

SAVER DIPOLE COLLARED COILS COMPLETE

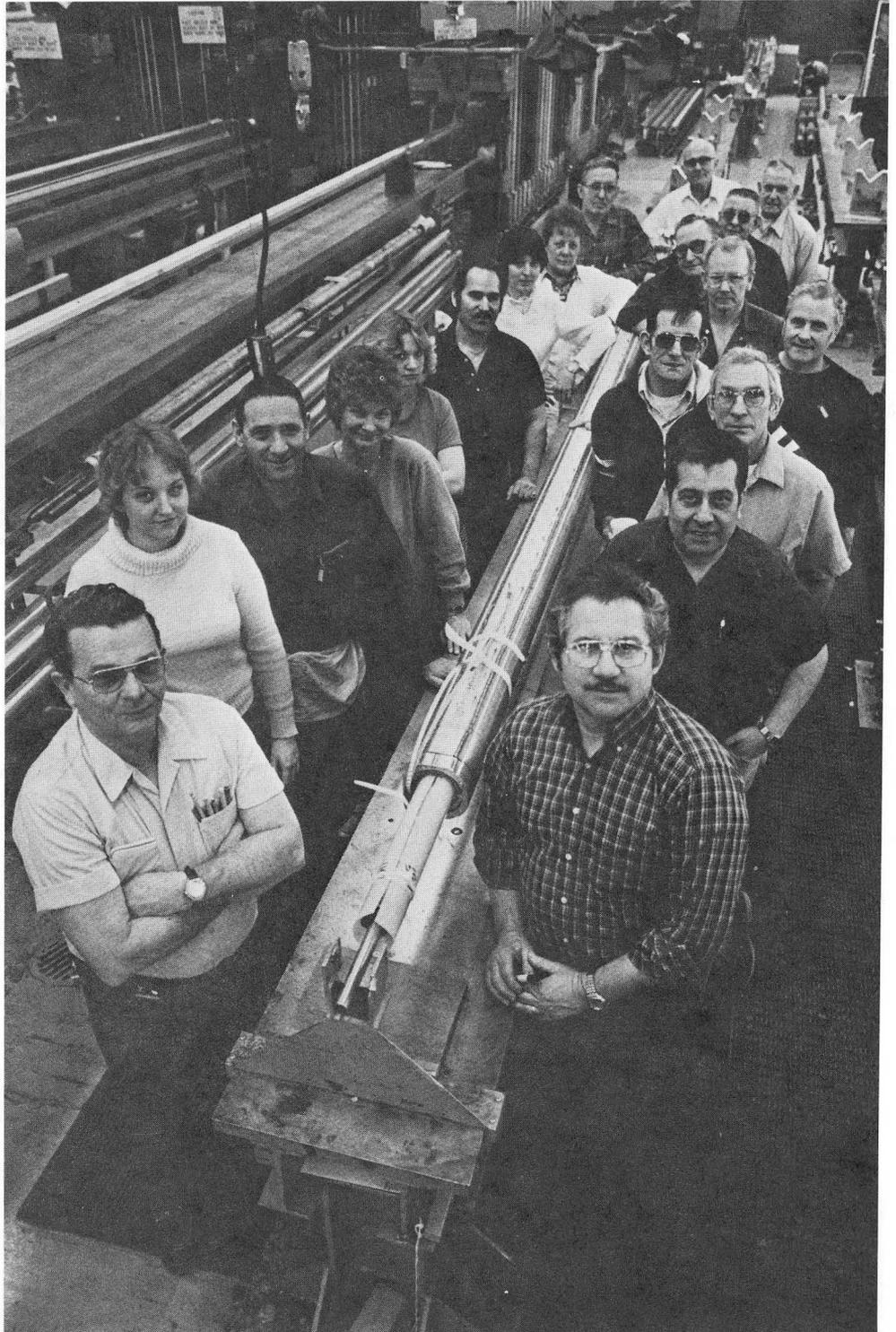
Completed collar coil with proud godparents (left side, front to back) Bernie Assell, Pam Greenwood, Rudy Wright, Annie Gilley, Pat Sanchez, Rich Zarko, Edith Loskot, Darlene Mindar, Bob Nilles, and Emery K (right side, front to back) Imri Gonczy, Manny Nilla, Bill Weissenborn, John Matheny, Tom Fritz, Dale Sherwin, Joe Lompart, Jerry Desjardine, and Carl Everett. →

by John Carson

A major milestone has been achieved on the road to completion of the Energy Saver.

The 906th dipole collared coil assembly was completed at Industrial Building #3 on February 4. The significance of #906 is that it completes the commitment for the Energy Saver; 774 dipole magnets are required for installation in the Main Ring. Of the remaining 132 dipole magnets, 62 are to be used in various beam-line applications, and 70 will be held in reserve as spares for the Ring.

Collared coil #906 must still make its way through final assembly at Industrial Building #1 where it will merge with its cryostat and iron yokes to become a completed dipole magnet.



The first Energy Saver coil assembly was completed on April 9, 1979. It was a major achievement because it represented the fruition of years of research in design and production technology.

(cont'd. on pg. 2)

10 MAGNETS/WEEK ASSEMBLED AT ZENITH

(cont'd. from pg. 1)

In the early research days when Fermilab's efforts were involved in producing 1-foot long magnets that met design parameters, it was hard to envision a facility capable of assembling 21-ft magnets at a rate of 10 per week. Bernie Assell, Production Supervisor in charge of coil and collared coil production, is confident the facility could be made to produce even more.

The successful completion of this program is a tribute to the people at Industrial Building #3, as well as the many support groups who interacted in this project.

The facilities at Industrial Building #3 have been scaled down from three shifts to one with many of its workers reassigned to the production on magnets for TeV I and TeV II. We will continue to produce coils at a low rate with an emphasis on innovations towards cost reductions and quality improvements.



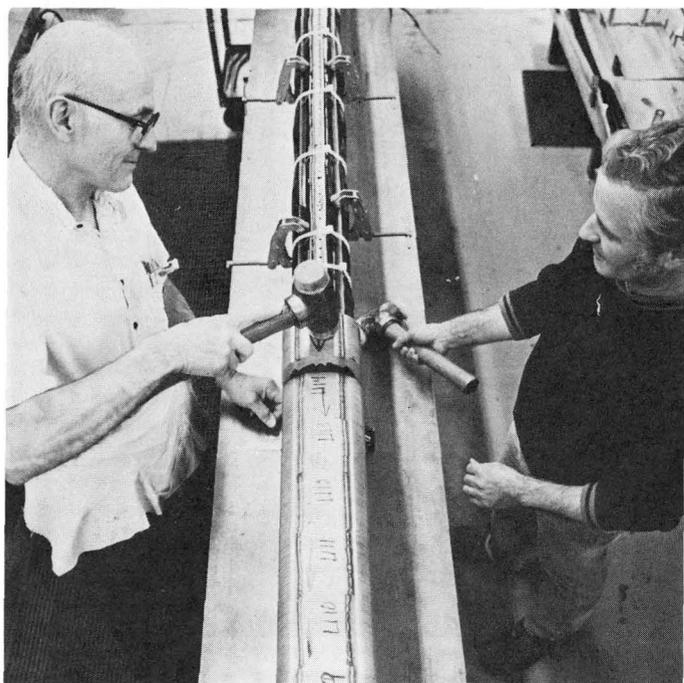
The fabrication of a superconducting magnet starts with winding the coils. Superconducting cable is unwound from the reel on which it is sent by the manufacturer and precisely tapped into place in the coil form by Pam Greenwood (right). In the background, Darlene Mindar guides the motion of the cable reel and the unwinding of the cable.

STATISTICAL MECHANICS TALK HERE

Dr. Scott Kirkpatrick, IBM, New York, will present "Statistical Mechanics and the Traveling Salesman" at the Fermilab Colloquium on Wednesday, March 16, at 4 p.m. in Ramsey Auditorium.

Methods used in statistical mechanics provide a powerful tool for heuristic solution of large scale optimization problems. Optimization is viewed as the result of an annealing process (like crystal growing, for example) and the Metropolis Monte Carlo algorithm is employed to stimulate this annealing. The connection between statistical mechanics and optimization is quite general and instructive; its practical value depends upon the problem considered. The classic traveling salesman problem provides evidence for the power as well as the limitations of this approach.

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Emery Konop (left) and Tom Fritz, using shims to keep the dimensions precise, assemble lamination packs over the coils.

FOR SALE:

LAND: (4) WOODED ONE-ACRE LAKELAND LOTS. 40 miles west of Green Bay, Wisconsin; utilities and roads already in; will sell on contract. Costs: \$5,000-\$12,000; taxes: \$90-\$180. Call Art Streccius, ext. 4791 or 896-8298.

HOUSES: THREE-BEDROOM CONDO. In Bartlett, close to stores, schools, and trains; garage or outside entrance; stove, refrig., washer/dryer, central air, 1 bath., kitchen w/attached dining rm., liv. rm., carpeted throughout, \$47,900. Call Jim Schellpfeffer, ext. 4029, or 837-0875 evenings.

CARS: 1981 DATSUN 210 HATCHBACK. Effective March 18, 1983; 5-speed manual trans., \$4,000. Call Ainosuke Ando, ext. 4255 or 851-9484 after 6 p.m.

1981 CHEVETTE 2-DOOR HATCHBACK. Air cond., tinted glass, rear window defogger, H. D. battery, 4-speed trans., 22,000 miles. \$4,500. Call Frank, ext. 3808.

1980 VW DASHER DIESEL. 4-door, 4-speed, 40 m.p.g., very good condition. \$5,195. Call JoAnne, ext. 3865 or (815) 758-2903.

1979 CHEVY SCOTTSDALE C-10. 350-V8, 50,000 miles, 4-wheel drive, powr. str., lockout hubs, 8-ft bed with extra trim, alum. wood-paneled cap, powr. brakes, factory air, AM-FM radio, heavy-duty suspension, tinted glass, new oversized tires. Like new, \$5,500 or best offer. Call Emeray, ext. 4344.

1979 SILVER GREY FORD FAIRMONT. 4 cyl., \$3,100 or best offer. Call Risto, ext. 4093 or 3547.

1973 OPEL 1900 YELLOW WAGON. \$1100 or best offer. Call Risto, ext. 4093 or 3547.

MISC: MOTORCYCLE ACCESSORIES. Michelin rear motorcycle tire, brand new, 425/85 V 18, \$50. Black ocelot expansion chambers for Suzuki 750 3-cylinder 2-stroke, \$75. Call Mike Raphael, ext. 3011.

TWO FIRESTONE 8-PLY 8.75 x 16 snowtires, low mileage, \$25 each. Bill Riches, ext. 3779.

P.A. SYSTEM. Includes Bogen Challenger CHB50 amplifier, two remote 24 in. x 18 in. port. speakers, two microphones, and stand. \$190. Call Bill Riches, ext. 3779.

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FOR SALE:
(cont.)

SPEAKERS AND TURNTABLE. Phillips 212 turntable, \$100. Bookshelf speakers, B and O C-30, \$150/pr. Call Mark O., ext. 4098 or 4164.

PORTABLE WASHER AND DRYER SET. 2-speed, 3-cycle washer; cool down feature on dryer; no permanent hookups; uses 110 volts; excellent condition. \$320 or best offer. Call Bill, ext. 4597 or 393-3241.

SIX-FOOT PALM PLANT. Can be seen on WH14, north crossover. \$60. Call Robin Aubrey, ext. 4568.

MINIATURE SCHNAUZERS. 8 wks old; AKC shots. \$200. Call Neil Olson, ext. 4179.

SLIDING GLASS DOOR. Aluminum, double-glazed, approx. 6 ft wide, 6 ft 9 in. high, includes everything needed for installation. \$75. Call Al Russell, ext. 4829.

MOVING

SALE:

For information on the following items, call Risto Orava, ext. 4093 or 3547

220V Huber (Swiss made) vacuum cleaner, \$25
Sears stereo (8-track cassette, 2 speakers, turn table), \$35
Mirror (30 in x 37 in.), \$35
Mirror cabinet, \$5
Tiletap table, \$25
Wood frame couch w/mattress and pillows, \$25
Brother sewing machine, \$65
Two 1500W electric heaters, \$10 each
Sears 7-speed blender, \$10
Gerry baby carrier, \$10
Baby bouncing chair, \$8
Miscellaneous tools and dishes

WANTED:

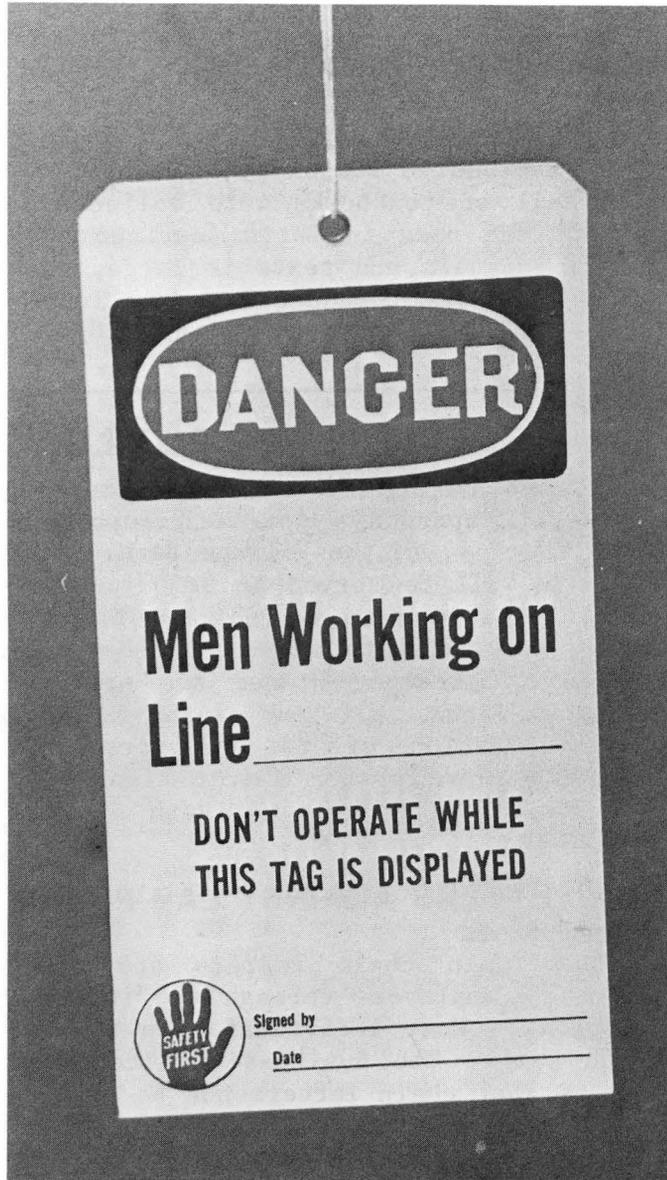
VIDEO-GAME PLAYERS. Individuals interested in forming a Video Game League for competition in two (2) or more player games (basketball, baseball, boxing, skiing, hockey, soccer, bowling, and football) to be played on Monday evenings at the Users Center. Send name, work extension, mail station, games interested in competing in, the system (Intellivision, Odessey 2, etc.) interested in competing with, and which night is best for availability to N. M. Smith, MS #303.

ELECTRICAL WARNING TAGS AND SIGNS MAY SAVE LIVES

When electricians work on lighting or distribution circuits, the first thing they do is switch off power to the circuit involved. They then hang a conspicuous tag on the switch or circuit broken which warns people **not** to reenergize the circuit.

That tag takes on extreme importance to the electrician. It can be the difference in working safely on a deenergized circuit or being electrocuted in the middle of a job. The purpose of the tag is to indicate that a circuit has been broken intentionally, work is in progress, and the circuit must not be reenergized under any circumstances.

A special precaution exists in Wilson Hall where electrical circuits are controlled at breaker panels located behind the elevators and at the south end of each floor. Additional warning signs will be attached to the front of these panels to further alert occupants of the work in progress. By all means, heed that warning! Someone's life may depend on it.



DR. WILL TO SPEAK HERE MARCH 9

"General Relativity Confronts Experiment," will be presented by Dr. Clifford Will, Washington University, St. Louis, Missouri, at the Fermilab Colloquium on Wednesday, March 9, at 4 p.m. in Ramsey Auditorium.

The years 1960-1980 have been termed the "decades" for testing general relativity. Compared to the previous 45 years, this period saw an explosion of progress in high-precision tests and their theoretical interpretation. We will describe this progress, and will discuss selected results obtained since 1980, including solar oblateness measurements, a "null" gravitational redshift experiment, and binary pulsar data.

LECTURER TO OPEN EXHIBIT

Exotic carvings and other artifacts are featured in the "New Ireland: Art, Life and Death," an art exhibit, lecture, and opening to be held at Fermilab on Tuesday, March 15, at 8 p.m. New Ireland, one of the many islands in the South Pacific, is the source of the art exhibit which will open with the lecture at Fermilab. Dr. Phillip Lewis, Chairman of the Anthropology Department at Chicago's Field Museum of Natural History and a recognized scholar of New Ireland culture, has assembled Oceanic creations from the Field Museum to be displayed in the Fermilab Gallery on the second floor crossover of Wilson Hall.

Dr. Lewis, who has been to New Ireland on collecting expeditions for the Field Museum, will speak on the cultural aspects of the items displayed in the exhibit. These are among the most significant at the Museum which holds one of the largest collections of Oceanic art in the world. On March 15, a special viewing time is available from 7 p.m. to 8 p.m. At 8 p.m., Dr. Lewis will deliver the lecture in Ramsey Auditorium and then he will be available for questions in the gallery until 10 p.m.

There is no admission charge to this Auditorium Committee program, but a ticket is required. A very limited number are available. To reserve your tickets call ext. 3353.

NEW GYM COMPLEX ON DISPLAY

The Users Office is presenting a display of the new Recreational Complex, including photographs of the nearly completed gymnasium. Plans for future remodeling of the exercise room and designs of the locker rooms, which are scheduled for completion in the fall of 1983, are also on display.

In anticipation of the opening of the new gymnasium complex, the Users Facilities Committee urges all sports enthusiasts, including exercise groups and basketball, volleyball, and tennis players to turn in a Request Form for use of the Facility. Forms are available from the Users Office, WH 1E, and will assist the Committee in scheduling activities in the new gymnasium. Requests are due in the Users Office by March 18.

Latin America Needs Physics Texts

Some months ago, Fermilab asked for contributions of unwanted physics journals and textbooks to be given to universities in Latin America. There was an impressive response, and about 50 boxes full of textbooks were collected; however, the need in Latin American for physics journals and texts is large, and Fermilab is again requesting donations. They should be taken to the Users Office, WH 1E.

BARN SETS SCENE FOR POT LUCK

NALWO, Fermilab's women's organization, will sponsor a Pot Luck Supper on Friday, March 4, in the Village Barn. Wine and sherry will be served at 5:30 p.m. and supper starts at 6 p.m. Please bring a main dish or salad to serve 12. Babysitting and a hamburger dinner are provided for the children. If you cannot bring a dish, a donation of \$3 per person is requested. For further information, call Andrea Green, 879-7140, or Ruth Pordes, 790-1176.

CHAIN LETTERS AGAINST LAB POLICY by Carolyn Hines

Once again chain letters are being received by employees through the internal mail system. Most individuals are opposed to such mail. The Business Services Section asks that chain letters not be sent to employees through the internal mail system. This is against Laboratory policy.

As a reminder, it is illegal to use Laboratory Xerox machines for making copies of such items.

DEADLINE FOR SUMMER HOUSING NEAR

The deadline for receipt of reservations for summer on-site housing is Thursday, March 24. Housing assignments for summer experimenters will be made in April, and responses will be mailed April 14. The starting dates for summer occupancy will begin during the week of May 31.

CONGRATULATIONS TO...

Brenda and Daniel (Welding, Lab 5) Van Lannen on the birth of their first child, Amanda Michelle, on February 12 at Delnor Hospital in St. Charles. Amanda weighed 6 lbs. 5 oz. and was 18-1/2 inches long.