FERMINEWS

Fermi National Accelerator Laboratory

Operated by Universities Research Association Inc.
Under Contract with the United States Department of Energy

Vol. 3, No. 2

January 10, 1980

...Environmental protection officers meet with Safety Section personnel. In front of the table is Sam Baker. Seated (L-R) are Mike McKenna, Linda Freund, Jim Moncrieff, Joe Otavka, Rich Hawel, and Jim Kilmer. Standing (L-R) are Art Streccius, John Phillips, Al Lindner, Bob Allen, Tim Miller, Ed Arko, Dug Pinyan, Milt Kampikas, Penny Horak, Jack Upton, Roger Thompson and Ross Doyle. Baker, Phillips, Allen, Miller and Pinyan are with the Safety Section...

FERMILAB STRENGTHENS AND EXPANDS ENVIRONMENTAL PROTECTION PROGRAM

Fermilab has strengthened and expanded its environmental protection program, said Sam Baker, senior environmental protection officer with the Safety Section.

The Laboratory has named 26 environmental protection officers (EPO) who represent all divisions and sections. Baker also has been holding meetings with these people to explain the purpose of the program and the responsibilities of the officers. Basically, the program's mission is to ensure a clean, safe and healthy environment in which employees and users can work; one that also enhances the surrounding communities' pride in the type of living they offer their citizens.

A major responsibility of the EPOs will be to assist the division, section and department heads in the development and implementation of environmental protection procedures, said Baker. These people will be knowledgeable about the procedures and materials that are used in their areas. Furthermore, they will be the persons to whom others can go to discuss environmental quality.

Baker said that while he runs the program, he can't be everywhere at all times. "Our EPOs will be 26 additional pairs of eyes to help us do this job right. We have started a comprehensive program that we believe will be effective in helping Fermilab meet or even exceed the standards for a quality environment set by state and federal governments."

The divisions and sections and their EPOs: Accelerator Division--Art Streccius; Energy Doubler Magnet Section--Reid Rihel, Joe Otavka, Bernie Assell, Jesse Howat, Louis Greenwood, Gary Hodge, Harold Warren and John Zeilinga; Business Services Section--Albert Lindner and Bob Hall; Laboratory Services Section--Roger Thompson; Technical Services Section--Linda Freund, Jim Moncrieff, Pat McDonald, Penny Horak, Bill Jones, Frank Kleber and Dennis Bowron; and Research Division--Don Carpenter, Jim Kilmer, Ross Doyle, Jack Upton, Rich Hawel, Ed Arko and Mike McKenna.

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IMAGINATIVE M-7 RUNS SUCCESSFULLY

It was created and decorated by a team with the esprit de corps and cohesiveness that along the way broke through a few traditional barriers.

This may seem exaggerated, but it isn't. Just look at the photographs and read on about what the M-7 can do, and soon it'll be apparent that along the way barriers were, indeed, broken. There's seven "M's"--that's why it's called M-7 -- count them: Magnificent Multi-Muon Mass and Momentum Monitoring Machine. It was built by the Particle Instrumentation Group of Research Services for Experiment 401, a collaboration in the Proton East Area that is studying photoproduction of high mass two-body final states.

The M-7 -- which already has successfully been used -- clearly broke the barrier for beauty, leaving far behind the more sedate and austere looking hardware that fills the thousands of nooks and crannies throughout Fermilab. But the M-7 also broke the time barrier, somewhat.

It's a superfast, but relatively simple computer that looks at the data generated in an experimental run. During this preliminary analysis, and before the data is written on the magnetic tapes, it selects the events that might interest the experimenters and rejects those events that would be of no interest. In this manner, the magnetic tapes the researchers examine are considerably enriched with data.

Now, back to the team members who are so proud of their work. Tom Droege, group leader of the Particle Instrumentation Group, and Kathy Turner, an engineer with the group, would have to be called the parents. They built it. Credit for the art goes to Merle Watson, a technical specialist with the group.

Others closely associated with the project include senior technician Tom Wesson, responsible for mechanical and power design; Sammy Rumple, wire wrapping; and technicians Leticia Chavez and Ed Frazier.

The primary motivators for the design and construction of the M-7 include collaborators John Peoples, head of Fermilab's Research Division; Irwin Gaines, staff physicist with the Colliding Detector Facility; and Dave Harding, a research associate.

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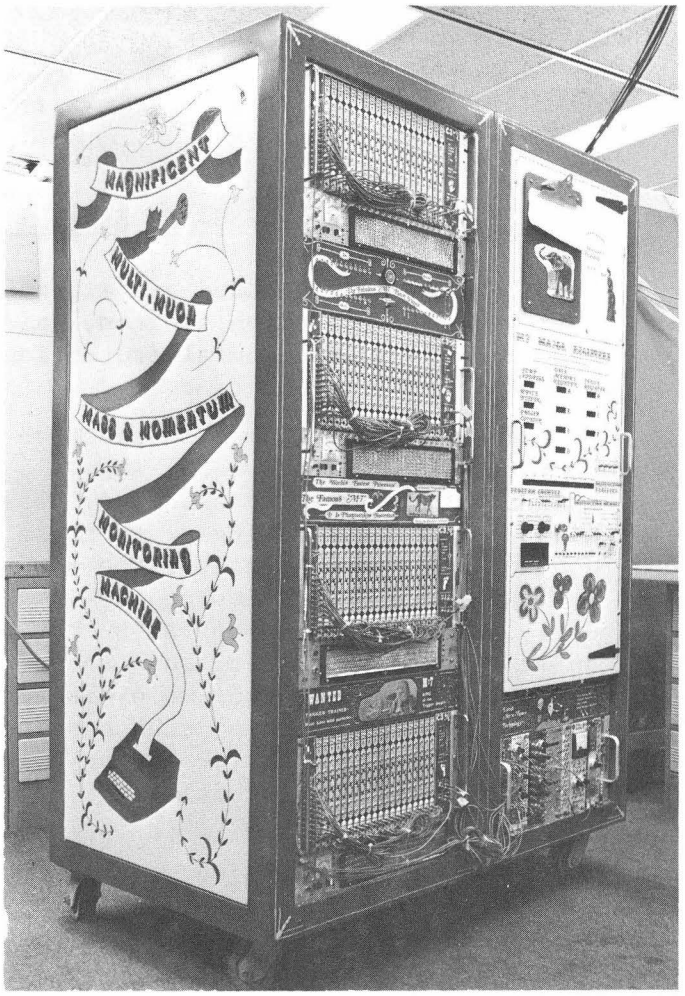
...Beaming with pride, they surround their magnificent machine. From the left, Merle Watson, Kathy Turner, Tom Droege, Dave Harding (behind M-7), Tom Wesson, Irwin Gaines and John Peoples...



...As colorful as a peacock, the M-7 shows off its plumage...

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GOODFIELD TO SPEAK AT FERMILAB

...*Goodfield*...

Dr. June Goodfield will speak Jan. 18 at Fermilab about "Science and Human Values."

Author and faculty member at Rockefeller University, she will begin her lecture at 8:30 p.m. in the Central Laboratory auditorium. Her talk is free and open to the public, but admission will be by ticket only. To reserve a ticket, call Ext. 3124.

Goodfield's appearance here is another in the Science and Human Values Lecture Series that is sponsored by Fermilab and the Illinois Humanities Council. The purpose of the free lectures is to bring together science and the humanities in a way that shows their interrelationship and will make both more understandable.

Born and raised in Stratford-on-Avon, Goodfield was educated at the universities of London and Leeds in England. She has been associated with and has lectured at universities in many countries. Some of these institutions include Harvard, Wellesley and Michigan State in this country, and University of Sussex, England, Hebrew University, Jerusalem, and University of Hamaden, Tehran, Iran.

She is widely recognized for her ability to interpret science in terms the public can grasp. Her books as author or co-author include "The Architecture of Matter," "The Siege of Cancer," "The Discovery of Time," and her most recent work, "Playing God: Genetic Engineering and the Manipulation of Life." Presently she is working on more books, one of which examines the two-cultures approach of C. P. Snow.

Furthermore, Goodfield has produced and directed a number of documentary films on science. Judges at the Venice Film Festival honored one of them for its excellence. She also has written a scientific novel, "Courier to Peking."

After the lecture, which usually runs about one hour, an informal reception will be held in the Atrium. Refreshments will be served.

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SUPERVISORS' SAFETY COURSE HAD UNUSUAL HOMEWORK ASSIGNMENTS

...*A session at the supervisors' safety course. Clockwise from Marilyn Kasules, standing, are Fred Moore, Marv Warner, Steve Butala, Earl Bowker and Bill Wickenberg*...

One thing was immediately apparent. The homework assignments were offbeat.

The eight people attending a supervisors' safety course were asked by Marilyn Kasules, Fermilab safety training coordinator, to evaluate the course: its content, textbooks, audiovisual approach, handouts and any other aspects they felt were important. And with good reason, too.

Kasules was teaching a pilot program that will become the basis for future courses at Fermilab. The next one is expected to begin in early March, but there will be some differences. These courses will be tailored to Fermilab's needs, based on the evaluations of Fred Moore, Marv Warner, Steve Butala, Earl Bowker, Bill Wickenberg, Ed Arko, Mike Hryck and Stan Tawzer, the first students. The 12-hour course ended last month (December).

"What these eight people have really done," said Kasules, "is help us develop a program that will more precisely meet our needs." The initial course was patterned after one given by the National Safety Council and it covered major areas that include safety and the supervisor, recognizing accident problems, human relations, maintaining interest in safety, instructing for safety and industrial hygiene.

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MUON-NEUTRINO WORKSHOP CONTINUES

More than 150 scientists from around the world are attending the Muon-Neutrino Workshop that enters its second day today.

Sponsored by the Fermilab Neutrino Department, the workshop will run through Saturday (Jan. 12) and is being held in the Central Laboratory auditorium. Tom Kirk, neutrino experimenter and former head of the department, is the workshop's organizer.

Today the main subjects include Fermilab plans and Neutrino Area beams and construction schedule; new detectors and beam ideas from users; and theory.

Tomorrow topics include muon and neutrino physics in the 1,000 GeV range.

The workshop will end Saturday with a continuation of neutrino physics at 1,000 GeV and with talks on the beam dump and new flavor physics.

Overall, the workshop was organized to "focus on specific physics to be done with 1,000 GeV muon and neutrino beams plus their associated detectors," said Kirk. He added that the workshop is being presented from the users point of view.

The opening session yesterday (Wednesday) dealt with experiments at 1,000 GeV using the 15-foot bubble chamber as well as with related topics.

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EMERGENCY SNOW INFORMATION

A number of radio stations on both the AM and FM dials will broadcast information about Fermilab closing if the weather is too inclement.

The AM stations are: WGSB, 1480 on the dial; WMRO, 1280; WMAQ, 670; and WFVR, 1580. On the FM dial are WBMX, 103; WAUR, 108; and WKKD, 96.

WMAQ has assigned Fermilab the number 218. The station will use this number only - instead of identifying Fermilab by name - during emergency bulletins.

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EMPLOYEES SHARE KNOWLEDGE

Last month (December), a number of Fermilab employees helped the public learn about Fermilab and high energy physics.

Chris Quigg, head of the Theoretical Physics Department, spoke Dec. 11 at Illinois Wesleyan University about gluons.

Helping with conducted tours during the month were Jim Prince, Larry Coulson, Glenn Lee, Frank Turkot, John Satti, George Holland, Jim Garvey, Marty Solis, George Biallas, Don Rohde and Harold Johnstad.

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LORD OF THE RINGS

Robert R. Wilson, director emeritus of Fermilab, is the subject of an article in the January-February issue of Science 80.

The 12-page article by Philip Hilts is titled "Lord of the Rings." In it, Hilts writes about Wilson the physicist, the sculptor and the creator of Fermilab. Hilts tells about some of the little-known moments of agony and exhilaration that went into building Fermilab.

Copies of this issue may be purchased in the Public Information Office.

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A NEW RECORD

The Main Ring set a new intensity record of 2.562×10^{13} protons at 400 GeV. The time was 6:10 p.m. on Dec. 23, 1979.

The previous record at 400 GeV was 2.528×10^{13} set on Dec.31, 1977.

The record intensity at 350 GeV is 2.703×10^{13} set on Feb. 21, 1979.

The total number of protons accelerated during 1979--2.52×10^{19}--equalled the previous record set in 1977. However, in 1979, the record was achieved in fewer total hours of running time.

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FERMINEWS is published weekly by the Public Information Office of the Fermi National Accelerator Laboratory — P.O. Box 500 — Batavia, Illinois 60510 — Phone: 312-840-3351.

U.S GOVERNMENT PRINTING OFFICE: 1980—651-139/30