

The Village Courier



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PROTON DEPARTMENT TESTS P-WEST LINE

The last beam line of the original design for external beam lines at Fermilab was successfully tested on Monday, June 16. At 1:40 a.m. the Proton Department operated all elements of the P-West beam line, bringing beam through three new sections of this Proton line for the first time, and bringing the Proton Department experimental lines to full design capacity.

Within a few weeks three experiments will begin to use the unique features which the new line brings to Fermilab's experimental capabilities. They will utilize an extremely clean beam of 10^{12} protons focused to a spot no more than two millimeters across, the goal of this latest project in the Proton Area. Initial results indicate a flux of less than 10^2 protons/mm² three inches from a beam focused to a density of 10^{11} protons/mm².

Design planning for the P-West line began two years ago. Very soon after the Proton Area began operation it was realized that the halo of the beam was too great to be tolerated by experiments to be set up there. Because of the high intensity of the proton beam, coming directly from the accelerator, the difficulties of eliminating the stray protons in the halo were soon apparent to the Proton Area staff and to the experimenters. The spray of secondary particles caused by this halo striking magnets, beam pipe here would create too much extraneous background on experimenters' counters, some of which are positioned within inches of the beam pipe.

Dr. Bradley Cox, Assistant Head of the Proton Area, with Drs. Thornton Murphy and John Peoples, developed the present concept of the P-West line. The new facility consists of three beam line enclosures which focus and collimate the extracted proton beam in order to reduce by several orders of magnitude the halo of the high intensity proton beam.

Proton Area personnel have been greatly aided in the overall bringing on of the Proton-West Area by members of the experimental teams that will use the new line. In particular, Dr. John Nagy of Experiment #95 and Dr. Carlos Hojvat of Experiment #177 have given valuable assistance to Laboratory personnel as they have built this area.

The experiments which will begin almost immediately to use the beam include:

Experiment #95 (a Fermilab-Johns Hopkins collaboration) that will start to run in a few weeks, using two spectrometer arms, to initially search for heavy particles produced in a proton-proton collision which will decay into photons or pi zero mesons.

Experiment #177 (Cornell University-McGill University-Northeastern University, and



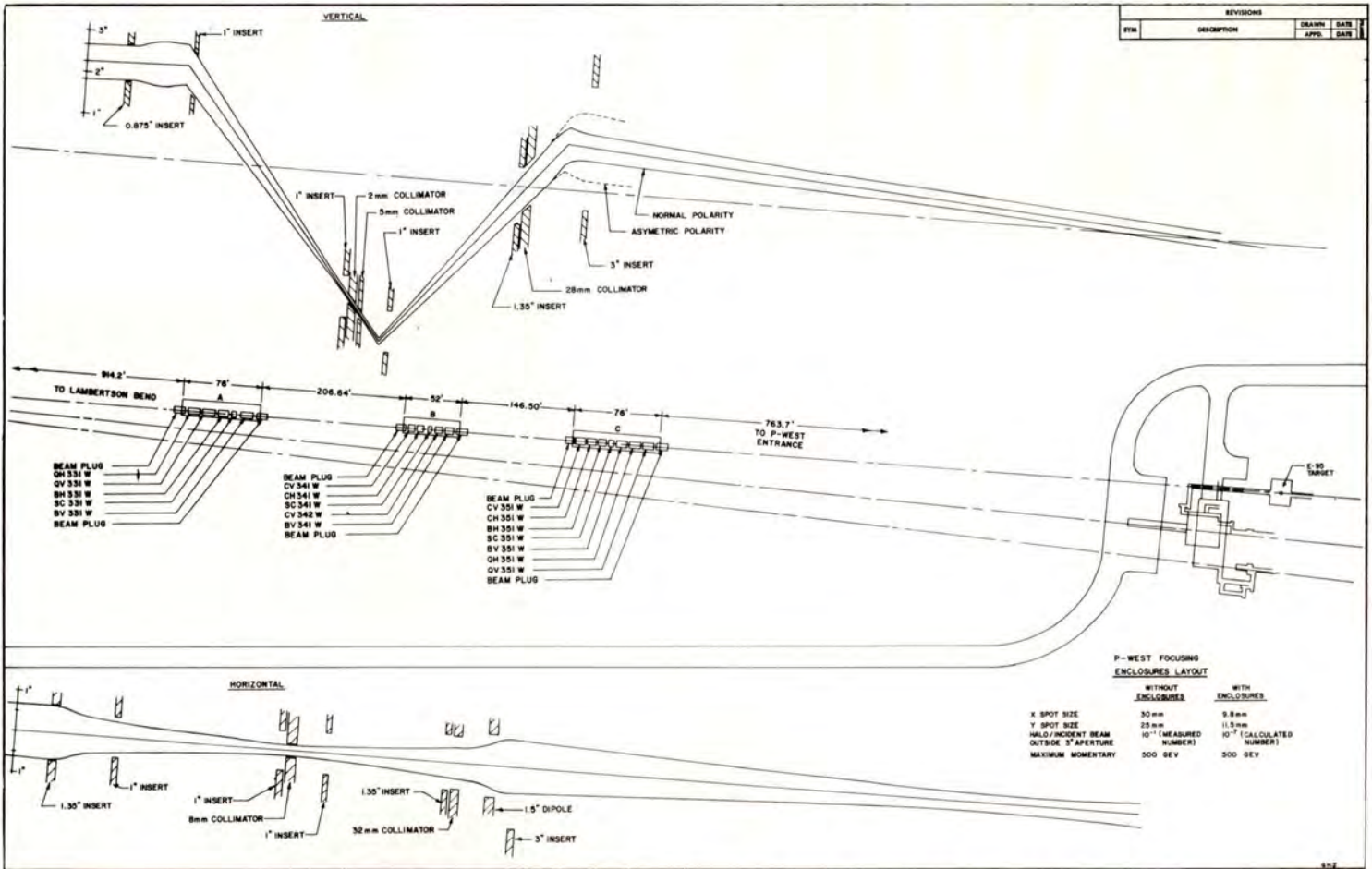
...Proton Department Personnel standing between the E-95 spectrometer arms...



...C. Rotolo and F. McIntosh of the Proton Department inspect equipment in the focusing enclosure...

(Continued on Page 2)

P-WEST LINE (Continued)



...Fermilab Proton West Focusing enclosures layout...

Lebedev Institute scientists) will study proton-proton elastic scattering at very large momentum transfers.

And Experiment #284 (a Fermilab-Northeastern-Northern Illinois experiment) will study inclusive particle production at large transverse momentum.

Roy Rubinstein, head of the Proton Area reports, "The P-West system worked exceedingly well. Even without the full power of the quadrupole enclosure system we have achieved our goals and we see that the experiments can go ahead."

Making especially important contributions to the P-West construction and testing from the Proton staff have been Ron Oram, project engineer for the P-West experimental area; Billy Strickland, drafting designer for the quad enclosure; Stan Orr, electrical engineer for the quad enclosure and Larry Tate, designer of the interlock system. Also deserving special mention is the work of the Architectural Services group under Tom Pawlak.



...Pivot point shared by E-95 and E-284 in the P-West pit...



...E-177 Septum Magnet...

FESTIVAL OF NATIONS LUNCHEON

Fermilab Cafeteria

Friday, June 27, 1975

11:30 a.m. - 2 p.m.

Gemüthlichkeit -- a Viennese Occasion

Bill Ross, Host
with Edith Tesinski



...(L-R) Eric Jarzab, Edith Tesinski, Bill Ross, Hans Kautzky sampling cucumber salad for Friday's Festival of Nations Luncheon...

Fermilab's chef, Bill Ross, attends many seminars and classes on gourmet cooking. At Mrs. Black's class, in Wheaton, Bill and Edith Tesinski of Warrenville met a Viennese menu which appealed to them as a suitable style of gourmet excellence for a Festival of Nations Luncheon. Their menu includes Spätzle soup, chicken paprika, bread dumpling, cabbage roll Smetana, cucumber salad, Linzer torte and Doboschtorte.

Hans Kautzky of Fermilab's Bubble Chamber staff, a native of Vienna and a gourmet cook himself, calls attention to the Linzer torte on the Viennese menu. "People come to Vienna for delicious desserts such as this, and this dinner, served with a light wine in the summer, would be popular."

Eric Jarzab's career at Fermilab has unfolded again, as he assumes the position of manager of the Fermilab cafeteria. Eric came to Fermilab in 1970, after 12 years in the Order of Franciscans, where, among other duties, he was a baker for The Brothers. At Fermilab he has worked in the stock room, the EEO Office, and in the Travel Office, as well as serving as president of NALREC. He is currently studying at the College of DuPage in a course taught by Jack Horton of the Argonne National Laboratory, a friend of many people at Fermilab. Eric was recently elected internal vice president of the West Chicago Jaycees.

The cafeteria staff (shown in photo below) has many ideas for enriching cafeteria service at Fermilab, such as donuts made in the Fermilab kitchen, coming soon. "We'll be utilizing all of the talents of our staff to bring good service to Fermilab customers," Eric promises.



...(L-R, back row) Alice Davidson, Josephine Mathews, Olivia McKinney, Elroy Martins, Jane Pesetski, Emma Visor, Eric Jarzab. (L-R, front row) Roberta Scheppman, Helen Thompson, Mae Riggs, Gertrude Mack. Not shown, Bill Ross, Chef, Margaret McAuliff, Lillian Konen, Bessie Miller, Arlene Alexander, Ernie Matt, and Angela Velasquez...

IN MEMORIAM
LLOYD S. SHEPHERD

Lloyd S. Shepherd, an employee of the Fermilab Accelerator Division since 1971, passed away at his home following a heart attack on Saturday, June 21, 1975.



Lloyd S. Shepherd

Mr. Shepherd was a native of Illinois. He attended the University of Illinois, majoring in electronics and electrical engineering. He served for more than 25 years in the U.S. Air Force, attaining the rank of major.

Lloyd worked as a technician under Jim Hogan in the Accelerator Division. "He was a conscientious, dedicated, and loyal individual who always gave you his best shot," Jim recalls. "He never complained or had a bad word to say about anyone. 'Shep' was both a gentleman and a gentle man, who had the respect of all his fellow employees."

Funeral services were held on Monday, June 23, with burial at Chapel Hill cemetery. Surviving Lloyd are his widow, Beth, and five sons -- Thomas, Fresno, California; Mark; Douglas, who lives in Arizona, and Robert and Christopher at home.

Contributions to an education fund for the boys may be given to Jim Hogan, Cross Gallery, Ext. 3701.

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+ ABOUT YOUR BENEFITS... +
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+ Fermilab employees enrolled in the TIAA-CREF retirement plan and wishing to +
+ change the distribution of premium allocations between the two funds, must do so by +
+ July 1 of each year. For more information about the retirement plan, or about this +
+ distribution, contact Ralph Wagner, Employee Benefits, Ext. 3395. +
+
+ TIAA is the fixed income securities portion of the retirement plan, with funds +
+ invested in such securities as bonds and mortgages. CREF, on the other hand, offers +
+ a variable annuity from its broadly-diversified common stock fund. +
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OPEN HOUSE PLANNED FOR JULY 20

Fermilab will hold another Open House -- on Sunday, July 20, from 11:00 a.m. to 6:00 p.m. Further details will be announced early in July. All Laboratory-associated families and the general public will be invited. Plans for the day will incorporate much of the experience gained from last year's first Open House, which was so overwhelmingly successful. Employees will be asked to volunteer their services to help with the occasion, and section leaders are being contacted to recruit such volunteers. Frank Cole is chairman of the Open House Committee.

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POTPOURRI...Mark your calendar--Fermilab Family Picnic, Sunday, August 17...There are still openings in the canoe class. Call Jane Theis, Ext. 3560...HAPPY HOUR, June 26 - 5-6:30 p.m., Village Barn - Steak and potatoes \$1.50...Users Center is now open from 1-9 p.m. on Saturday and Sunday...

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CLASSIFIED ADS

FOR SALE - Moving. Used furniture. Twin beds, dressers, loveseats, recliner, coffee table, expandable dining table w/8 chairs, desk, etc. Good cond., Murthy, X4153, 665-9734.

FOR SALE - Shely Pups (miniature Collie), 2 female, 9 wks. old. \$20. ea. Homer D. Clover, Ext. 3685, 554-1375.

SUBLET - Unfurnished 2 bedroom apartment. \$200/mo. Close to Lab, stores & tollroad. Call Meg, Ext. 3242 or 851-4272 after 5:30 p.m.

FOR SALE - Air compressor--oil-less type, 3 gal. tank, regulator, pressure switch, gauges. \$60. Bob Trendler, Ext. 3157 or 968-0516.