



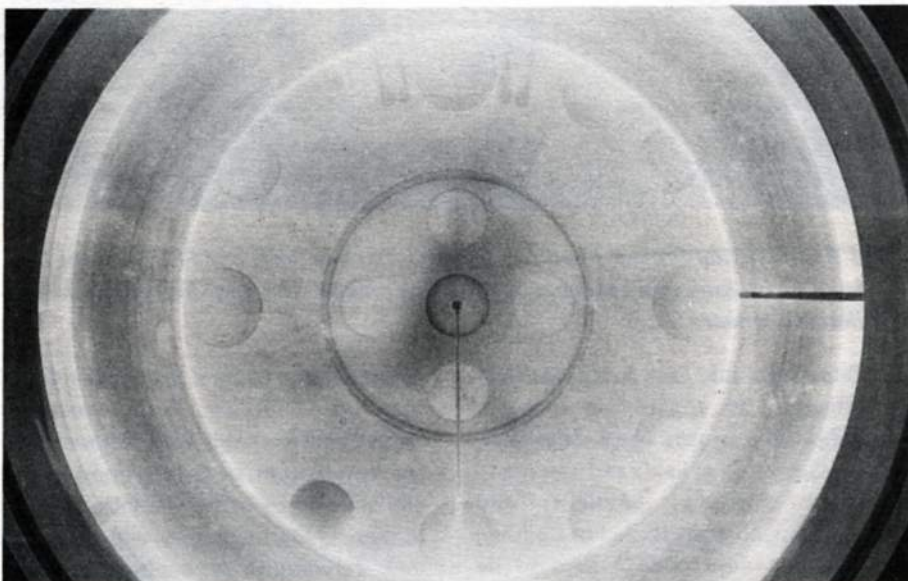
HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

Vol. 4, No. 10

March 4, 1983

SPHEROMAK FIRST PLASMA



This picture of a spheromak plasma was shot with a wide-angle lens, looking along the machine's major axis. A magnetic probe extends across the flux core "doughnut" to where the plasma (the darkened central area) is forming.

Achieving first plasma on TFTR isn't the only reason for celebration at PPL anymore. Another important "first" occurred at 11:17 p.m. January 31, when first plasma was created in the laboratory's S-1 spheromak.

"This success was the result of some very concerted work by some very dedicated individuals," enthused Engineering Program head Jack Joyce. "We planned our work and our resources in the face of TFTR priorities, and neither project suffered. They made their first plasma milestone, and so did we."

A plasma was formed for approximately 100 microseconds in the S-1 Jan. 31. A toroidal current of 60 kiloamps and a

poloidal current of 150 kiloamps were generated during the event. The first plasma had the spheromak configuration.

According to experimental project head Dr. Masaaki Yamada, "The behavior of the initial plasma was better than we expected for stability. After 100 shots of operation by February 2, our further investigations produced a plasma of 0.3 milliseconds in the spheromak configuration. That plasma had a 100 kiloamp toroidal current, and a 250 kiloamp poloidal current. In general, its gross MHD stability behavior was very good." Thanks to these initial S-1 successes, Dr. Yamada feels that "in the next several years, we face a rather exciting period for this alternate fusion research concept."

Dr. Robert Ellis, project head of the S-1 fabrication program, said he was "very pleased" at the machine's success. "First plasma was a part of our systems performance testing program, in which we evaluate the adequacy of various systems during the test phase to determine whether any modifications need to be made before completion. So naturally we're delighted that the machine functioned as anticipated."

Pre-plasma power tests on the S-1 were conducted in three separate phases over a two-week period. The equilibrium field (EF) circuit was tested by directing the output of two motor generator (MG) sets into the EF coil system. The system was brought up to 20,000 amps, the upper limit the circuit is designed for.

Testing on the two remaining power systems was completed using dummy loads. The poloidal field (PF) coil system was tested in two modes: in the first, the capacitors were charged, then allowed to discharge slowly through resistors. In the second, the capacitor bank was charged; discharging was accomplished by firing the ignitrons into a short at the collector plates. The capacitor banks were gradually brought up to their full power of 20,000 volts during testing.

The toroidal field (TF) power system was tested similarly to the PF system, reaching the 20,000 volt level in 2,000 volt increments.

After each system was successfully tested individually, the TF and PF leads to the collector plates were connected. The systems were again tested singly and jointly.

(continued)

Jack pointed out that S-1's first plasma was not achieved at the machine's full power level. "The instrumentation installed on the flux core liner was not adequate to get the strain information we would need at full power," he explained. "The liner is 0.01-inch thick Inconel, which is like foil and is very delicate. We didn't want to risk it by taking it to full specification without that strain information." The full-power test was scheduled to take place last month.

While first plasma has been achieved in the Mode D configuration, operation in Modes A, B and C have yet to be tried. Those tests await the completion of the spheromak control system, additional diagnostics, and installation of a coil filter circuit to protect the MG sets. Testing is expected to be completed in August, when Dr. Ellis will turn S-1 over to Dr. Yamada for inclusion in PPL's experimental physics program.

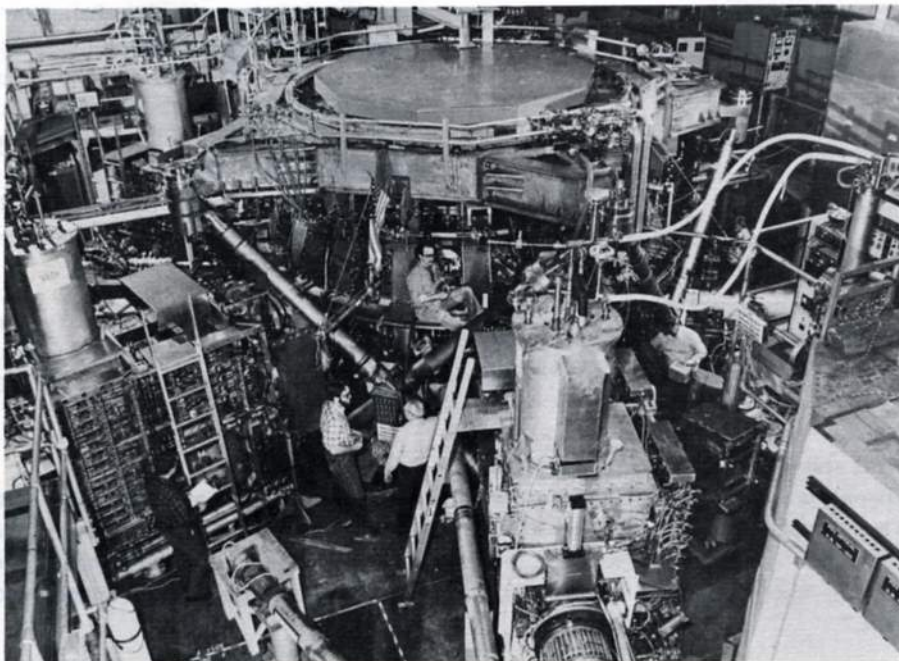
Laboratory Director Dr. Harold Furth lauded S-1's achievement in a congratulatory memo. "During the past three years," he wrote, "the S-1 project has demonstrated outstanding technical competence and a level of personal effort that has been a worthy match to TFTR final assembly. As first project manager of S-1 construction, Jim Sinnis got things off to a good start, and Bob Ellis finished



S-1 Experimental Project Head Dr. Masaaki Yamada (left) and PPL Director Dr. Harold Furth look over readouts of S-1's first plasma. The machine achieved that milestone January 31.

a well-managed job. Jack Joyce was highly effective as engineering manager throughout the project. The S-1 designer, led by George Sheffield, and the many dedicated engineers, physicists and technicians who contributed to building the machine have good reason to be proud. Masaaki Yamada has been in charge of the successful physics planning, and will now head S-1 experimental research."

"First plasma came a little easier on S-1 than on TFTR," Dr. Furth concluded, "and was remarkably well behaved. With the completion of S-1 full-power tests and start-up of experimental operations in March, the laboratory will be able to look forward to an exciting period of new achievements in basic plasma research."



PDX UPDATE

The FY83 PDX experimental program began in November 1982. It has been formulated to reflect some changes and additions to the internal hardware. These changes include: rebuilding of the neutralizers to eliminate problems with their original design; installation of new liners to separate the divertor domes from the main plasma volume, permitting faster and easier access to the domes; and removal of the outer divertors and closing of the associated divertor channels so that higher gas pressure can build up in the domes. A new pumped limiter (the "scoop") has also been installed, as have launchers for a 60 Ghz, 400 kW microwave heating system.

Diverted plasmas are being run using the new divertor configuration. If a high-re-

cycling divertor can be achieved, a cold, dense plasma will build up in front of the neutralizer plates instead of the usual rarefied, hot plasma. A cold plasma does not cause "sputtering"—the erosion that occurs when energetic ions collide with a metal surface. The eroded atoms may in turn enter the plasma, where they will enhance the loss of energy by radiation.

The PDX group will also attempt to verify the good confinement results for beam-heated plasmas reported by the ASDEX group in Garching, Federal Republic of Germany. The group hopes to learn enough about the conditions needed to achieve this confinement to determine if it can be obtained without a divertor. This information would be valuable for TFTR, which does not have divertors.

As in FY82, increasing beta values will also be emphasized during FY1983. Beta is the ratio of plasma pressure to the strength of the confining magnetic field. Plasma pressure is the product of temperature and density. As beta values increase above the minimum needed for fusion to occur, more fusion power is produced. Therefore, a higher beta value means that greater plasma pressure, and thus more fusion output, is achieved in a given magnetic field.

Last year at higher beta values, an instability occurred that "kicked out" the neutral beam ions before they could heat the plasma. The PDX group hopes to avoid this instability by increasing the plasma density, so that the beam ions slow down and release their energy to the plasma before they can be kicked out. The pellet injector, which has been rebuilt by Greg Schmidt so it can inject larger pellets, will be used to increase the plasma density. Larger pellets are better able to penetrate deep into the plasma.

It is anticipated that the high beta work will begin in the spring. A "well-conditioned, clean machine" is needed, and according to Kees Bol, Head of the PDX research group, the best way to get it is "by using the machine."

Finally, a series of microwave heating experiments will be conducted and the pumped limiter will be operated to determine if it will produce the same good confinement achieved with the high pressure divertor.

Stairwell Gates

Many people have questioned the purpose of the metal gates installed in some of the stairwells in TFTR buildings. Some employees apparently assumed they were installed to harass them, and have either damaged the gates or blocked them open.

The real purpose of these gates is to prevent people on the stairways from descending past the exit door during a fire or other emergency requiring building evacuation. Under fire conditions, the stairwell could be filled with smoke. People descending the stairs could fail to see the exit sign or door. There have been documented cases in which people have descended past the exit doors during fires, and have been overcome by smoke.

For these reasons, the Life Safety Code now requires a break in a stairwell that descends past the exit level. The gates that have been installed are the minimum acceptable means of providing that break.

While the gates will hopefully never be needed, they are an important part of the lab's building fire safety program. The protection they provide should not be negated by blocking them open or rendering them inoperable.

Safety Notice

The Health and Safety Branch has issued a warning about the Granville-Phillips Co. Model 216 automatic pressure controller. Under certain circumstances, electrical shock hazard can exist on the unit.

Laboratory owners or users of this controller should contact Health and Safety for information on eliminating the potential hazard.

Energy Conservation

Despite the recent spate of mild weather, energy conservation is still a very necessary part of daily laboratory operations. PPL's energy costs have now been projected in the multimillion dollar range, due to increases in energy rates and lab activities. The cooperation of every employee is needed to help curtail these increases by eliminating energy-wasting situations wherever they occur.

As part of PPL's continuing efforts to conserve energy, the activities of the Employee Energy Awareness Subcommittee and the Electric Power Subcommittee will be continued through FY83.

Medical Claims

To more effectively help PPL employees with their medical claim difficulties, Eleanor Schmitt will be available for consultation and assistance every Tuesday in C-Site conference room B345. Consultation hours will be from 9 a.m. to noon.

Eleanor will also be available each Thursday from 9 a.m. to noon and from 1 to 4:30 p.m. in Room 219, Sayre Hall.

Any employee with questions or problems concerning Blue Cross/Blue Shield or Major Medical claims should speak with Eleanor during these scheduled hours. Contact her at ext. 2046 to request forms for direct filing of claims.

Vending Machines

Vending machines have recently been installed on the first floor of Sayre Hall. The machines include a soda machine, a sandwich machine, and two snack machines.

Condominium

FOR RENT A two bedroom, two bathroom condominium in Hilton Head, South Carolina. Golf, free tennis, pool. \$319-\$399 per week. For more information, call Bill Davall of Main Campus Security, 609-924-5560.



Donald J. Carden became the new Director of the Department of Energy's Princeton Fusion Project Office (PFPO) January 23, succeeding Dr. Nelson Grace. A 27-year employee of DOE and its predecessor agencies, ERDA and AEC, Don served as deputy director of PFPO under Nelson Grace. Mr. Carden was the former manager of the Princeton Area Office of DOE.

Siren Signals

When the PPL siren blows, do you recognize what it signifies?

Two cycles of the siren indicate a siren test, normally held each Wednesday at noon. Six cycles indicate a drill evacuation, usually publicized in advance. Six cycles of the siren repeated continuously indicate an emergency evacuation situation.

During an evacuation, employees should vacate their buildings immediately by the closest exit. Once outside, go to the closest parking lot well clear of the building and await further instructions. Elevators *should not* be used during an evacuation.

The only exception to this procedure is the TFTR complex; in an emergency evacuation, employees in the Mock-Up area, the Hot Cell, the Test Cell, and the Neutral Beam areas should report to the

LOB east courtyard. Employees in the Field Coil Power Conversion building and the MG area should assemble in the TFTR cooling tower area.

Emergency Services Unit Director Jack Anderson is currently establishing specific employee assembly points should an emergency requiring evacuation occur. The finalized list will be published in a future edition of HOT-LINE.

The A/B and C-Site sirens work independently of each other. For an evacuation of only one site, for example, only one siren will sound. Evacuation orders will also be announced over the public address system (where possible) to supplement the siren.

Weekly Time Record

Anyone who wishes a time record form to keep track of vacation, holiday or sick

time, optional holiday and excused absence use should contact Eleanor Schmitt at ext. 2046. Forms may also be picked up at Sayre Hall, Room 219.

Patent Program

PPL now has a Patent Awareness Program, as well as a Committee on Inventions, to increase the patent awareness of laboratory staff. Nine invention disclosures were filed with the committee since the end of FY 82:

- Plasma Ion Temperature Diagnostic Using Ion Radiation Produced by Charge Exchange Collisions, by R. Fonck and R. Goldston
- Process of Creating a High-Beta Tokamak with a Second Stability Regime, by R. Kulsrud and S. Yoshikawa
- The EST (Elmo Snaky Torus), by H. Furth and A. Boozer
- Prompt Radial Profile Species Diagnostic for Intense Neutral Beams, by H. Kugel and R. Kaita
- Non-Interlocked Planar Coil Stellarators with a Magnetic Well, by A. Boozer
- A Nuclear Diagnostic for Fast Alpha Particles, by L. Grisham, D. Post and J. Dawson
- Resonant-Cavity Antenna for Plasma Heating, by F. Perkins, S-C Chiu, P. Parks and J. Rawls
- Getter and Limiter System for Controlling Hydrogenic Density and Impurities in a Magnetic Fusion Device, by J. Cecchi, R. Kinze, F. Dylla and J. Sredniawski
- The Quasi-Isobaric Reactor, by R. Mills

For further information about the committee or the program, contact Meg Harmsen at ext. 2659.

Medicine and Food

Medical experts have emphasized the dangers in eating certain foods while taking various kinds of medication. Certain combinations of foods and drugs can have hazardous -- even lethal -- effects. Combinations that should be avoided include:

- Eating dairy products while taking the antibiotic tetracycline; such foods impair the body's absorption of the drug.
- Eating foods containing natural licorice while on high blood pressure medication. An excess of natural licorice in the body tends to raise blood pressure.
- Eating any foods high in Vitamin K while taking anticoagulants containing indandione or coumarin. Vitamin K inhibits these drugs' effects.
- Eating aged or fermented foods while taking monoamine oxidase (MAO) inhibitors, often prescribed for high blood pressure or depression. When MAO inhibitors interact with tyramine (a substance found in these foods), the blood pressure is often forced to hazardous levels. Severe headaches and brain hemorrhages can result, with death possible in extreme cases.
- Eating a high-fat diet while taking fat-soluble drugs. The elevated dietary fat level will cause poor bodily absorption of such drugs.
- Drinking alcohol while taking antibiotics, anticoagulants, high blood pressure medication, MAO inhibitors, sedatives, antidiabetic drugs, or antihistamines. Alcohol doesn't mix well with any of these medications.
- Taking drugs with acidic fruit or vegetable juices, or with soda; these drinks can create excess acidity in the stomach, hindering the medications's

absorption into the bloodstream. Check with your doctor before taking medicine with these liquids.

Each time you begin taking a new medication, ask your doctor about its impact on your body when combined with certain foods. Always be aware of the drugs you're taking and the foods you're eating; making the correct match-ups can be just the prescription to augment your doctor's diagnosis.

Tee-Shirt Deadline



February will be the last month that individual orders for TFTR tee-shirts and sweatshirts will be accepted. The shirts, which come in a variety of styles and colors, feature a TFTR logo being "heated" by four neutral beam "dragons". Each shirt is silk-screened in four colors.

After February, only team orders for three dozen or more shirts can be filled. For further ordering information or a price list, contact Don Weissenburger, Building 1-P, ext. 2599.

Over \$100 in Medical Bills?

Did you or a member of your family spend over \$100 in medical bills last year (including October, November and December of 1981)? If so, then you should contact Eleanor Schmitt and open a Major Medical claim.

After satisfying a \$100 deductible, you will receive 80% reimbursement of your medical expenses. These charges can include office visits, prescriptions, chiropractor visits, podiatrist visits, allergy shots, rental of hospital beds, crutches, braces, registered nursing charges, and so on.

For additional information on Major Medical claim procedures, call Eleanor at ext. 2046.

Singles Social

The Princeton University League's monthly singles wine and cheese social will be held March 17 at 5 p.m. in the Fine Tower faculty room on main campus. All single members of the University faculty and staff are invited to attend. For further information, contact Naoma Dorety at 272-4097.



Manager of Human Resources Len Thomas has begun a series of walk-through dialogue sessions, randomly visiting different areas of the laboratory. These informal dialogues offer employees a chance to air their views, opinions and concerns on PPL or University-related issues. For further information, contact Len at Personnel, Sayre Hall, ext. 2052.



Information Services welcomed two new additions recently -- Information Officer Patricia A. Bergbauer (left) and Head of Technical Information Meg Harmsen (right). Pat, who is replacing Diane Carroll, received her bachelor's degree in English from St. Joseph's College in Philadelphia. She also earned a master's degree in English from Villanova, and worked for "Cancer Research" (an international scientific journal) for 10 years. Meg earned her bachelor's degree in anthropology from the University of Maryland, and did graduate work at The American University in Washington, D.C. She was formerly employed as a records management specialist by the TERA Corporation of Bethesda, Md. Meg replaces Nan Jones in the position.



Associate Director and Administration Department Head Richard Rossi accepts his 15-year service award from Director Dr. Harold Furth during January's service awards program. Mr. Rossi was among 176 PPL employees honored for laboratory services ranging from five to over 25 years. The awards presentation was organized by the Personnel Office.

History Program Planned

A slide tape on Princeton's past, prepared by the Historical Society of Princeton, will be presented at 8 p.m. March 22 in the Dorothy Brown Room of the Princeton University League headquarters, 171 Broadmead.

Art Exhibit

Paintings by Hiroko M. Yoshikawa and flower arrangements by Nobuko Manabe comprise a joint art display in the Dorothy Brown Room in the Princeton University League offices. The exhibit may be viewed daily through March 11.

P.U. League Notes

The Princeton University League will sponsor its annual International Festival on April 17. The day-long event, which will feature cultural exhibits, dances and music by visiting scholars and students, will be held in Dillon Gym.

The Professional Roster, which helps University-affiliated individuals seeking jobs, needs volunteers. If you can help, call the University League office or contact Nancy Seibert at 921-9561.

Volunteers: People People

The information on the Singles Volunteer Group was submitted to HOTLINE by the Voluntary Action Center of Middlesex County. For further information, contact the VAC at 201-249-8910.

Singles who enjoy helping others can now find a common meeting ground at the Voluntary Action Center (VAC) of Middlesex County.

The VAC, which serves as a clearing-house for people who wish to volunteer and agencies that request help, is establishing an organization for single volunteers only. The group will provide an opportunity for singles of all ages to meet others like themselves -- people who share their motivations to help someone in need.

Since the VAC has a number of requests which require the cooperative effort of many people, an emphasis will be placed on large and small group activities. Some projects will be a one-time event, while others may be carried out on a regular basis. Possible activities range from running a fundraiser or working backstage in a theatre production to finding good homes for stray animals.

Volunteers interested in joining the group should call the VAC at 201-249-8910 and ask for Harriet Indik or Linda Hale. Group members will be notified of future meeting dates and sites by the VAC.

The voluntary opportunities that follow were supplied by the VAC of Mercer County, a member agency of the United Way. For further information about any listing, call the VAC at 609-249-1912.

- Womanspace, a halfway house for abused women, is seeking a volunteer coordinator. The group is also in need of exercise instructors; child care assistants who can teach crafts and other activities; drivers; main-

tenance assistants; individuals bilingual in Spanish; babysitters; daytime advocacy volunteers; and legal and medical service. Specific information about each position is available from the VAC.

- The Carrier Foundation needs a patient librarian and a clerical aide. The Carrier Clinic is seeking volunteers who can serve as patient visitors; pharmacy, physical therapy, or arts and crafts therapy aides; and gym or recreation assistants.
- The Helene Fuld Medical Center needs individuals to act as emergency room, physical therapy or clinic aides; nursing station volunteers; and to assist with running the operating room information desk, the admitting office, and the front information desk.
- Teachers' assistants are needed by the New Jersey Association for Retarded Citizens. Teachers' aides are being sought by the Carolyn Stokes Day Nursery, the Trenton Educational Development Corporation, the Delaware Valley School for Exceptional Children, Parents for Action, and the Little People's College.
- Both the Mercer and Trenton Head Start programs need teachers' assistants. The Ewing Head Start program is seeking babysitters and bus rider aides; the state Head Start program is in need of a shopping aide and a volunteer to write reports for the program's social worker.

The next six listings were provided by the VAC of Morris County. Positions are listed by general duty outlines; further information is available from the VAC at 201-538-7200.

- An organization concerned with the suffering of animals needs an editor to write a monthly newsletter for

their members. The newsletter is two pages long and consists of eleven issues per year.

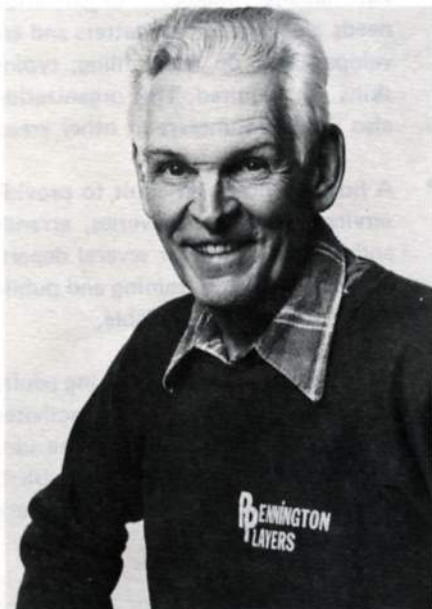
- A health organization needs a publicity chairperson to develop an advertising campaign. The volunteer should have professional knowledge in public relations; hours are very flexible.
- An ancillary-medical organization needs a person to type letters and envelopes, and do some filing; typing skills are required. This organization also needs volunteers in other areas.
- A hospital needs an adult to provide services, such as deliveries, errands and various tasks, for several departments. On-the-job training and public transportation are available.
- A youth program needs caring adults to be supervisors of sports activities one night a week in a gym. The adolescents involved are usually troubled; a caring heart and a helping hand are required.
- A nutrition program for the elderly needs volunteers to record both the number of meals served and program attendance. Volunteers are also needed to serve meals, clean up afterwards, and to deliver meals to housebound clients. Volunteers of all ages are welcome; on-the-job training will be provided.

The following item was submitted to HOTLINE by the Voluntary Action Center for Somerset County, a division of the United Way of Somerset Valley:

Consider being a Blood Drive volunteer through the American Red Cross. A special training session for volunteers who are available weekdays will be held in March. For further information, contact the VAC for Somerset County at 201-560-9380.

Volunteer Viewpoint

Beginning in this issue, the HOTLINE will profile laboratory employees who volunteer their time to various community organizations. Our subject this time is Tom Deverell, who works with the Pennington Players. If you have any suggestions for future profiles, contact the HOTLINE at ext. 2754.



Tom Deverell is a man in love with "the roar of the greasepaint, the smell of the crowd." That affection for the theatre world has led to his involvement with many amateur theatre groups, most notably the Pennington Players.

Tom has been a laboratory employee since mid-1978. He operates "a one-man bolometer laboratory" in the LOB, designing and fabricating bolometers for PLT, PDX and TFTR.

His interest in the theatre began early in life, due in part to living in the neighborhood of the Papermill Playhouse. "I grew up in Millburn," Tom reminisced, "and I wound up painting dressing rooms and punching tickets at the theatre. It was an opportunity to see a performance without paying, and I became a jack of all trades there. It gave me an early and

permanent love of Gilbert and Sullivan, and of Victor Herbert."

Tom's love affair with the theatre took a hiatus during World War II, and stayed on hold when he married and went to college. But he returned to "the boards" in 1958 when he became a member of the Westfield Players. He relocated to Pennington in 1963, joining the Pennington Players shortly thereafter.

Although he wore a kilt and carried a torch in "Brigadoon" once, Tom says he's "not much for being on stage; I prefer working on the scenery." His adeptness with scenery has won him the rank of master carpenter with the Players. In fact, the Deverell name appeared on the program three times for the group's last production, "A Very Special Person" -- Tom worked on the scenery, son Bob designed the set, and son Bruce handled the lighting. Tom also had more than a passing acquaintance with the show's star -- former PPL Business Manager Allen Rowe.

In his experience, Tom says, scenery is always constructed "in one hell of a hurry. Often you use a framework that's crude, but can be made to look right with a little paint and artistic talent."

Despite the fact that the audience is apparently seeing a sturdy farm house, for example, Tom knows how flimsy pieces of scenery can be. "Most scenery for our company is made of canvas stretched across a wooden frame, then painted."

Even that's not as easy as it sounds. "You have to be concerned with sight lines. You must make sure that no matter where playgoers sit, they won't be able to see through or behind the scenery unless you want them to. Perspective from various points also has to be considered; " a backdrop that may look fine to people sitting directly in front of it may appear out-of-kilter to those sitting at the side of the theatre.

Among the many items Tom has built for various plays was the computer for

"Desk Set". "We set the lights on the display panel up so that, at a specific point in the play, the computer would spell out 'Oh Nuts!'," he recalled. Tom has also constructed half a sewer manhole for "Guys and Dolls", a working windmill for "South Pacific", and scenic creations for "The King and I", "Brigadoon", "West Side Story", "Oklahoma!", and many other musicals.

No pieces of Deverell-constructed scenery have ever fallen down at an inappropriate moment, Tom proudly reports. But there have been a few times when, as the curtain opened, the mountains appeared to be rising over the sun!

"Things can get positioned upside down," Tom admits, "because you're working in a very low light situation. Once the curtain goes down, you have anywhere from 30 seconds to three minutes (depending on the play) to get the scenery changed for the next act. And when you're working at top speed to make the switch, things sometimes can go wrong."

Tom contends that most amateur theatres are full of people "with a genuine love of the theatre. There's some kind of magic that happens when you take a good play, mix in some good people, and do it in front of an audience."

The Pennington Players is a non-profit, all amateur acting group. The company has a board of directors, and group officers (Allen Rowe was the 1982 president). The Players mount an average of four productions yearly in the 110-seat Pennington Playbarn.

Tom noted that the group has "a chronic shortage of willing hands" in the craft areas of production (painters, carpenters, props, costumes and so on). Newcomers are always welcome, and can learn the skills necessary from other Players members.

Anyone interested in volunteering their talents to the Players can contact Tom at ext. 3746.

EMERGENCY PREPAREDNESS

PPL has established an Emergency Preparedness Plan, which outlines specific procedures to be followed in case of an emergency. The plan lists specific Building Emergency Supervisors (BES), who will be responsible for various areas of the laboratory should an emergency occur. The BES include:

A SITE

Bldgs. 1-A, 1-E, 1-N	Robert Middlebrook	Bldgs. 1-F, 1-L, 1-T2	Henry Miller
Bldgs. 1-B, 1-H, 1-HA, 1-K, 1-O, 1-P, 1-R	Thomas Hurley	Radiation Storage Area	William Rutkowski

B SITE

Forrestal Shops, Dispensary, Gas Dynamics, Receiving 1, 8-E, Old Guggenheim, New Guggenheim	Joseph Stencil	Cafeteria, Chem Science, Matterhorn Bldg., Guard Booth 5	James Kopliner
Sayre Hall, Aero Lab	Leonard Thomas	GFDL, Hangar, Library Annex	Lou Pizzarello

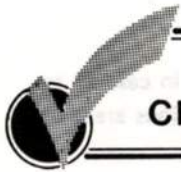
C SITE

Cafeteria, Courtyard, LOB	Robert Smart	MG, CS, COB, RF, PLT Power, System Test	Henry Chandler Ben Velivis
Modules, Theory Wing, Administration Bldg., Library, Computer Areas	Bernard Giehl	PM&O, Water Towers, Pumphouses, Cooling Towers, Trailers	Ray Pressburger
Shops, Laboratories, Tech Shop	Girard Boyd	Warehouses, Switchyards, Fire Station, Annex Warehouse	Harold Barbour

D-SITE

MG, FCPC Bldg., Cable Spreading Room, Yards	David O'Neill	Basement, Tritium, Gas Tank Farm, Data Aquisition, Radiation Waste Tanks	Don Harnsberger
NB Power, Cryogenics, NB Control Room, NB Test Cell	Ben Prichard	Access Tunnel, CICADA Junction Area	Joseph Bosco
Test Cell, Hot Cell, Gallery, Mock-Up Area		Gordon Rappe'	

Review copies of the entire Emergency Preparedness Plan are available in the library.



Security Checkpoints

In an effort to tighten security in the LOB after 5:30 p.m. on weekdays, weekends and holidays, entry into the building will be limited to employees whose job responsibilities require access during those times. This limited security access system will take effect March 11.

Supervisors whose employees need access to the LOB during these hours should submit written authorization to the Forrestal Security Department, Chem. Sciences, B-Site, NO LATER THAN MARCH 7. Employees who must enter critical security areas at C-Site during these hours should use the C-Site entrance; all other entrances will be locked and alarmed during non-working hours.

Employees requiring access to the TFTR facility, and who have access privileges during non-working hours, should use their card reader badges for entry.

Tour Guides

Employees are reminded that their guests MUST register with the LOB receptionist (during normal working hours) or the C-Site Security desk (during non-working hours) when visiting any area of the Forrestal campus. Employees and their guests must display their identification badges or visitor passes at all times while on campus; personnel without badges will be required to leave the premises.

Employees who need access to PPL during non-working hours, but forget their permanent access badges, must obtain a temporary badge from the C-Site Security desk.

Parking

The regulation restricting parking in TFTR parking lot to construction personnel has been lifted. Parking privileges have been extended to any PPL employee whose vehicle bears the required Forrestal parking decal.

Parking in the area will be limited to those employees who require access into the TFTR facility. Personnel entering C-Site should park in either the upper or lower "N" lot.

Fire Permits

The PPL Health & Safety Manual requires a permit for all welding and cutting done in PPL facilities outside of designated shop areas. These permits are required regardless of whether PPL or subcontractor employees are doing the work.

In the past, permits have been issued by Health & Safety technicians. Now that the laboratory has full time coverage by the Emergency Services Unit (ESU), the issuance of permits is being turned over to that group. As in the past, advanced notification of your need for a permit will help speed the process.

Permits should be requested from the ESU on ext. 3166.

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.
