



HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

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CARTER VISITS PPL



PPL Associate Director for Research Paul Rutherford (left), describes the Princeton Large Torus (PLT) experiment to former President Jimmy Carter as laboratory Director Dr. Harold Furth (right) looks on. Mr. Carter visited PPL for an hour-long tour as part of his Princeton visit last week.

PDX UPDATE

After a four month shutdown, PDX is coming back to life. The last two of four ORNL beam lines have been installed by H.P. Eubank's neutral beam group. The total injection capacity is now 6 MW.

To protect the inner wall of the vacuum vessel from direct bombardment by the neutral beam, the wall has been armored by arrays of graphite tiles. The tiles, coated with titanium carbide, are mounted on water cooled copper slabs. This design was developed by H. Kugel, who is also responsible for the PDX injectors.

Les Gereg, who is responsible for all the work inside the PDX vacuum vessel (and who practically makes his home there during a long vacuum vessel opening), was in charge of the actual installation. "Installation" usually means modification as well, since it is rare that pieces supplied to Les fit in place with no alteration.

In addition to neutral beams, two major new diagnostics have been installed on the machine. Both search for fine grained plasma instabilities by observing the scattering of CO₂ laser radiation in one case, and of 2-mm microwaves in the other.

Since the inside of a tokamak is a harsh environment, a wide range of repairs were also made to the internal divertor hardware and to some important diagnostics (such as the TV Thomson Scattering apparatus, the waveguides for the microwave interferometer, magnetic loops, and so on). The old titanium limiters were also replaced by graphite ones.

In the coming six months, the main experimental effort on PDX will center on getting beam power up to full rating and resolving the questions that arose last fall regarding the heating efficiency of near-perpendicular beam injectors.

Chain Letters

PPL facilities, including Xerox copiers and the mail service, are for official Laboratory/Princeton University business only. Personal chain letters, even though they may be well-intended, are not to be copied or distributed with the use of PPL facilities.

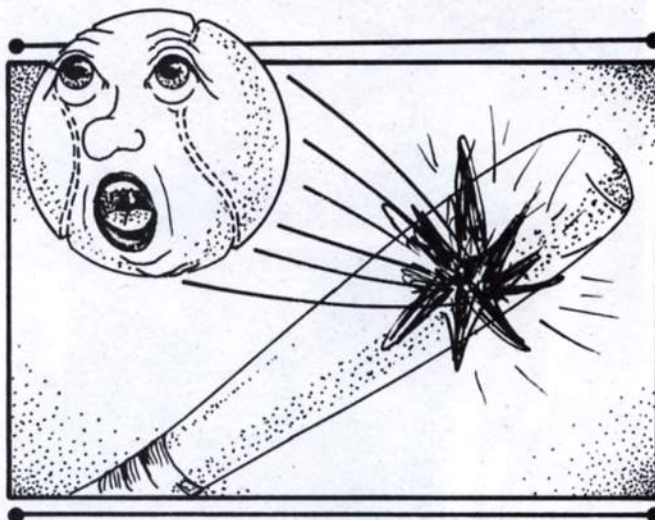
Check Valves

Reverse flow safety check valves will be required on all oxygen and acetylene cylinders used with a torch set as of March 30, 1981.

These valves, which are now a safety requirement, are available at the stockroom for \$7.49 each. Equipment without check valves after March 30 will be tagged out of service.

If you have any questions concerning this requirement, contact Ray Jeanes in PPL Health and Safety at ext. 2532.

Softball Signups



Players are needed for PPL's entry into the 32-team Princeton Industrial Softball League, according to organizer Tom Holoman. The league will be split into several divisions, with the PPL team playing slo-pitch softball against teams such as RCA, FMC and other area research or industrial firms. PPL finished last season with a 10-6 record.

Teams consist of between 15 and 20 members. The PPL team will play Tuesdays at 5:45 p.m. beginning April 28. Games are played on the softball field near the airstrip, and spectators are urged to attend the games to cheer the team on.

Anyone interested in playing on the team should contact Tom at ext. 2748.

Language Lab

Approximately 25 people joined Associate Director of Academic Affairs Dr. Thomas Stix in wishing the PPL Language Lab "many years of reel happiness" at the lab's grand opening last week.

The group heard a short speech by graduate student Kevin Brau, who called the lab "an intellectual oasis" for "the amalgam of scientist and humanist . . . who reads 'War and Peace' between PDX discharges." Brau helped organize the lab, with the aid of fellow grad student Jim Glanz. Opening 'ceremonies' also included the splicing of two 600-foot reels of magnetic tape, and the recording of "testing, testing" in three languages by Dr. Shoichi Yoshikawa.

The brainchild of Dr. Stix, the laboratory is open on a 24-hour basis and is available to all PPL

personnel. The lab currently contains two reel-to-reel tape recorders with headphones, allowing users to listen to elementary college level German, French and Russian tapes. The tapes and their accompanying texts are available in Mary Dyson's office, C-Site, Room AD9.

Those interested in using the lab should sign up on a sheet in Room AD9, get the required materials, and go to the lab, housed in LOB Room B-142. A set of operating instructions is posted on the tape recorders for first-time users.

Other language tapes will be added to the laboratory as user interest and available funds allow. Suggestions for improvements or additional languages should be sent to the lab in care of Mary Dyson.



Grad student Kevin Brau tests his command of foreign languages in the newly opened PPL Language Laboratory. The lab, housed in LOB Room B-142, offers all employees the opportunity to learn French, Russian or German.

Electronic Wiring and Workmanship



These 12 employees recently completed the Electronic Wiring and Workmanship course held at PPL. The week-long course, taught by technical consultant Maurice Wells, covered NASA-level soldering and welding skills with integrated circuits. Pictured are (front row, left to right) Dave Ciotti, Pete Haney, Mel Gensammer, Wesley Reese, Charlie Sule, and Training and Development Manager Larry Holpp; (back row, left to right) Gary D'Amico, Ray Gernhardt, Pat Murray, Howard Richter, instructor Maurice Wells, Technical Training Coordinator Joyce Lafharis, Rich Frankenfield, Carl Szathmary and Jim Greenhough.

●● Safety Glasses ●●

The laboratory provides a service for purchasing prescription safety glasses and safety shoes at considerable savings. Any employee who wishes to purchase corrective industrial safety glasses through the laboratory service may do so by calling Health and Safety at ext. 2526.

The PPL Hotline is issued by the Princeton University Plasma Physics Laboratory, a research facility supported by the U. S. Department of Energy. Correspondence should be directed to PPL Communications Office, Module 2, C-Site, James Forrestal Campus, ext. 2754.