floor N.E. Other times by arrangement. During office hours, phone Ext. 3160. Ombudsmen are: Jim Buffenmyer, Ext. 3279; John Barry, Ext. 3646; and Anne Burwell, Ext. 4278.

* * * * *

ENGINEERING LECTURE

The third of four on-site engineering lectures in a 1977 series offered by the Technical Services Division was held recently. L-R are: Hank Hinterberger, chairman, Engineering Policy Committee; George Mulholland, speaker on "Bubble Chamber Design/Construction/Utilization;" and Penelope Horak, coordinator of the lecture series. The fourth lecture is planned for November.



* * * * *

FIRST AID CLASS GRADUATES

A dozen Fermilab people learned emergency first aid procedures recently in a class taught by the Safety Office. Chuck Bonham, safety engineer, and Ed Brezina, safety inspector, co-taught the Red Cross multi-media system standard first aid course. Four two-hour sessions met from 9 - 11 a.m. at the exercise room at 16 Potawatomi in the Village. The class was the fourth conducted by Safety since November, 1976, and raised the number of graduates to 48. Topics were: wounds; shock; artificial respiration; poisoning; burns; ill effects of heat and cold; bandaging; head/internal injuries; gunshot wounds; infection; tetanus; animal bites; immobilization; heart attack; apoplexy; fainting; epilepsy; foreign objects in the eye/air passages; rescue and transfer. Using 20 film segments and 17 practice sessions, 12 students worked through 13 workbook lessons that tested them on material presented and provided more details on specific topics. Bonham and Brezina completed a 12-hour multi-media instructor course to qualify to teach the method. Latest students were: George Doyle, Village Services; William Noe, Sr., Proton; Philip Gavin, Accelerator Mechanics; Brad Kobiella, Housing; Donald Emery, Research Services; Vance Sauter, Energy Doubler; Dennis Curl, Internal Target; Ray Gunderman, Maintenance and Operations; and George Powell, James Parker, Charles Mangene and Dennis Williamson, Neutrino.

CL STOCKROOM CLOSING

The Central Laboratory stockroom will be closed approximately three weeks starting September 6, 1977. This is necessary to effect the move of all material to the new location in the Catacombs. All stockroom issues during this period will be made from the Main Stockroom at the Warehouse (Site #38).
