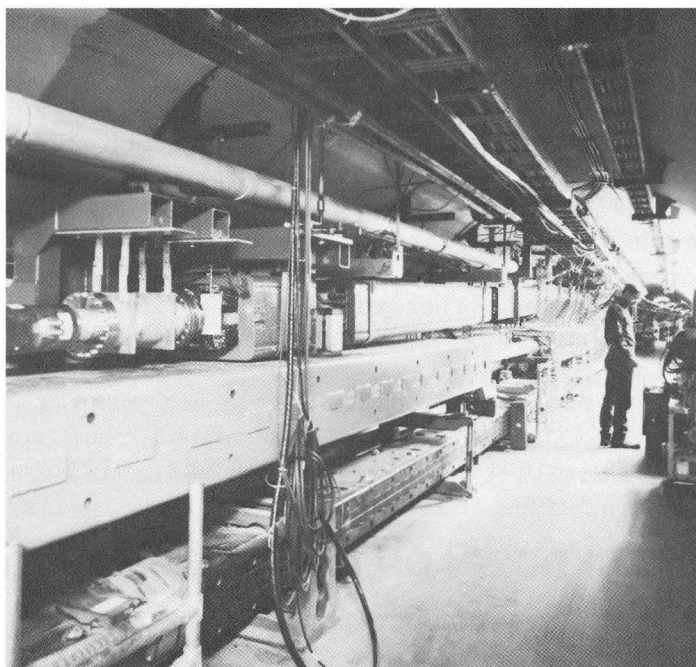
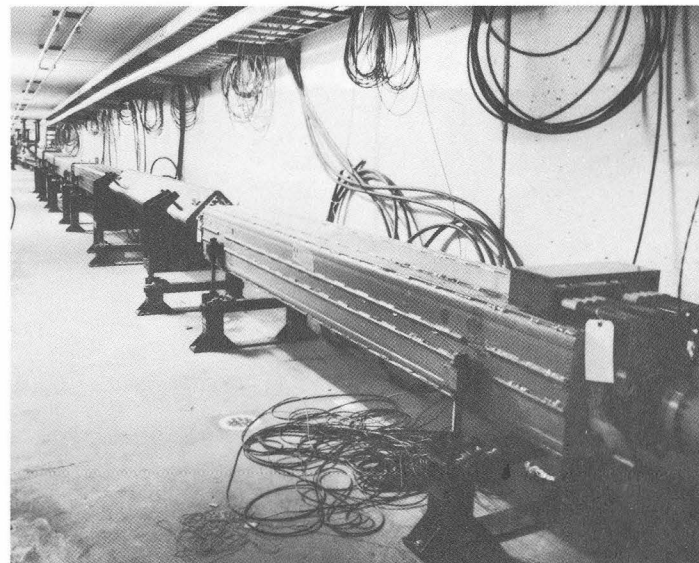


## AP-1 NEARLY READY TO TRANSPORT PROTONS



*Beginning of AP-1 in the Main-Ring tunnel near F18. The beam line magnets run just over the top of the Main-Ring magnets.*



*AP-1 magnets in the Pretarget Enclosure. There are 10 EPB dipoles and 14 3Q120A quadrupoles in AP-1. This transport line carries 120-GeV protons to the antiproton target station.*

by Gerry Dugan

The antiprotons for the Antiproton Source will be produced by the interaction of a beam of 120-GeV protons in a target. The proton beam will be extracted from the Main Ring at location F17 and transported in a beam line to the TeV I Target Station. The installation of the extraction system and beam line are now nearly complete; commissioning of the system is expected to take place in the next few weeks.

The extraction system consists of an extraction channel at F17 (two Lambertson magnets and two C-magnets); a kicker at E17 used to extract 120-GeV beam; a kicker at E48 used to inject 8-GeV antiprotons from the Accumulator; and three small bump magnets.

A large number of people from Technical Support, the Accelerator Division, and Tevatron I have contributed to the extraction system and beam line. The extraction channel magnets were designed by Mike May and Mike Harrison;

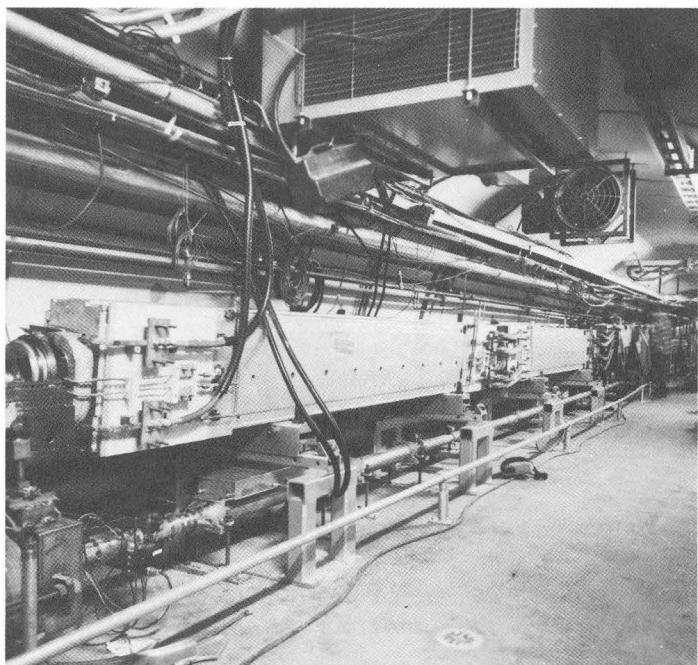
they were fabricated, along with the small bump magnets and 5 new 3Q120A's for AP-1, by the Magnet Factory, under the direction of Jack Jagger. The kicker magnets (which are similar in design to existing kickers) were built by Lee Brown's kicker shop. Their electrical systems' design and fabrication was directed by George Krafczyk (E17 kicker), Bill Merz (E48 kicker), and John Dinkel (extraction channel pulser). The installation of the Main-Ring devices in the tunnel was supervised by Bob Morrison and Stan Reeves. The extraction channel magnets and vacuum system were installed by Greg Lawrence's group. Cabling for all the Main-Ring devices was provided by Ed Kessler.

The installation of the AP-1 magnets and vacuum system in the Main-Ring tunnel was handled by Fritz Lange. In the rest of AP-1, Larry Sauer's group was responsible for magnet installation, and Glenn Lee's group for the vacuum system. Jack McCarthy's group has handled the electrical cabling in AP-1 (Bob Oberholtzer) and the magnet power supplies (Frank Cilyo). The

*(cont'd. on pg. 2)*

(cont'd. from pg. 1)

beam line instrumentation is being provided by Curtis Crawford, Rod Gerig, Jim Lackey, and the instrumentation groups of both TeV I and the Accelerator Division. Controls and software support for both F17 and AP-1 have been supplied by Tom Groves and Dennis McConnell.



*Lambertson magnets installed at F17. The extracted beam is transported to the target in a 500 ft long beam line (called AP-1).*

## ART INSTITUTE OFFERS CLASSES

The School of the Art Institute of Chicago (S.A.I.C.) will offer a series of classes at Fermilab in the spring. This will be S.A.I.C.'s second off-campus effort organized in conjunction with the North Shore Art League in Winnetka, Illinois.

The specific art courses have not yet been decided. If you are interested in influencing the selection of the art history or studio courses, please complete a questionnaire available at the Information Desk in the atrium of Wilson Hall. Instructors of the courses will be from the teaching staff of the S.A.I.C. Fees and credit for the courses are also the same. The classes will be offered in the evenings and Saturdays and are open to the public.

For more information regarding this opportunity to improve your art knowledge, contact Sandra Cox, ext. 2059.

## REFUND REQUEST DENIED

As explained in the May 3, 1984, issue of **Fermineers**, the Laboratory has been pursuing the possibility of obtaining an FICA Annuity Plan Tax Refund for all applicable employees. Employees who participate in Fermilab's annuity plans through salary reduction (tax-deferred) whose reduced salaries bring their taxable incomes below the Social Security maximum tax base in the years 1980 through 1983, might have been eligible for a refund of the FICA (Social Security) taxes paid in each of those years.

However, the Deficit Reduction Act of 1984 has now retroactively closed any refund possibility. The Laboratory had filed protective claims to keep open the possibility of an eventual refund, but now it is clear that no refunds will be forthcoming.

## CRACKDOWN ON ABANDONED CARS

Over the past several months, the Security Department has been keeping a close eye on abandoned vehicles. It appears that people who have an old car with mechanical problems sometimes get the idea that it's all right to park it on site until they get around to having it fixed.

So that the site will not become cluttered with derelict or abandoned vehicles, Security has put into effect the following procedures:

- 1) Vehicle believed to be abandoned will be issued a Parking Citation as "suspected abandoned" and the owner given time to remove it; and 2) If, after notification, the vehicle isn't removed, it will be towed to the 19 Shabbona vehicle lot in the Village and another Parking Citation issued this time citing it as an "abandoned vehicle." A letter will be sent to the registered owner informing him that if the vehicle is not removed from Fermilab property, the vehicle will be removed and disposed of in accordance with DuPage County Zoning ordinances and Illinois State Statutes.

Chief Armstrong reminds everyone that once the vehicle has been removed from Fermilab property, the disposition of the vehicle is entirely between the owner and the DuPage County Zoning Department.

# THE GUTHRIE THEATER PRESENTS 'FOXFIRE' FEBRUARY 3

by Jane Green

The Tony-award winning Guthrie Theater returns to Fermilab in February with its highly acclaimed production "Foxfire." Based on the popular "Foxfire" books compiled by Eliot Wigginton, the drama is a tribute to the people of Georgia's Blue Ridge Mountains. This "dazzling" play comes to Ramsey Auditorium on Sunday, February 3, at 7:30 p.m. Please note the special day and time.

Written by Hume Cronyn and Susan Cooper, "Foxfire" is a story about the old making way for the new. The play examines the battle between old ways and values and those of the present day. It reflects the humor, color, music, and glowing spirit of Appalachia. The drama "asks us to examine what it is that's important in our lives" and "finds its power in its sincerity and conviction."

The Guthrie Theatre, based in Minneapolis, is one of America's best known and most respected companies. Critics acclaimed Cronyn and Cooper's "masterpiece" as a "most fulfilling theatrical experience." "Foxfire" is "a show that glows with warmth and humanity."

Admission is \$11, and tickets are available at the Information Desk in the atrium of Wilson Hall, ext. 3353.

## SCHOLARSHIP FORMS DUE

Universities Research Association scholarship applications are now available in the training office, Wilson Hall 15. The deadline for returning them is March 1.

Annually URA sponsors a minimum of 15 scholarships for children of full-time employees. A single scholarship covers tuition and fees to a maximum of \$3,000 per year. It is renewable for up to four years as long as the student remains in good standing at the school.

## SHARE OLD PAPERBACKS WITH USERS

Want to get rid of the paperbacks you've already read 10 times? Good! Drop them off in the Guest Office, Wilson Hall 1E, or at the Users Center between 10 a.m. and noon on Tuesdays and Thursdays (or arrange to have them picked up). These books will be used to start a library in the Users Center. For more information contact Avril Quarrie, ext. 3440.

## NEW SPRAY PAINT BOOTH IN HIGHRISE

Good news! There's no longer any need to walk aimlessly around Wilson Hall looking for a safe place to spray paint.

The Business Services Section has installed a spray paint booth on Wilson Hall 16 just north of the elevators. You are encouraged to use this facility which is available 24 hours a day. Please observe the safety rules which are posted next to the booth.

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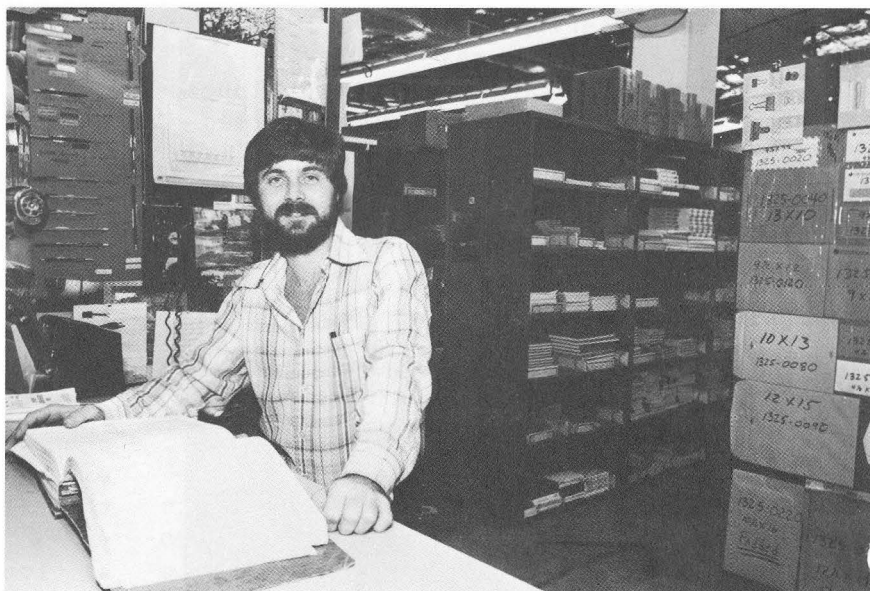
*"Foxfire," is centered on the relationship between a mother, played by Helen-Jean Arthur, and her son, played by Jake Turner.*



# DAVE MYERS' CREATIVE DISPLAYS ENHANCE STOCKROOM

In the year that David Myers, lead storekeeper, has been at the Wilson Hall stockroom, he has done more to facilitate customers and speed the stockroom withdrawal process than in all previous years combined. Working primarily on his lunch hour, and soliciting parts from customers, Dave has constructed boards showing samples of connectors, electrical fittings, envelopes, and pencils. In addition, he has assembled books of drawings of solder tips, typewriter ribbons, pliers, anchors, sandpaper, electrical boxes and covers, UNISTRUT fittings, screwdrivers, and drafting and engineering supplies--to mention only some.

Not only does Dave's desire to help make the stockroom withdrawal process pleasant for the customer, his construction efforts make his task of retrieval easier by saving steps back and forth when customers ask to see different styles. Dave thinks his artistry has been appreciated most by foreigners who frequently do not know the names of the items they need, but by using his drawings and boards can point to the desired object--be it a pen or pencil or an electrical part. And, the only board remaining to be completed in Wilson Hall is the 1000 Series (plumbing parts).



Dave has been at Fermilab almost eight years, coming here with stock experience from Eby-Brown Company in Aurora. Since working in Stores means being transferred among four stockrooms, Dave is now located at the main stockroom at Site 38. When asked if he will continue his efforts

*Dave Myers at the desk in the Wilson Hall stockroom. Behind him are several of the displays he created to help Stockroom users.*

there, he smiles and jokingly says, "If I have time." Jokingly, because in addition to helping customers and unpacking supplies, Dave spends at least two hours a day on paperwork. No wonder the only time he has left for completing his projects is his lunch hour. During a brief 15-minute interview for this article (on Dave's afternoon break), there were more than 8 customers lined up when he opened the familiar service window.

So, Dave, whatever stockroom you may be in, Wilson Hall appreciates your efforts and looks forward to the 1000 Series the next time you are here. Any volunteers willing to donate parts for this board?

R.D.

## Mileage Reimbursement Lowered

Effective, January 1, 1985, the mileage reimbursement rate for personal auto use is 20.5 cents per mile. The reimbursement rate is related in part to automobile fuel costs which have decreased in the Chicago area since the last reimbursement rate was determined. Accordingly, the Laboratory has adjusted its rate downward, and all mileage reimbursed in 1985 will be at the 20.5 cent per mile rate.

## FEMALE BASKETBALL LEAGUE TO BEGIN

The Fermilab Female Basketball League sign-up sheets are available at the gym, Monday through Friday from 5 p.m. to 10 p.m. If interested, please contact Ed Bonner, ext. 4761, or Vivian Butler, ext. 3494.

Congratulations To ...

