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BREAK GROUND FOR INTERNAL TARGET ADDITION



... Fermilab Director R. Wilson's spade signals start of Internal Target Addition...

Fermilab's Internal Target Group broke ground on Wednesday, November 27, for the construction of an addition to the facilities of this experimental area. The new 40 ft. by 40 ft. enclosure, adjacent to the Main Ring tunnel at the C-zero headquarters of the Internal Target group of the Accelerator Division, will house a superconducting spectrometer. Excavation will begin immediately and when the external enclosure is completed in the spring of 1975, an opening will be made into the Main Ring tunnel to connect the new addition to the existing facilities. Only the roof of the new addition will be visible at ground level, somewhat like the experimental pits of the Proton Area.

At the groundbreaking ceremony, Laboratory officials noted that the value of the internal target concept has been demonstrated in the 2½ years it has been in operation. This success has included the use of the hydrogen jet equipment brought to Fermilab in 1972 by the first U.S.S.R. collaboration. The device, developed and built by the Soviets, provides a stream of hydrogen gas which crosses the proton beam as it moves around the Main Accelerator. The gas stream acts as a target, providing significant data about proton-proton interactions at the span of energies available in the Main Accelerator. The unique device has been in continuous use since the middle of 1972 for a number of purposes including the joint U.S.--U.S.S.R. project. The new spectrometer will utilize the hydrogen jet as well as a helium jet now being built in the Soviet Union and expected to arrive at Fermilab also next spring.

"The jet has proved to be a useful workhorse," reports <u>Drasko Jovanovic</u>, head of the Internal Target Group. "Now we are making a bold attempt to augment our experimental area without stopping the operation of the Main Accelerator. No major shutdown will be required to bring the new spectrometer room into operation."

The first experimental group to use the new spectrometer (Experiment #198A) will be a collaboration of the University of Rochester, Rutgers University, and Imperial College of London. Several of these experimenters have been in other experimental collaborations which have used the internal target facility. Experiment 198A will continue the study of proton-proton interactions. Another experiment, #E-313, will begin to study polari-



...Soviet experimenters (L-R) Yuri Akimov, Georgi Takhtamyshev, Serge Mukhin, Barb Perington of Internal Target...



... E 198 Collaborators (L-R) D. Nitz, D. Gross, K. Abe, F. Sannes, S. Olsen...

zation in May, 1975, using the new spectrometer. While the construction goes on, Experiments 317 and 363 continue to run in the Main Ring tunnel.

Publications of Internal Target results have been made; more are on the way. "It is gratifying that in this day of difficult financing money has been given so that this project can continue as planned," Dr. Jovanovic notes. "This can be attributed to the importance of the physics that will be done here."

The new Internal Target enclosure was designed by Wally Pelczarski. Jim Klen is manager of jet operations for the Internal Target Group.



...S. Mukhin, Jim Klen, hydrogen jet assembly...

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AN EVENING OF INTERNATIONAL MUSIC AT FERMILAB

A concert of International Art and Folk Song will be held Friday, December 6, 1974, at 8:30 p.m., in the Fermilab Auditorium.

Sheila McKenzie, song stylist, will present an informal program of popular ballads and



international folk songs, self-accompanied on the guitar. Her large repertoire in nine languages contains songs from North and South America, most European countries and the Middle East, and spans the 13th to 20th Centuries in time.

Miss McKenzie is an artist in residence at the College of Education of the Chicago Circle Campus of the University of Illinois. She earned a Bachelor of Music degree from the College Conservatory of Music, University of Cincinnati, and later studied at Herbert Berghoff Studios in New York City. She has studied with the noted singer and voice teacher, Miriam Janowski, in Chicago.

Miss McKenzie has appeared in a number of concerts and also in many of the well-known clubs in New York and Chicago with outstanding success. Recently she gave a concert for Governor Walker and his guests in the Ballroom of the

Governor's mansion. She has also been a featured performer on national television with appearances in New York, Cincinnati and Detroit. She has been producer/director for a number of LP albums of folk, ethnic and art music.

Tickets are on sale in the Guest Office, Central Laboratory 1 West, or from Marilyn Paul, CL 2E. Tickets will also be sold at the door. They are \$3.00 for adults, \$1.50 for children, with student group rates available.



... His Eminence Cardinal Franziskus Koenig (third from right), Archbishop of Vienna, accepted a Fermilab invitation to tour the laboratory while on a Chicago visit recently. Accompanying the Cardinal on his Fermilab tour were (L-R) R. Carrigan; the Cardinal's secretary; a visitor from the University of Vienna; Henry Hinterberger; E. L. Goldwasser; R. R. Wilson; Arlene Lennox and T. Toohig...

SOME IMPORTANT FERMILAB ADMINISTRATIVE SERVICE NOTES

...Study continues on alternatives for programming the elevators in the Central Laboratory. A revised program providing service to each floor on each side of the Central Laboratory is now in operation. On the west side, the southwest elevator runs basement, first floor, and even-numbered floors; the northwest elevator runs odd-numbered floors. On the east side of the building, the northeast elevator will run all floors until the southeast elevator is back in service. (This should occur this week.) When both elevators are in operation on the east side, the northeast elevator will run odd floors and the southeast will run even floors and, in the near future, the basement. The comments made on the first-phase operations are appreciated. Some of the suggestions are being investigated for permanent incorporation into the program, those that are consistent with the goal of improving elevator service.

...The Central Laboratory Stockroom is now open from 8:30 a.m. to 5:00 p.m., Monday through Friday. It is located in the northwest corner of the ground floor (behind the elevators). The Cross Gallery stockroom is closed.

For off-hour stores requirements, use the stockroom in Industrial Building #3, which is open until 12:30 a.m., Monday through Friday and 8:00 a.m. to 4:30 p.m., Saturday and Sunday. For emergency requirements at times other than those listed, call the Site Patrol, Ext. 3414.

...To improve transportation service for employees, the current on-site taxi service has been expanded to include off-site chauffered transportation from Fermilab to Batavia and to certain designated hotels in Aurora to meet commercial bus service to O'Hare Airport. This service will be restricted to the daily taxi hours -- 8:30 a.m. to 5:00 p.m., Monday through Friday. A call to the Fermilab dispatcher, Ext. 4225 (H-A-C-K) should be made in sufficient time to allow for meeting the Continental Air Transport Company's bus during the taxi service hours. The Continental schedule is available from the Fermilab Travel Office, CL lW, Ext. 3397. All other airport service should be arranged on a reservation basis with the Travel Office.

...Electric heaters should not be used in the Central Laboratory advises <u>Dave Sauer</u>, Director of Site Services. Their use violates energy conservation as well as defeating efforts to fit the heating system to the actual need demands.

...Sauer also appeals to Central Laboratory residents: "The Cafeteria service ends at the obvious limits in the South Atrium. Please avoid taking trays and china from the cafeteria. Paper plates are available. If you choose to take trays and dishes from the Cafeteria, you have obligated yourself to return them to the Cafeteria. This obligation is to your own and your co-workers healthful, safe, and attractive environment."

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FERMILAB SOCIAL ACTIVITIES CALENDAR AVAILABLE

A variety of activities is scheduled at Fermilab during December, including the popular holiday parties for both children and adults. A special listing of December events (it's bright red) is being distributed with this issue of the Crier. It's meant for posting, for taking home, or propping up as a reminder. Look for a copy, or call Public Information (Ext. 3351) for extras.

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NEW SOUNDS OF MUSIC?

Electronic music continues to grow as a new and different style of music. Electronic sounds are being used more in traditional styles of music. Wally Kissel, Accelerator Division, Ext. 3721, is interested in finding out how many people at Fermilab would be curious in these areas and would like to discuss possibilities of designing equipment and generally experimenting with electronic music. Call him if you are interested.

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...Jim Krebs, Accelerator Division, and <u>Vivian Butler</u>, Purchasing, were winners of the Fermilab Music Club's 1974 Thanksgiving Turkey Raffle. Larry Jackson heads the Music Club.

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*** REMEMBER, CREDIT COSTS LESS AT YOUR CREDIT UNION ***

CLASSIFIED ADS

WANTED - 3 or 4 br. houses needed to rent by visiting scientists families for 1975, furn. or unfurn., stove & refrig. a must. Call Fermilab Housing, 840-3560.

FOR SALE - Sears Roto-Belt Humid. w/humidistat, water lev. indic., warn. light, 8½ gal. reservoir. Don Champion, Ext. 3719.

FOR SALE - Camping Lot, Wooded 40' x 120', near lake, elec., water, refuse pickup, paved roads, comf. stat. w/shower, 24 hr. secur., 85 mi. from Chicago, shown by app., H. Clover, 3089.

FRUIT SALE - Wheaton No. High Band, for music dept. trip. Box Oranges: sm.-\$4.00, Lg.-\$6.50; Box Grapefruit: sm.-\$4.50, Lg.-\$7.50. Call D. Szarzynski, Ext. 3719 or 665-5699.

FOR SALE - Girl's bicycle, 3 spd., \$25., and Child's tricycle, \$10.00, good cond., call Bill Neale, Ext. 3680.

FOR SALE - 74 Honda 500 Four, 600 mi., roll bar, aud. turn sig., luggage carrier and seat back Mint. \$1500. Call Jim Snow, Ext. 3815.

FOR SALE - 1969 Olds. Delta 88, 4 dr.ht., A/C, P/S/B, AM-FM radio, new battery & brakes - \$800. or best offer, Call Don Fichter, ext. 3492/3384.

FOR SALE - 1970 VW Squareback, fuel inject., 30 mpg, 4 new Michelin radials, low mileage, \$1500., Call Judy, ext. 3935, or Gil at ext. 3728 or eves. 892-1829.

FOR SALE - 1967 Pont. Catalina, 4 dr., P/S/B, good, \$300, D. Burandt 422-5291, ext. 3013/3216.

FOR SALE - 1967 Pont., P/S/B, new tires, good mech., \$450., J. D. Hogan Ext. 3701.

FOR SALE - 73 Mach I Mustang A/C, P/S/B, good. cond., clean, Oscar-897-3201/ Nino ext. 3303.

FOR SALE - 1967 Ford Galaxie, 4 dr., A/C, \$300., Call L. Teng, Ext. 3805.

FOR SALE - Silverware, William & Mary 12 place settings. Call E. Brezina, Ext. 3580.

CANDY SALE - Canned Kathryn Beich Candy, Katydids, Golden Crumbles, Toffee, Party Nuts & Caramel Chews. Benefit Cub Scouts Pack 522. Call J. Otavka, Ext. 3701.

ATT'N HORSE LOVERS - Hay, Straw, Oats for sale. Call Evenings 231-8127, B. Schlick.

FOR SALE - Snow tires, 825-14 studded on 6" wide rims, \$19 ea., Call Grant, Ext. 3143.

WANTED - Good used Crank Shaft for 40 H.P. V.W. engine., C. B. Pallaver, Ext. 4248/3090.

FOR SALE - Hart 180 skis w/Tyrolia "Clix" bind., \$40. C. Vanecek, 3315 or B. Vanecek, 3469.