



# HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

Vol. 4, No. 13

June 3, 1983



## TFTR DEDICATION

May 5, 1983

The May 5 TFTR Dedication turned into a double-decker celebration, with festivities held throughout the day on laboratory grounds and at the University's main campus.

In the morning, approximately 400 guests representing government, industry, and national and foreign laboratories attended a ribbon-cutting in the TFTR Test Cell. Prior to the event, attendees heard several speakers laud the success of PPL's projects in general (and TFTR in specific) in ceremonies in the decorated Mock-Up Building.

Secretary of Energy Donald P. Hodel read a letter from President Reagan, in which the President cited the laboratory's "truly historic program" and its "pioneering work," conducted in the "spirit of inquiry" and farsighted planning that are "the hallmark of a society with vision." He added that TFTR's "notable achievement" was an important step toward "opening the door to a new world of progress for all mankind."

A congratulatory letter received from Governor Thomas Kean was read by Princeton University President William G. Bowen. Governor Kean applauded "this impressive scientific and technological achievement," adding that "New Jersey takes special pride in the laboratory's other continuing programs. To the staff of PPL, I want to convey my best wishes for success. I am confident that you will continue to provide the imaginative leadership so essential to the timely development of this important and tremendously exciting field."

Secretary Hodel told the audience that "one doesn't have to be a scientist to appreciate the importance of this program or this project." He expressed his confidence that the nation "has the will to maintain the core commitment to maintaining basic research and development that is essential to keep us in the forefront of these kinds of activities."

Presidential Science Advisor George Keyworth noted that "TFTR began as

part of another administration's science policy, but we too recognize a good thing when we see it, and we're making sure it doesn't falter." He concluded by saying, "I take comfort from this fusion program, which steadfastly maintains an eye on its ultimate objectives. I for one salute your enthusiasm to make science and technology work for the good of all."

President Bowen, DOE Office of Energy Research Director Alvin W. Trivelpiece and Keyworth then joined other guests in watching Secretary Hodel and laboratory Director Harold P. Furth cut a ribbon on TFTR. The ribbon-cutting marks the beginning of the first phase of TFTR experimentation.

During the celebration held later that afternoon in Jadwin Gym, Dr. Furth told his audience that "what (our guests) saw in the Test Cell was really not the important part. We all know that what is in the Test Cell is only the egg, and the chicken is right here." President Bowen praised "the capacity of so



many people, not only to work so hard, but to work so well together. It is a remarkable accomplishment...and it is to the members of the staff at PPL who have worked so hard that congratulations are really due."

Dr. Bowen then told the assembled crowd that TFTR's success is due "especially to the determination, good spirit and dedication of all the individual people who have breathed life into this project. What has been done to date is simply prelude. We have to be able to continue to count on the kind of dedication, willingness to make the extra effort, skill and intelligence that have marked your contributions to this project from its inception."

The PPL staff received additional congratulations from John F. Clarke, DOE Associate Director for Fusion Energy, Office of Energy Research. Clarke told his listeners that "people who attempt to work on a project like TFTR are doing more than an ordinary job. They may work with ordinary things, but they have to put those things together in a way that has never before been attempted. It isn't ordinary people who can do this; it takes people with a very rare combination of faith, hope and dedication to do a project like this."

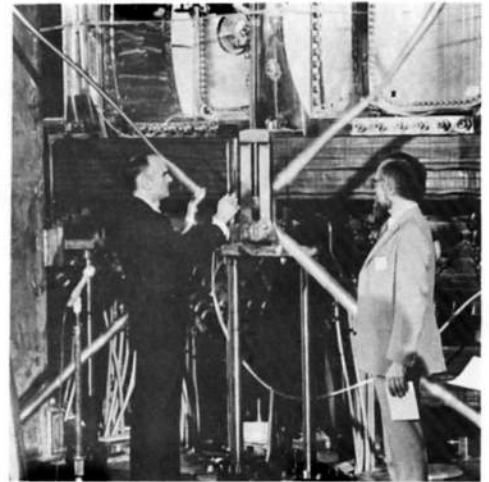
Kudos also came from DOE's Manager of Chicago Operations Robert H. Bauer. "The real pleasure today," he said, "is this opportunity to share the excitement and the fulfillment of this historic event with the people who actually



made it happen: the dedicated men and women of PPL, their families, the contractors and the subcontractors who shared in this task. In a very real sense, this is your day."

Then, in what Dr. Furth characterized as the "most formal and sacred" segment of the day-long celebration, the second eye of PPL's daruma doll was completed. Professor Taksuoki Miyajima, chairman of the Nuclear Fusion Council and president of the Institute of Physical and Chemical Research, inked in the eye as Dr. Furth looked on.

PPL received the daruma doll from the Japan Atomic Energy Research Institute (JAERI) during the 1977 ground-breaking for TFTR. The doll is traditionally presented with one eye left blank at the start of a great undertaking. The second eye is completed when the project reaches fruition.





## NBI NETWORK

Prior to 1980, PPL's word processing capability was centered in a Xerox 850 system run by two operators. But PPL has now centralized its expanded word processing system via the NBI shared resource network, incorporating trained operators and satellite stations throughout the laboratory.

Marilyn Hondorp, Head of NBI Network Operations for PPL, explained that upgrading of the system has allowed installation of satellite stations in TFTR Operations, Applied Physics and the Theoretical Division. "The NBI OASys 64 uses a fixed disk with a memory capability of 60 megabytes (mb) and 16 ports. An additional 120 mb of memory and eight more ports were recently approved, which will allow the installation of satellite stations in the Director's Office, Plant Maintenance and the Experimental Division."

The satellite stations serve as an adjunct to the Word Processing Center, located in Module 2 at C-Site. The Center's two full-time operators regularly churn out thousands of pages of work monthly; in April the Center completed a record 3,066½ pages.

Most Center users submit articles destined for journals or PPL reports for composition, although the Center does create memos, charts and mailing lists for the Administrative Division, Plant Maintenance and Personnel. The system is also fully loaded with communications, records processing, equations, and system archiving software programs. Spelling verification and stat/math programs are being planned for the near future.

Ms. Hondorp emphasized that the Word Processing Center is an on-site service group. Any department can prepare material for submission to the Center on a first-come, first-served basis, although rush service is available in emergency situations. There is no charge-back for work done in the Center.

Word processing stations are established on the recommendation of the laboratory's Word Processing Committee. Departments interested in obtaining satellite stations must provide justification to the committee, which examines the compatibility of the desired system with existing equipment. Once a station is approved by the Committee and the DOE, prospective operators can be trained at NBI's facilities in Paramus, or in a one-week in-house training course conducted by Marilyn. At present, there are 10 satellite operators trained on NBI equipment.

Future plans for the NBI Network include increasing its current ability to send information to and from the PPL Computer Net, and from PPL's NBI equipment to NBI equipment at other facilities. Installation of stations in Buildings 1-0, 1-P, 1-A and 1-E are also in the offing, building toward total communication from one site to another.



*Operator Chris Ritter demonstrates the capabilities of the NBI network. The system has helped centralize PPL's word processing operation.*

Anyone interested in seeing the capabilities of the NBI system can attend a demonstration in the Word Processing Center, available by appointment only. Appointments can be scheduled by calling Ms. Hondorp at ext. 2662.

For more information about word processing, contact Marilyn Hondorp or Technical Information and Printing Services Head, Meg Harmsen.

## ID BADGE RULES

Employees who forget or misplace their regular access/identification badges may obtain employee temporary badges at any time from the C-Site Security Desk. Temporary badges are issued to employees on a daily basis ONLY and must be returned daily. Individuals requiring badges for more than one day at a time should come to the Security Office at the Chemical Sciences Building, B-Site for a permanent badge.

ALL visitors must obtain a Visitors Pass from the C-Site receptionist during working hours, or from the C-Site Security Desk after working hours, on weekends and holidays.

Questions regarding the temporary badge policy should be directed to the Forrestal Security office, ext. 2894.

This year, PPL has resorted to the lottery system to fill approximately 100 summer jobs open throughout the laboratory.

According to Human Resources Manager Len Thomas, 157 applications were received by the summer youth employment program from individuals whose

parents work at PPL. Princeton University students on financial aid received first preference for the available positions, followed by college students with technical abilities in fields such as computer science, physics or engineering. Non-technical college students and high school students rounded out the priority list.

Numbers were assigned to each eligible applicant prior to the lottery. John Anastasio, Leon Jackson and Marilee Thompson of the Employee Representatives Committee (ERC) selected names in consecutive order during the lottery. Positions will be offered to applicants based on the order in which their names were chosen.

## SUMMER JOBS LOTTERY



A group of technical summer positions are available, but these jobs will be filled based on skill qualifications, not on the lottery system. Thomas added that a number of applications were received from individuals with no ties to PPL. These applications were not included in the job lottery selection process.

Thomas said he expected all positions to be filled by mid-May.

*ERC members John Anastasio (left), Leon Jackson (center) and Marilee Thompson begin the selection process in PPL's summer hire lottery. The numbers they selected determined the order in which summer jobs were offered to applicants.*

## PRIZEWINNING PMT

The world's smallest magnetic fusion confinement experiment, the Princeton Micro-Torus, achieved 'first plasma' at the National Energy Foundation's recent Student Exposition and Energy Resources (SEER) fair in the Morristown Armory. It also achieved a plasma physics award for its builder, Delbarton High School senior John Bradish of Bernardsville.

John, the son of PPL Computer Division engineer John Bradish, constructed the microtorus with a major diameter of six inches and a minor diameter of 1.2 inches. The model employs a circular fluorescent tube as a vacuum vessel, and can produce a .001 kiloamp current for 1.2 milliseconds in its low temperature mercury vapor 'plasma'. Activated by automatic firing controls and monitored by a LED countdown timer, it also boasts a 1,000 volt capacitor bank and 10 turns of eight-gauge wire to provide primary ohmic heating.



The SEER program provides secondary school students with the opportunity to construct projects demonstrating new energy sources, or new ways to obtain and use energy.

*John Bradish poses with his creation, the Princeton Micro-Torus. The project won John an award at the recent SEER science fair in Morristown.*

## PATENTS

PPL now has a Patent Awareness Program as well as a Committee on Inventions, to increase the patent awareness of laboratory staff. Five invention disclosures have been filed with the committee since the beginning of FY83:

- Method of Winding High-Field Double-Pancake Superconducting Coils, by P. Materna

- Gaseous Divertor, by F. Tenney, W.L. Hsu and M. Yamada

- High Rejection-Ratio Differential Amplifier, by S. Yoshikawa

- Hexagon Tap Driver, by R. Silvester

- Neutron Band-Pass Filter for Fusion Diagnostics, by T. Elevant and L. Samuelson

For further information about the committee or the program, contact committee secretary Nancy Jones at ext. 2858.

## CORRECTION

A story printed in the last issue of HOT-LINE described the blinding of a shipyard worker wearing contact lenses. An electric arc flash supposedly bonded the lenses to the corneas of his eyes, costing him his sight.

Follow-up investigations of the reported incident revealed that the accident never happened. Officials of the National Society to Prevent Blindness have labeled the story "totally impossible".

Ray Jeanes of the Health and Safety Branch pointed out that while the accident report may have been false, contact lenses should not be worn while working in any PPL shop or laboratory.

## TOUR THANK -YOUS

Neither the January blizzard, the February rains, nor the March winds kept visitors from PPL's door. One hundred thirty-three guides conducted 98 tours and a record total of 2,210 visitors through the laboratory during that period. March led the totals with 51 tours, 1,343 visitors, and 134 aching feet belonging to 67 tour guides! To all of our guides who almost never say "no," we extend a sincere thank you.

### JANUARY

Halsey Allen  
Suzen Bayer  
Peter Beiersdorfer  
Patricia Bergbauer  
William Blanchard  
Allen Boozer  
Charlie Bushnell  
J. W. Clark  
James DeLucia  
Anthony DeMeo  
Ernst deHaas  
Fred Dylla  
Melvin Gottlieb  
Naren Kokatnur  
George Loesser  
Dennis Manos  
George Martin  
Don Monticello  
Richard Palladino  
Mike Pereira  
Gary Oliaro  
Alan Ramsey  
Phyllis Roney  
H. Rosenbroek  
Greg Schmidt  
Marilee Thompson

Fred Tenney  
Mike Ulrickson  
Al von Halle  
S. von Goeler  
Masaaki Yamada

### FEBRUARY

Suzen Bayer  
Paul Bellomo  
Patricia Bergbauer  
James Bialek  
Norton Bretz  
Robert Budny  
Sal Cavalluzo  
Ernst deHaas  
Fred Dylla  
Robert Fleming  
Stuart Foote  
Larry Grisham  
Gary Hay  
Daniel Huttar  
Richard Jensen  
Harold Johnson  
Naren Kokatnur  
Robert Krawchuk  
Robert Kress  
John Lovberg  
Milt Machalek

Dennis Manos  
Lorand Meray  
Don Monticello  
Holt Murray  
Robert Papsco  
Mike Pereira  
Frank Petree  
John Schivell  
Paul Snook  
Fred Tenney  
Felix Ullrich  
Mike Viola  
Al von Halle  
Howard Zuvers

### MARCH

Suzen Bayer  
Michael Bell  
Patricia Bergbauer  
Jim Bialek  
Fred Boody  
John Bradish  
Norton Bretz  
Robert Budny  
Charlie Bushnell  
Sal Cavalluzo  
Joe Cecchi

Sam Cohen  
John Coonrod  
Joe Csenter  
Ernst deHaas  
Frank Dreher  
Fred Dylla  
John Edwards  
Robert Fleming  
Stuart Foote  
Sam Goldfarb  
Melvin Gottlieb  
Boris Grek  
Richard Hawryluk  
Donald Hay  
Phil Heitzenroeder  
Ralph Izzo  
Alan Janos  
Harold Johnson  
Fred Kloiber  
Naren Kokatnur  
Ed Lawson  
Jerry Levine  
Doug Loesser  
J. Manickam  
Dennis Manos  
George Martin  
Peter Materna  
Robert Mills

Harold Murphy  
Donald McNeill  
Gary Oliaro  
Richard Palladino  
Mike Pereira  
Robert Pinsker  
Doug Post  
Alan Ramsey  
Phyllis Roney  
Greg Rewoldt  
Eric Salberta  
Greg Schmidt  
Jim Sennis  
Ralph Smith  
Larry Stewart  
Wolfgang Stodiek  
Conrad Stout  
Szymon Suckewer  
Fred Tenney  
Marilee Thompson  
Phil Thompson  
Felix Ullrich  
Mike Ulrickson  
Al von Halle  
Fred Wysocki  
Ken Young  
Irving Zatz  
Howard Zuvers



## ABSENCE POLICY



### JEAN HENDERSON

Jean was recently appointed Customer Service Representative for the Material Control Branch. Jean, who has been with PPL for 23 years, will assume her new duties on June 6.

According to Material Control Branch Assistant Manager Chris Gillars, Jean's responsibilities will fill the void left by the now-defunct Stockroom Users' Committee. "This will be a new way for us to get feedback," he explained. "Jean will basically be a problem-solver, providing one-on-one service to our customers and a channel for customer inquiries and problems."

As a first step in that direction, Jean will begin making visits to various areas throughout the laboratory in June. The visits are expected to highlight areas where Material Control can help improve its service level to the PPL community.

When material is needed on an emergency basis, Jean can help expedite the request. Jean will be able to make open orders for out-of-stock or emergency items, as well as responding to telephone inquiries and requests for aid. She will also be responsible for administering PPL's safety shoe program.

Jean can be reached at Building 1-E, Room 201, ext. 3576.

Over the past several months, the Personnel Department has been continuously informing employees of the various components that make up the University's benefit program. The following outline describes the sporadic sick and absence for compelling reasons policy for non-exempt employees.

The Laboratory recognizes that employees may have urgent reasons for requiring short or long term absences from their jobs. When the circumstances are appropriate, employees can be authorized to have either an Excused Absence or a Leave of Absence, whichever is applicable to the situation. Employees will continue to accumulate service time for all authorized absences and leaves of absence, provided they return to work.

Non-exempt (bi-weekly) employees are permitted to receive pay for time lost due to sporadic personal illness ("sick days") not to exceed eight days for each fiscal year, October 1 to September 30. Employees hired between October 1 and March 30 will be allowed up to eight sporadic sick days; those hired between April 1 and September 30 will be allowed four days for the year. Probationary employees will be allowed up to two sporadic sick days during the probationary period.

Sporadic absence days may be taken by the employee for personal illness, injury, accidents, or for a personal doctor or dentist appointment only. Employees are responsible for notifying their supervisor, by telephone or other means, if prevented from reporting to work because of illness, injury, or other reasons.

If a scheduled holiday occurs during a day of sporadic absence, the day will be charged as a holiday. If an illness occurs during an employee's scheduled vacation, the absence will normally be charged to vacation and not to sporadic absence.

Unused sporadic absence days may not be compensated for nor carried over to the next year's allotment. Additional days beyond those defined within this section may not be granted with pay and will be charged to leave without pay. However, with supervisory approval, such time may be charged to vacation or optional holidays.

Absences which result in temporary disability or workers' compensation leaves of absence will not be charged as sporadic sick days.

The Laboratory also recognizes that non-exempt employees may need time off for reasons other than those provided for in leaves of absence and other specified excused absences. In order to provide time off with pay for compelling and essential reasons, supervisors may approve up to two days per year for full time regular employees.

Compelling and essential reasons are personal time off absences that cannot be scheduled outside of normal working hours. Absences beyond the two day limitation may be charged to vacation or optional holidays with supervisory approval. Unused days may not be compensated for nor carried over to next year's allotment.

If you have any questions about the policy, call Mary Bersch at ext. 2043.



## "WINDS OF PPL"

Jane (Mary Ann McBride) works on her most important project -- her nails -- while Bobbie (Dee Hurley) bemoans her fate in this scene from "The Winds of PPL", left, a comedy skit presented during Secretaries' day festivities sponsored by the Secretarial and Office Support Staff program committee. Taking their bows at the finale, right, were (left to right) writer/director Bob Malinowski and actors Debbie Silvestri, Roger Gould, Lee Benson and Terry Greenberg. Not pictured are actor Leon Jackson and musical accompanist Wayne Sloyer. The play was produced by Dee Hurley.



## SECURITY GATE USE

The security booth at the main entrance to PPL is now equipped with a gate-arm controlled by a Rusco card reader. The gate has been programmed to remain opened from 7 a.m. to 7 p.m. Monday through Friday, allowing personnel to enter the campus during these times without challenge. The Security officer stationed in the booth during these hours is there for informational purposes only.

The gate-arm remains closed on weekends and holidays, as well as between 7 p.m. and 7 a.m. Monday through Friday. Personnel requiring entrance to the campus during these periods should insert their Rusco access card into the card reader to automatically activate the gate-arm. It should be noted that the gate-arm will remain open **ONLY** long enough to allow **ONE** vehicle at a time to pass through.

Employees who have either forgotten

their card, or who have not been issued a card, must use the Security telephone (located next to the card reader) to call for aid. The telephone provides a direct line to the C-Site Security Office, and will be answered promptly by a Security officer. Individuals will be asked to give their names and other pertinent information to the Security officer, who will then activate the gate-arm to allow entrance to the campus.

Any questions or problems concerning the access gate should be directed to the Forrestal Security Department in the Chemical Sciences Building, ext. 2894.

## VOLUNTEERS: PEOPLE PEOPLE

*The following information pertains to the Voluntary Action Center of Middlesex County. For further information about the listing, call the VAC at (201) 249-8910.*

High school teacher Linda Hale has organized a group called VAC-SAC (Voluntary Action Center-Singles Aiding the Community). VAC-SAC spans all age groups, and is designed for people who want to do community volunteer work. Volunteers may choose to participate in group projects, such as the Hand-in-Hand Festival, the Raritan Valley River Fest, or the State Teen Arts Festival. Individual opportunities are also available for workers at the Daisy Therapeutic Center fair, Clowns for Special Kids, and for Moot Court jurors. Contact the VAC to become an active part of VAC-SAC.

*The next listing was supplied to HOT-LINE by the Voluntary Action Center for Somerset County. Further information is available from the VAC at (201) 580-9380.*

Volunteers are needed to help the handicapped learn to ride horses at the Somerset Hills Handicapped Riders Program. Evening or weekend volunteers will help riders mount, lead horses, and offer encouragement to program participants.

*The next five opportunities were supplied by the VAC of Morris County. Positions are listed by responsibilities only; further information on any one is available from the VAC at (201) 538-7200.*

Are you a plant lover? Then put your green thumb to good use helping with a greenhouse project. An organization needs plant lovers to start growing a vegetable garden for the needy and senior citizens.

An historical museum is seeking volunteers who sew to form a Textile Conservation Committee. Research on clothes, quilts and interior decorating would be involved. Workshops and seminars are also available to committee members.

An organization concerned with child welfare seeks board members to review children in out-of-home placements, such as foster homes. A psychology background would be welcome, but is not required.

An organization concerned with protecting the environment is seeking volunteers with science backgrounds to write book reviews. Other opportunities with this organization are also available.

An historical museum is running a training program for individuals interested in becoming guides for the site. The village also needs sales people for its gift shop, toll keepers at the gate, and volunteers for special events. If you're interested in history, here's a great way to learn more.

*These final opportunities were provided by the Voluntary Action Center of Mercer County. For more information on any position, call the VAC at (609) 249-1912.*

The Family Service Agency of Princeton needs volunteers to write publicity, do yard work, or perform clerk/typist duties.

Was "Radar" always your favorite M\*A\*S\*H character? The Big Brothers/Big Sisters, Donnelly Memorial Hospital, Lutheran Social Services, the Little Peoples' College, Multiple Sclerosis, the state Department of Civil Service, and the N.J. Agent Orange Commission are all looking for clerical assistance.

Longing to be "on the road again"? Become a driver for the Ewing or the Lawrence Meals on Wheels program, or for the Americal Red Cross.

Do you have a pleasant voice? Put it to work by tending telephones for Mill Hill, Parents Anonymous CONTACT.

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*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 Information Services, Module 2, C-Site, James Forrestal Campus, ext. 2754.*

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