

FERMINES

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SUPERCONDUCTING MAGNETS MAKE DEBUT IN MESON AREA

Three Energy Doubler-Saver superconducting magnets are proving their mettle in the first major bend of the Meson Area M6 beam line.

They were first cooled down in the Meson Area in June 1979 and have been in use since September guiding high energy particles to a number of physics experiments. "These are the first Energy Doubler-Saver magnets to be used on a regular basis as part of the current research program," said Ernie Malamud, head of the Meson Department. "Besides saving a great deal of electric power, they also have enabled us to double the energy of the M6 line to 400 GeV."

A 400 GeV beam was transported the entire length of the M6 beam line Dec. 14-16, and some test data was taken at that energy for Experiment 557. "The reliable operation of this cluster of three magnets has given us confidence and knowledge," Malamud continued. "We plan to convert other clusters of beam line bending magnets in the Meson Area as another step toward reducing the consumption of electrical energy. Later, it will be possible to upgrade these beam lines to 1,000 GeV by adding more superconducting magnets."

The success of this project came "at the end of a lot of hard work" that started in early 1978 when a prototype system was set up in Laboratory 6 in the Village, said Malamud. "After that research and development project succeeded, we made the decision to install the final system in the Meson Front End Hall using all new components with a design that was based on the successful Village system but modified for the different geometry of the real M6 beam line."

Start of the final installation was held up by construction delays caused by the severe winter of 1978-79. By the time the Meson Cryogenics Group, assisted by



...Members of Meson Cryogenics Group, beginning left and going clockwise, are Kurt Kremptz, Bill Lord, Terry O'Brien, Umer Patel, Herman Haggerty, John Caffey and Ed Justice. Photograph was taken in Front End Hall at site of superconducting magnets. Not shown are Teresa Sobocki, Meson Department and John Stoffel, Research Services.

Research Services and the Tevatron Helium Liquifier Group, was able to start installing components, it had "only a scant two months" before beam once again flowed through the Meson Area at the end of the Meson pause, Malamud explained.

"We gave it a big push with careful work and by early May the system was in and working," he continued. "The assistance which the Meson Department received from the other parts of the laboratory was a very important factor in meeting such a demanding schedule. This major accomplishment was led by physicist Herman Haggerty and cryogenic engineer Umer Patel, leader and associate leader of the Meson Cryogenics Group (shown in the photograph on this page)."



...Leon Lederman (second from right), Fermilab director, accepts Minority Business Program Achievement Award from Robert H. Bauer (far right), manager-regional representative of the Department of Energy's Chicago Operations and Regional Office. Also beaming with pride are (l-r) Richard J. Auskalnis; Eduardo Marrero, minority business specialist with the DOE Chicago Operations and Regional Office; Phil Livdahl, Fermilab acting deputy director; Joyce Curry, Fermilab Equal Employment Opportunity Office; and Ed West, Fermilab contracts manager...

FERMILAB EARNS ACHIEVEMENT AWARD

The Department of Energy has presented Fermilab with its Minority Business Program Achievement Award.

"We are particularly proud of this award," said Richard J. Auskalnis, head of Fermilab's Purchasing Department. "To have earned it demonstrates that Fermilab is dedicated to the principles this program stands for."

The award was established by DOE to recognize contractors--such as Fermilab--that meet or exceed goals set by DOE. These goals set the minimum amount (measured in percentages or dollars) of purchases that should be awarded to small or minority businesses.

"The thing that is meaningful," said Auskalnis, "is that the Laboratory did not earn this award by chance. We really had

to work at it. But that's not surprising, because the Laboratory has a vigorous and aggressive policy in its posture toward equal employment opportunities, affirmative action and buying from minority vendors."

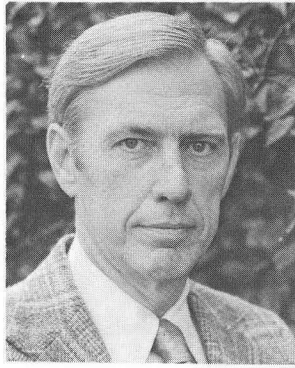
A while back DOE praised the Laboratory for having "demonstrated an active and successful interest in small business and minority business enterprise programs..."

The Laboratory is a leading member of the Chicago Regional Purchasing Council, the local affiliate of the National Minority Purchasing Council. Through Auskalnis, the Laboratory is represented on the Governing Board of the Purchasing Management Association of Chicago, the largest local association of purchasing executives in the United States. This association is widely recognized for its leadership in encouraging minority purchasing.

WILL HANSON DIES

Willard B. Hanson, a long time Fermilab employee, died Feb. 29 after a lengthy struggle with cancer.

He had been with the Laboratory since June 1, 1968, coming here as an engineer with the Booster Section of the Accelerator Division.



...Hanson...

At the time of his death, he was a group leader with the newly-established Conventional Mechanical Devices Group of the Accelerator Division. He had been with that group since its organization last July. Prior to that time, he was head of the Magnet Fabrication and Engineering Group with the Energy Doubler Magnet Division.

"Will had a distinguished career as a mechanical engineer at Fermilab," said Phil Livdahl, acting deputy director of the Laboratory. "His influence has been strongly felt in the design and fabrication of many of the major components of the Booster as well as magnets for parts of other accelerators and for many experiments.

"While he was head of the Magnet Group, he was instrumental in developing the assembly technique and tooling for the Energy Saver magnet coils. He is going to be fondly remembered by all of his colleagues, not as much for his accomplishments for Fermilab, but for his integrity, his high principles and his perseverance. Indeed, he was a friend and valued colleague. We will surely miss him."

While with Fermilab, Hanson had served on the Laboratory Safety Committee, the staff overseeing the summer program for minority students and the Engineering Policy Committee.

Hanson was awarded his bachelor of science degree in mechanical engineering in 1946 by the Illinois Institute of Technology. He is survived by his wife, Martha Jean, and three children.

The funeral was March 5. Contributions toward a memorial fund may be sent to Carolyn Vanecek, Ext. 3315; LaDaune Trierweiler, Ext. 3041; or Jean Plese, Ext. 3211.

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...Annette Bays and Training model of 15-foot bubble chamber...

OFF-BEAT ASSIGNMENT FOR 15-FOOT BUBBLE CHAMBER

A 15-foot bubble chamber small enough to carry in your arms has a big responsibility in the Film Analysis Facility.

The model is used to help train new employees how to read the complex tracks of particles recorded on film. It's the product of Annette Bays, scanner supervisor in Film Analysis, and Carl W. Lindenmeyer, a design engineer with the Physics Section. In order to simulate particle collisions, Bays put tracks inside the miniature bubble chamber consisting of wire painted with different fluorescent colors that vividly stand out under a lamp and black background.

"It takes about four to six months before a new person gets the hang of what they are really supposed to do," explained Bays. "Some individuals just cannot visualize or get the whole concept of what they are supposed to be looking for."

Thus emerged "a great training aid."

In the top of the model are three peep hole lenses (those commonly used in doors) that work perfectly as camera lenses. By peering through one of them, a viewer gets an astonishing view of particles frozen in flight.

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NALREC PLANS TWO SPORTS TRIPS

NALREC has planned two sports trips: one for basketball fans on March 14 and one for hockey fans on March 16.

In the basketball game, the Chicago Bulls battle the Seattle Super Sonics, and in the hockey game, the Chicago Blackhawks go after the New York Islanders.

A bus will leave the Central Laboratory at 6:15 p.m. for each event. Tickets cost \$15 each for the basketball game and \$14 for the hockey game. Seats at the basketball game are in the front and at the hockey event in the mezzanine.

The price of the ticket includes transportation both ways, admission to the game, sandwiches and beverages on the way to the game.

For basketball tickets contact Sharon Koteles, Ext. 3232, or Pat Yost, Ext. 4365. For hockey tickets contact Jean Plese, Ext. 3211, or Chuck Grozis, Ext. 3478.

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CHEZ LEON MENUS

For reservations call Ext. 3646 - (this week only).

Tuesday, March 11, 7:00 p.m. - \$8.00

Frog leg's provencal flambe'
Chateaubriand - sauce espagnol
Fresh broccoli - hollandaise
Mushrooms a la grecque
New England bibb lettuce salad
Chiffon cheese cake - Oregon blueberries.

Wednesday, March 12 - NO LUNCHEON

Thursday, March 13, 7:00 p.m. - \$8.00

Biloxi shrimp cocktail
English cut prime rib of beef
Yorkshire pudding
White asparagus gratine'
Noodles Alfredo
Fermi avocado salad
Baked Alaska flambe'

Beginning the week of March 17, Wednesday luncheons will again be served. Reservations at that time should be made by calling Ext. 3542. Chez Leon is located in the Users Center in the Village.

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EMPLOYEES SHARE THEIR EXPERTISE

A number of employees shared their knowledge of Fermilab with the public during February.

Ray Stefanski spoke to the Kiwanis Club of Brookfield on Feb. 5. Ed Tillis gave a general orientation on Feb. 13 to the Aurora Evening Lion's Club. Penny Horak on Feb. 6 and 13 taught a workshop on solar energy at Elgin Community College; spoke on solar greenhouses before the Evanston Garden Club on Feb. 14; and conducted another workshop on solar energy at the Elgin Community College satellite location at Streamwood High School on Feb. 27. Louis Kula spoke on Feb. 19 at the St. Charles Optimist's Club, giving the group a general orientation on Fermilab.

Helping conduct tours during February were George Biallas, Paul Brindza, Bob Ducar, Jim Ellermeier, Linda Even, Gene Fisk, Bob Flora, David Harding, Elvin Harms, Joe Heim, John Ingebretsen, Alan Jonckheere, Quentin Kerns, Ed Kessler, Glenn Lee, Jack Lockwood, Bob Mau, Peter Mazur, John O'Meara, Tom Peterson, Brian Pientak, Dave Ritchie, Jay Schmidt, Sue Shaver, Louis Taff, Gerry Tool and Jim Zagel.

ERA PANEL HERE MARCH 13

The pros and cons of the Equal Rights Amendment will be discussed at Fermilab March 13.

Sponsored by NALWO, the discussion will begin at 12:30 p.m. in the southwest conference room, first floor, Central Laboratory.

"Everyone is invited," said Mary Ann Ernwein, chairman. "This is not just for NALWO members. We would like to extend an invitation to all women at Fermilab to join NALWO activities."

"But this meeting is even broader in its subject matter. It should be of interest to men as well as women. We hope everyone will come. We'll have a good panel to give us good information."

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