# FERMINEWS

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The photographs on page 2 show and describe some of the major components of the satellite refrigerators that are now being constructed and installed around the Main Ring.

Eventually the 24 refrigerators will be positioned along the Ring's four-mile circumference. "The refrigeration components were designed and initially are being built at Fermilab, but contracts have been placed with local firms for fabrication of additional components," said Dick Andrews, head of the Satellite Refrigerator Support Group.

"This scenario allows the personnel doing the assembly at Fermilab to gain enough experience to oversee and inspect the work of the outside fabricators. It also enables them to suggest techniques that will produce a superior product with an eye on economics. This is an example of 'technology transfer',"

Andrews continued.

Andrews praised the members of the Satellite Refrigerator Support Group, many of whom are shown in these photographs. "They are doing an outstanding job with a technically difficult project," he said. He pointed out that the group has been in existence since January 1979 and has been used in many supporting roles around site, "providing key and valuable assistance to some of the most advanced projects."

Under the leadership of Jeff Appel, Andrews's precursor and now associate head of the Computing Department, "the group quickly became a cohesive and productive organization," said Andrews.

However, Appel was assigned to the Computing Department before "the first visible sign--a satellite refrigerator--appeared to mark the group's major responsibility and contribution to the superconducting accelerator."



Mighty proud of their accomplishment, the youngsters show off their finest smiles. Before them is the poster they made.

# CHILDREN WIN POSTER CONTEST

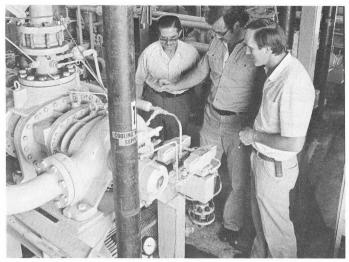
It's a proud moment for the youngsters at Fermilab's Children's Center. Their poster--embellished mightily with their hand prints--won the poster contest sponsored by the Fermilab Energy Conservation Employee Awareness Committee last month, October, energy awareness month.

For their outstanding achievement, the boys and girls were treated to lunch Nov. 10 in Wilson Hall and were each given a certificate and blue ribbon. Hank Hinterberger, chairman of the committee, presented the youngsters and their teachers, Linda Braddy and Patti Hedrick, with a plaque that was hung in the center. Dining with the children were other members of the committee.

The poster was displayed in Wilson Hall atrium throughout most of October as part of an energy conservation display prepared by the committee. The poster competition along with energy saving suggestions are but two of the approaches the committee will be taking in the coming months to make employees more aware of energy conservation.

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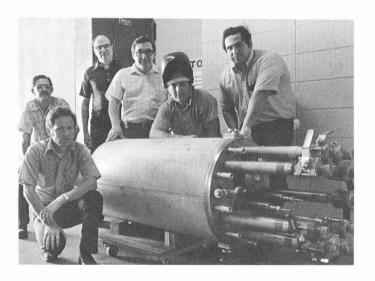
Satellite refrigerator compressor located in the AO building. From the left are Bill Noe Sr., John Satti and Dick Andrews. The compressor station takes the low pressure, room temperature helium returning from the superconducting magnet loops and compresses it to a high pressure stream. The helium stream is purified by sending it through an oil removal system. It is then delivered to the heat exchanger train.



Expansion engine system. Each refrigerator has two expansion engines. One, a gas engine, further cools the high pressure gas in the heat exchanger train, and the other, a wet engine, converts the now cold high pressure gas to low pressure liquid helium. From the left are Bill Noe Sr., Tom Peterson, Brian Kowalski, Bill Martin, Jim Loskot and Tim Richer. Brian, son of John Kowalski, was a summer employee.



Two heat exchanger trains. Others similar to these can be seen protruding from the buildings on top of the Main Ring berm at A3 and A4 (across from the industrial building complex). The exchanger trains shown here are being assembled. From the left are Ralph Afanador, a summer employee, Rich Krause, Gerry Kusiolek, Jim Thompson and Dave Hanabarger. The heat exchangers cool the high pressure gas from the compressors by using the low pressure cold gas returning from the magnet string in the tunnel.



Valve box. Its function is to integrate the flow of liquid helium from the sattelite refrigerator and the Central Helium Liquifier Facility along with liquid nitrogen. They are sent along the tube at the left of the photograph to the superconducting magnets. The liquid nitrogen provides the shield cooling and the liquid helium bathes the magnet coils, keeping them at superconducting temperature. From the left are Bill Noe Sr., John Colvin, Carl Pallaver, Ernie Ramirez, Rich Krause and Gerry Kusiolek.

#### RETURNABLE CONTAINERS BEING SOUGHT

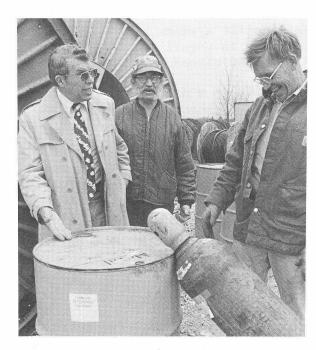
Don't be surprised to see Rob Bermel, Materials Specialist, and Bonnavent Paul, lead man in Shipping and Receiving, poking about the site in the coming weeks.

Both with Support Services, they are looking for returnable containers. These are containers for which the Laboratory has paid a deposit and which will be refunded when the containers are returned. At any given time, the Laboratory has in excess of \$20,000 tied up in returnable containers, said Al Lindner, Property Management Supervisor. Bermel and Paul are taking an inventory of the containers and also looking for those that somehow never got returned.

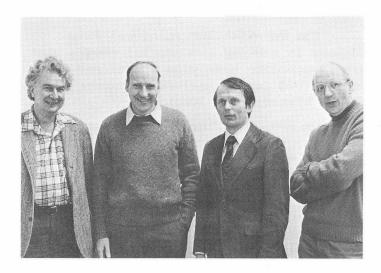
The most common returnable container is the 55-gallon drum. There also are smaller drums that can be returned. The second most common item is a gas cylinder. These come in many sizes. Ranking third are reels, primarily those that held cable.

The inventory was begun Nov. 3 and will continue until Accounting is satisfied that every returnable container on site has been located, said Lindner. He encouraged people with questions about returnable containers to call his office at Ext. 3585.

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From left Al Lindner, Bonnavent Paul and Rob Bermel discuss returnable containers. Surrounding them are three of the most common types: drums, cylinders and reels.



Peter Schöenberg (second from right), consul in Chicago for the West German government, visited Fermilab recently. Meeting with him at lunch were (L-R) Hans Kobrak, Fermilab user; Peter Koehler, head of the Research Division here; and Win Baker, Fermilab physicist.

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# FERMILAB POPULAR WITH VISITORS

More than 1,000 people visited Fermilab on 30 guided tours last month (October), the Public Information Office reported. Another 1,500 people visited on self-guided tours during the weekends.

Helping PIO with tours and special visits that month were: George Biallas, Joe Biel, Ray Brock, John Cumalat, Bonnie Deke, Tom Droege, Jesse Guerra, Dave Harding, Joe Heim, Brian Hendricks, Hank Hinterberger, Roy Jeffries, Willard Kautz, Ed Kessler, Jack Lockwood, Joanne Mansell, Chuck Marofske, Ralph Pasquinelli, Ivan Rosenberg, Chuck Schmidt and Ed Tilles.

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## FALL COLLAGE ONLY EIGHT DAYS AWAY

Nov. 21 is the time to have five hours of continuous fun with your friends and coworkers at NALREC's Fall Collage.

It will be held from 5:15 to 10 p.m. in the Village Barn. Raffle tickets for \$10 gift certificates can be purchased from any NALREC member. Winners of the gift certificates can cash them in for \$10 worth of their choice of groceries. The party also will feature four hours of live music. Pizza and beverages will be available.

#### TWO SPECIAL FILMS

The Fermilab International Film Society is showing two special movies that are expected to have wide appeal and that have earned for themselves permanent niches in the history of filmmaking.

On Nov. 14, "The Thief of Bagdad" will be shown. Then on Nov. 21, "2001: A Space Odyssey" will be shown. This second film is being presented as a cooperative project with the Fox Valley Associates of the Art Institute of Chicago.

Both films will begin at 8 p.m. in Wilson Hall auditorium. The admission price to "Thief," with a running time of 133 minutes, is \$1.50 for adults. Tickets to "2001" cost \$2 each. This movie's running time is 139 minutes. Children are admitted to any movie shown at Fermilab for 50 cents. Both of these movies are suitable for children.

"Thief," featuring Douglas Fairbanks in one of his most outstanding silent films, is part of the film society's weekend of silent films program. Fairbanks produced and starred in this 1924 movie, a screen fantasy the likes of which Hollywood had never before seen.

The production uses elaborate sets and is one of the earliest attempts at pure fantasy. The thief--portrayed by Fairbanks, of course--travels to the Citadel of the Moon by way of the Defile of the Mountains of Dread Adventure, the Cavern of Enchanted Trees, the Valley of Fire, the Valley of the Monsters and the Midnight Sea. Once there, he claims the cloak of invisibility and the magic chest to help him win the affection of the Sultan's daughter.

Stanley Kubrick's "2001" epic was a major milestone for films. Almost single-handedly it made science fiction a powerful screen medium and won the public's respect for the quality that science fiction is capable of achieving. Based on Arthur C. Clark's short story "The Sentinel," the movie is Kubrick's and Clark's personal and metaphysical vision of humanity's journey to maturity. Some of Clark's "Childhood's End" has been injected into the film. Kubrick chose established classics from Strauss, Khachaturian and other great composers for his background music.

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#### ANNUAL BENEFITS STATEMENT ON WAY

Fermilab soon will send employees their annual benefits statements.

"This is an important source of information, because it explains to each employee the current status of his benefits program," said Ralph H. Wagner, senior personnel administrator with the Training and Benefits Office. "When you receive it, please read it carefully. If you have any questions or wish to change your benefits, please call our office at Ext. 4361." This also is the appropriate time to make changes in addresses as well as beneficiary changes, Wagner added.

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## CHEZ LEON MENUS

# Wednesday, Nov. 19 - 12:30 p.m. \$6.00

Leek and potato soup Breast of chicken w/horseradish sauce Sauteed broccoli and cauliflower Fresh green salad Black forest cake

# Thursday, Nov. 20 - 7:00 p.m. \$10.00

Crabmeat wrapped in phyllo Roast loin lamb chops Ratatouille gratin Cucumber in yogurt Walnut and almond torte

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#### COMPUTERIZED ORGAN CONCERT

The Geneva Organ and Piano Company will present a computerized organ concert tomorrow (Nov. 14) in Wilson Hall atrium at noon.

Paul Wesley-Bowen, a nationally acclaimed soloist, will play a Solina F200 series organ.

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# CU BOARD DECLARES DIVIDEND

The Argonne Credit Union Board declared 6.25 percent as the common share dividend for the third quarter. Share dividends on common shares are computed on a day-in, day-out basis.

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