

The Villager



Fermi national accelerator laboratory

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Harnessing Solar Heat

Heat from the sun's rays will be harnessed at Fermilab's Magnet Facility. By this time next year, solar heat will provide auxiliary space heating for work areas and auxiliary process heat for magnet curing.

The project is a Fermilab (Technical Services Division)/United States Department of Energy demonstration installation. It is under the design and supervision of Hank Hinterberger, associate Laboratory director and Penelope Horak, assistant division director. Project design is financed by a \$12,000 DOE grant; an additional \$48,000 grant is expected for its construction. It is anticipated that the system will be operating in mid-1978.

The retrofit project (literally "refitting an existing structure with a solar energy system," according to Horak) is a unique, inverted panel mirror augmented design. "The flat inverted panel faces downward for heat loss suppression, while reflecting curved mirrors concentrate available sunlight on to the panel by a factor of three," Hinterberger said.

Eighteen inverted panels, in six rows of three modules each, will be located in the northwest corner of the roof of Industrial Building 1. Piping connecting the panels will convey heated liquid to use areas as well as to a thermal storage tank: reserve for sunless days.

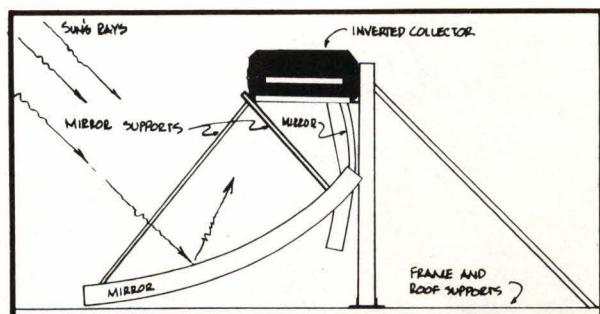
A prototype of the inverted panel design has been successfully operating for about eight months. It is located adjacent to the Model Shop. The retrofit will be described in a paper Horak will present at the International Solar Energy Conference in New Delhi, India in January.

Other Technical Service staffers assigned to the project design are Linda Even, Vic Kuchler, Joe Raczek, Gene Valdes and Marv Warner.

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...H. Hinterberger (L) and P. Horak with 1/8-scale model of solar collector...



...Sketch of solar collector showing typical operation...



...Stockroom staffers L-R are: F. Cesarano, N. Hill, T. Saunders, S.L. Jones, L. Henry, O.G. Guyer, B. Rawson...

NEW 'CATACOMBS'
OCCUPANTS

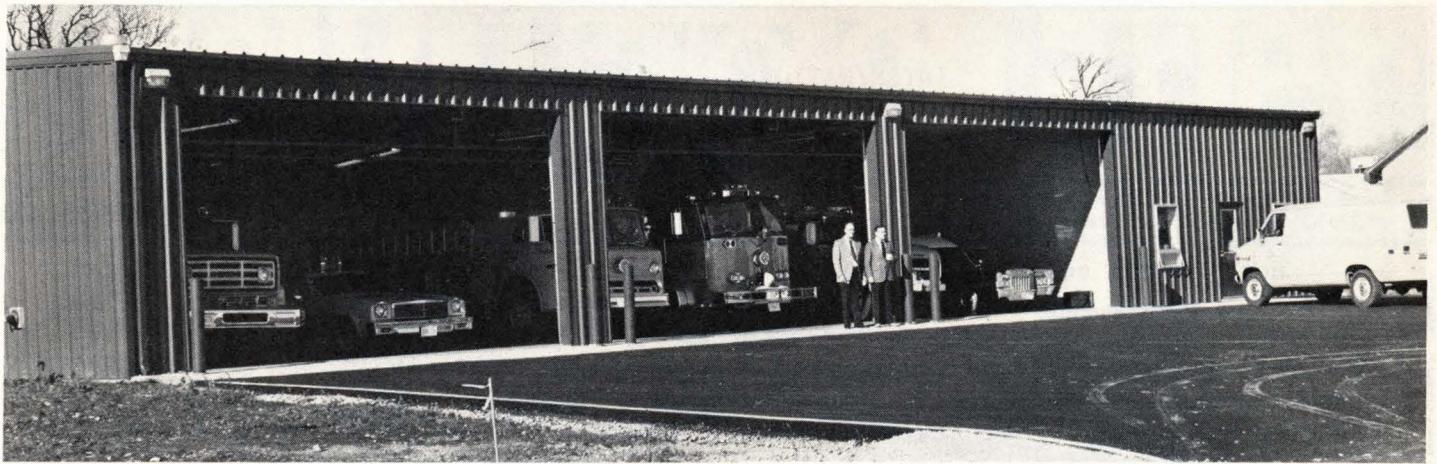
Duplicating, Central Laboratory Stockrooms and the Photo Unit have joined the Mailroom in the "Catacombs" -- the ground floor area under the Laboratory's North entrance. New facilities and respective personnel are introduced in the following photos.



...Photo unit members L-R are: T. Frelo, J. Rapovich, R. Fenner...



...Duplicating specialists are: Sybil Krebs, seated; standing M. Cepeda (L) and V. Readus...



...Fermilab's new fire station...

NEW HOME FOR FERMI FIREFIGHTERS

Donning a fireman's hat, Laboratory Director R. R. Wilson wielded a fire axe through a ribbon Friday in ceremonies opening a new Fermilab firehouse. The 5,000-square-foot structure, south of the receiving warehouse off Road B, was a six-month project. The bright red all-metal building is fully insulated and measures 51 feet wide by 84 feet long and 14 feet high. Interior areas include: an apparatus room, for ambulance, cars and trucks; office area; chief's office; dormitory sleeping room; shower room; and dayroom including kitchen/dining areas. For the first time in the department's seven-year history, all fire protection facilities are housed under one roof. The department consists of 20 men and nine pieces of equipment. Administrators accompanying Dr. Wilson were: John McCook, Associate Director for Administration; David Sauer, Site Services; R. Dorner, Emergency Services; R. Armstrong, Security Chief. Representing the Department of Energy were: Claude Dickens, Ron Zeitler and Kenneth Walker, Batavia Area Office; and R. Moser and F. Gorup, Chicago Area Operations Office.



...Fermilab Director R. R. Wilson (with axe) and others at ceremonies opening new Laboratory fire station at Phillips Farm Nov. 4...

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CONTRACTS SIGNED



The Laboratory reached agreement with the Fermilab Fire Department and Support Services groups to extend their agreements through the fall of 1979. These contracts were signed in October. Above left, L-R: R. Kramp, Fire Chief; D. Sauer, Site Services; C. Marofske, Personnel; R. Dorner, Emergency Services; F. Cload, J. Gary and T. Velasquez, IAFF Local I-21 firefighters. Right photo, L-R: J. Colson, Support Services; D. Hanabarger, B. Paul and D. Sark (Teamsters Local 726); standing L-R are: B. Arnold, G. Elias and C. Marofske.

INTER/NATIONAL FILM SOCIETY

presents

"ONCE UPON A TIME IN THE WEST"

8:00 p.m.

Friday, November 11

Fermilab Auditorium

Henry Fonda stars in this monumental study of revenge and loyalty. Directed by Sergio Leone, the film also stars Claudia Cardinale, Jason Robards, and Charles Bronson. In it, Fonda murders a rancher and his children whose property lies in the way of a new railroad development. Employed by the railroad, he must then face a number of adversaries. Other films by Sergio Leone include the Clint Eastwood westerns: *A Fistful of Dollars*; *The Good, the Bad, and The Ugly*; and *For a Few Dollars More*.

Adults \$1.50 Children 75¢

A TASTE OF MEXICO

Ethnic lunches are returning to the cafeteria! Mexican will be the feature Thursday, Nov. 17, when Hector Labra of Aurora's "La Fiesta" restaurant prepares Fermilab's menu. The special will feature chicken mole, rice, refried beans, nopales (cactus salad) and bunuelos for dessert -- all for \$1.95. Enjoy!

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VIOLINS: A SCIENTIFIC VIEW

"The Tone Quality of Old Violins--Science Examines a Lost Art" will be presented at Fermilab Tuesday, Nov. 29. In an 8:30 p.m. auditorium program, a free lecture-demonstration, senior science advisor to IIT Research Institute Marvin Camras, will describe scientific analysis of vintage violins. He will tell how scientists have discovered, in the Laboratory, special qualities of master violin makers' products. Camras will demonstrate how old instruments can be matched through applying scientific data. The program is sponsored by the Amoco Research Center Club of Sigma Xi national science organization. The group encourages original research in natural sciences. The Amoco chapter includes members from Amoco, Fermilab and Wheaton College. Scientists, musicians and others interested are invited to attend. No tickets or advance registration are required.

FERMILAB HOSTS WAYNE ART LEAGUE

Central Laboratory's cafeteria area became a showcase Monday for 25 paintings by Wayne (I.I.L.) Art League members. Mrs. Pearl Doerge, league art director, said many of the works were begun during a day-long site visit in August by the league. Oils and watercolors, plus several collages, depict Laboratory scenes and other area subjects. All will be framed and priced for sale. The exhibit will run through Saturday, Nov. 26.

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BAHAMAS/HAWAII EMPLOYEE TOURS SET

Escape winter on NALREC-sponsored employee excursions to the Bahamas or Hawaii! A travel agent will show a film on Bahamas delights Monday, Nov. 21, at noon in Curia II (CL-2W). Employees are invited to attend and ask questions. The Bahamas trip will be taken Feb. 17-20; an eight-day Hawaii escape will be held Nov. 3-10. Per person prices are \$249 for the Bahamas outing and \$439 for Hawaii. Fees are based on double occupancy accommodations and include air transportation. Brochures with details and signup forms will be available at the film showing. For more information, phone Keith Schuh at Ext. 4048 or Ext. 4444.

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