

FERMILAB NEWS

 Fermi National Accelerator Laboratory

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

Vol. 2, No. 25

June 21, 1979

YOUNG MEN AND WOMEN PREPARE FOR MECHANICAL CAREERS HERE

In a classroom in the former director's complex in the Village, Penelope Horak teaches 15 young men and women the intricacies of blueprint reading.

In a work area on the lower level of the Cross Gallery, Hendrik J. Van Leesten shows them how to run, maintain and repair common types of equipment used by mechanical technicians.

And at the magnet facility inspection barn, Jim Humbert carefully explains the fine points of vacuum technology.

Horak, assistant head of Technical Services section; Van Leesten, technical specialist with the Mechanical Support Group, Accelerator Division; and Humbert, technical specialist in the Quality Control Group of the Energy Doubler Magnet Division, are part of a new scenario that is now unfolding at Fermilab.

They are helping to give these 15 young men and women an opportunity to learn the basic entry skills in what will be a new career field for the students.

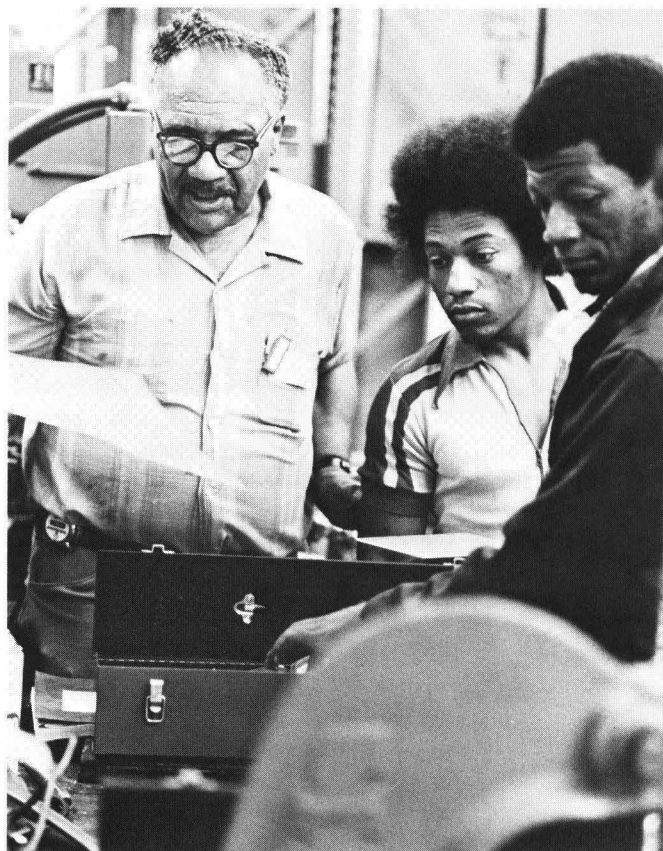
The students are here participating in a six-month training program that prepares them for jobs at Fermilab as mechanical technicians. The 12 men and three women--all from the greater Chicago area--were selected to pursue careers under the Comprehensive Employment and Training Act (CETA) that otherwise may never have been available to them. At the end of their training period, they may join the Fermilab team as mechanical technicians. The laboratory divisions and sections are committed to jobs for them.

Robert Amos, Benjamin Black, Harry Brown, Randal Jinks, Fannie Linton, Bernard McCray, Barbara Mitchell and Richard Rivera are from Chicago; Warren Brown is from Harvey; Dewayne Gillespie and Bishop Smith, Maywood; Estelle LeSure and Leroy Middlebrooks, Oak Park; and Kenneth Shores

(Continued on Page 2)

FERMILAB TO SURVEY EMPLOYEES AND USERS ABOUT ENERGY CONSERVATION PREFERENCES

Inserted in this issue you will find a short questionnaire asking for your opinion about public transportation at Fermilab. This survey is the first of several steps to encourage energy conservation awareness at Fermilab. Please express your opinion and return the form as indicated.



...Henry J. Van Leesten (left) shows Warren Brown (center) and Harry Brown the technical aspects of a machine shop. In this shop in the basement of the Cross Gallery, the young men and women learn about lathes, drill presses, band saws, hole punches and other shop equipment. They also learn how to do a right angle shear and regular shear as well as other techniques, such as milling...



...Joseph Rodriguez (left), Barbara Mitchell (center) and Benjamin Black discuss a fine point...

(Continued from Page 1)

and Rodney Shores, Broadview.

Providing guidance to the entire training program is Lauta Price-Joyner, manager of the Equal Opportunity Office at Fermilab. Serving on a resource and advisory committee for the CETA program here are Howard Casebolt, Ron Currier, George Doyle, Jeff Gannon, Penelope Horak, Jim Humbert, Frank Kleber, Bud Stanley and Ruth Christ.

Sharing the teaching responsibilities are Diane Engram, Naperville, instructor and counselor, and Dave Frazer, Joliet, instructor. He teaches technological subjects and Engram handles the academic topics. Both are being paid by CETA. The purpose of this

CETA mechanical technician training program--the first of its kind to be conducted here--is to train unemployed and under-employed men and women for jobs that offer them more challenging and rewarding futures, said Price-Joyner.

She particularly praised William R. Jones, general foreman of laboratory machine shops, and his machinists for their cooperation. Four machinists--Charles Matthews, Dave Billingsley, Joseph Rodriguez and Nelson Sample--have been helping in the afternoons teaching the students the basic shop work and mechanics that will be useful to them.

After the training program ends in early October, the Minority Information Referral Center will keep in touch with the men and women for 26 more weeks. The purpose is to help them maintain good work records and to tell them about various advanced educational opportunities at colleges and technical schools.

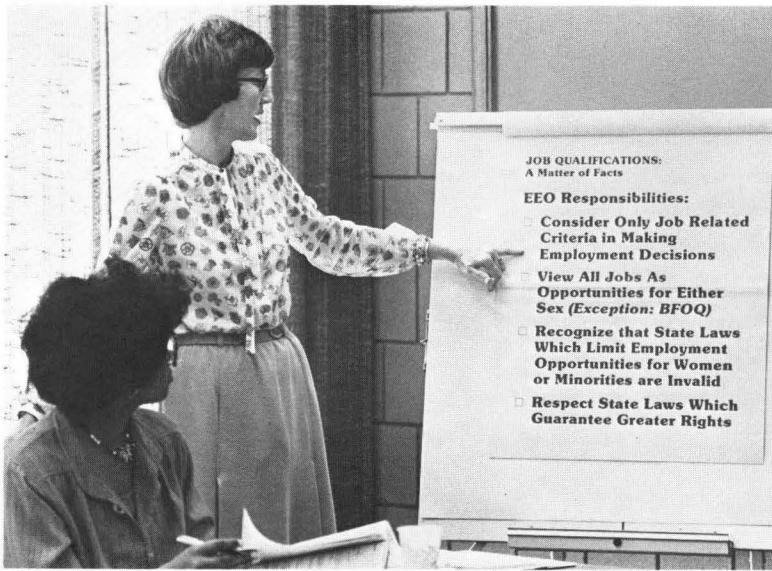
Price-Joyner also pointed out that the CETA program offers an effective way for women to break into a non-traditional type of work, such as learning a mechanical trade.

The students are in classes and shops from 8 a.m. to 4 p.m. five days each week.

* * * * *



...CETA classroom session in the magnet inspection facility led by Jim Humbert. Other Fermilab instructor is Penny Horak, second from left, front row. Just behind her right shoulder is CETA instructor Diane Engram. Behind Horak and to her left is Lauta Price-Joyner. Sitting at the very back is other CETA instructor, Dave Frazer...



...Ruth Christ (standing, above-left photo), Personnel Department, and Lauta Price-Joyner, manager of the Equal Opportunity Office at Fermilab, lead the first equal employment opportunity seminar June 13. The second was held June 20 and the third will be held June 27. The series for Fermilab employees is being conducted at North Central College, Naperville. In the photo above-right, some of Fermilab's top administrators spend the day gaining a better understanding of equal opportunity and its guidelines as well as learning how to more effectively apply its principles...

BIOLOGICAL COMPASSES HELP EXPLAIN ANIMAL BEHAVIOR

One jar was labeled "Med Eel Msh" and the other "Cedar MSH." Both contained muddy-looking water from a marine marsh and rested conspicuously next to a binocular microscope on the stage of the Central Laboratory auditorium.

It took more than an hour before the more curious members of the audience could line up to peer into the microscopic world contained in that water. This grand conclusion to the physics colloquium talk on biological compasses by Dr. Joseph Kirschvink of Princeton University must certainly have been worth the wait, judging from the exhortations of the impressed scientists who watched white pinpoints swimming in a black sea, bacteria that mindlessly responded to the direction of a magnetic field.

Geophysicist Kirschvink had carefully dipped a long pipette into one of the jars, extracted a few milliliters of fluid with its occupants and placed a drop or two on a slide. This demonstration should convince even skeptical members of the audience that some organisms respond to weak magnetic fields, he said.

Under the influence of a magnetic field, the organisms, wriggling their flagella (a long hair-like tail), moved toward one pole. When the field was reversed with the throw of a toggle switch, they moved in the other direction. Back and forth, back and forth...depending on how many times the viewer wanted to manipulate his captive subjects.

Strung along like a precious necklace of pearls in each bacterium were granules of magnetite (Fe_3O_4), a magnetic mineral. These granules are hooked into the nervous system of the bacterium and help the organism guide and control its movements--partly determined by the surrounding magnetic field.

The bacteria are only part of the spectrum of living creatures whose lives are influenced by weak magnetic fields, said Kirschvink. Others he talked about in more detail included bees, pigeons (particularly homing pigeons) and the primitive chitons, one of the first organisms discovered to be influenced by weak fields. Studies suggest that even man is sensitive to weak magnetic fields, he said.

* * * * *

GRAND LADY OF THE BUBBLE CHAMBER

George T. Mulholland, group leader with the 15-foot Bubble Chamber, said, "Her personable nature, attention to duty and conscientious approach to her assignments have won her the highest praise from all of us who have worked with her."

And Bert Forester, secretary at the Bubble Chamber, described her as "a very great lady. We're really going to miss her."

They were talking about Mrs. Leone McChesney, who for years has been a security officer at Fermilab, and who seems to have made the 15-foot Bubble Chamber her domain these past few years. Yet to the venerable Mrs. McChesney, her leaving Fermilab is not to be regarded as a retirement or as a leave of absence. It's just an opportunity to spend more time relaxing and "visiting my family around the country," she said.

Her friends greeted her for the final time June 15 with a farewell party that included a lot of hugs and handshakes, a cake and a going-away present.

"She will be sorely missed," said Mulholland, adding that replacing her will be a difficult task.



...Leone McChesney...

Mrs. McChesney comes from a pioneer family who farmed this part of Illinois more than a hundred years ago and on whose farm she now lives. Those familiar with history will recognize that the McChesney farm was one of the more prominent farms around here and that McChesney Road was named for the family.

But still, it's Mrs. McChesney herself who personifies that history and who with an exuberant reply reminiscent of the pioneer spirit said, "I never know for sure" when asked about her future.

* * * * *

PARTY TO REFLECT HARD TIMES

NALREC will hold a "Hard Times Party" June 27.

Reflecting the hard times most people are going through, the event will run from 5:15 to 9 p.m. in the Village Barn. Food and beverages will be available and entertainment will feature disco music and a live band. Chairperson for the party is Claudia F. Slater, Ext. 3090.

* * * * *

FISHING CONTEST TO CHALLENGE CONTESTANTS

Now is the time for all good fishermen to show off their skills.

NALREC has entered a fishing contest sponsored by the National Industrial Recreation Association. All full-time Fermilab employees and members of their families are eligible to participate at no cost. For additional information about the rules and for entry blanks, call Keith Schuh, Ext. 4048.

* * * * *

FOLK CLUB PRESENTS BARN DANCE

The Fermilab Folk Club will hold a barn dance with live music and old-time and western callers June 23.

The event will begin at 8 p.m. in the Village Barn. Admission is \$1.50 for each person. Beverages and other refreshments will be available.

* * * * *

DEADLINE FOR FALL HOUSING REQUESTS

The deadline for persons to submit requests for fall on-site housing is July 13.

Housing assignments will be based on the expected running schedule. Responses will be mailed the week beginning Aug. 6, and occupancy will begin Sept. 3. Call Housing Office, Ext. 3777.

* * * * *