HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

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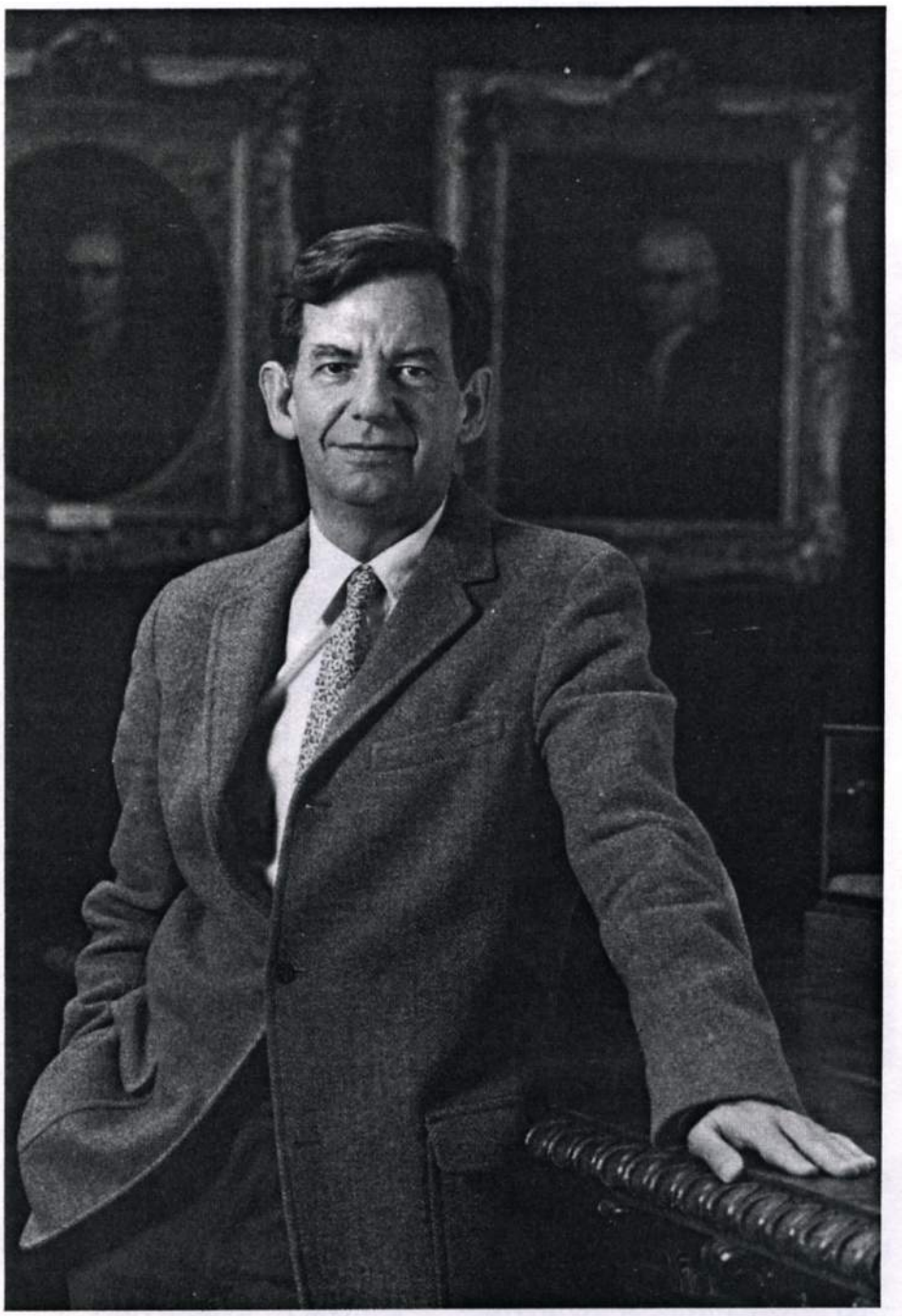
MESSAGE FROM THE PRESIDENT



William G. Bowen

First of all, I want to express the pride Princeton University takes in the remarkable scientific results achieved by the Plasma Physics Laboratory this summer. We know that a long road still lies ahead, but all members of the University rejoice in your success and look forward to future accomplishments. I was particularly pleased to be able to tell the faculty, at their first meeting this fall, of the Lab's exceptional achievements. That aspect (alone!) of my report was greeted with warm applause.

The quest for practical fusion power has been the largest and most sustained scientific enterprise ever undertaken by Princeton. Many of the basic ideas underlying the magnetic fusion effort were developed by Lyman Spitzer and his associates in the Department of Astronomy over thirty years ago. The University has nurtured the effort through many stages of growth, leading finally to the successful construction and operation of TFTR. At present, we look forward to the development of an even more advanced device proposed by the Laboratory -- the Compact Ignition Tokamak (CIT) -- which will explore ignited plasmas with characteristics close to those needed for practical fusion reactors. The CIT is widely recognized as

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the next logical step in the world-wide program of advance towards the goal of fusion power.

In this context, I should like to review another development of major importance to the Laboratory that was recently brought to a successful conclusion. As you know, the University's contract with DOE to manage and operate the Plasma Physics Laboratory is subject to renewal at five-year intervals. This year, the contract negotiation was prolonged because it involved some fundamental issues that were difficult for everyone. These issues have now been settled in a way that is satisfactory to all parties. Let me review some of the important points:

- The government was anxious to clarify the status of land rights at Forrestal in view of its large investment in fusion facilities here, and the prospects for siting important experimental facilities at the Laboratory in the future. The University has now agreed to lease land at Forrestal C- and D-Sites to the DOE for a period of 40 years. The fair market value of the land, and hence the annual lease payment, are to be determined after appraisal by an independent party within the next 90 days and will be reappraised every five years thereafter. The 40-year lease arrangement places the land rights on a businesslike basis similar to arrangements for private-sector occupants at the Forrestal Center.

- DOE has indicated that it favors proceeding with the $300 million CIT project and designating Princeton as the logical site. Approval of the President and Congress must still be obtained next year, but DOE support on the CIT location and funding issues is a very important step forward.

- Both parties agreed to move expeditiously toward consolidation of Laboratory activities at C- and D-Sites. This will reduce the DOE's land costs over time, improve the effectiveness of Laboratory operations, and permit the University to review and optimize longer-term land use (particularly at A-Site) for commercial and research purposes. The agreement calls for relocation of the activities at A- and B-Sites by September 30, 1987.

- To provide the necessary additional space for the activities now located at A- and B-Sites, three approaches are being followed. First, a request for construction of a new high-bay building at C-Site has already been submitted to DOE; construction of this building is expected to be completed by next summer. Second, a joint PPPL/DOE planning effort for a new laboratory-office building is underway. Third, until the new laboratory-office building is available, space will be leased in nearby commercial office buildings.

Both the University and the DOE have, through this agreement, underscored their long-term commitment to the development of the Laboratory. As in the case of the other DOE laboratories, the Department has the right to consider at the time of each five-year renewal of the PPPL contract whether Princeton University should continue in its management role, or whether the management of the Laboratory should be opened competitively to other parties. The University fully expects to retain the PPPL contract through the 40 years of the new lease, and to strengthen the ties between the Main Campus and the Laboratory.

The new contract will not result in any change in the relationship between Princeton University and its employees at the Laboratory. PPPL employees will retain the same rights and benefits as under previous contracts. The consistency of Laboratory and University personnel policies was a fundamental objective of the University throughout the negotiations.

In sum, the University remains fully committed to its fusion research effort at Forrestal Campus and to its staff at PPPL, who are performing such important services to science and to the nation. Such services are consistent with the best traditions of Princeton.

I know that the consolidation at C- and D-Sites places an unusual burden on PPPL managers and staff, and I appreciate your understanding and support. The long-term result will be a more efficient Laboratory, backed by strong commitments to its future by both the University and the DOE.

William G. Bowen

Invention Update

In 1981, PPL established a Patent Awareness Program designed to recognize creative inventors and to raise the patent-mindedness of laboratory staff. A Committee on Inventions makes cash awards to inventors for their new or novel ideas. Additional monies are awarded if a patent application on the discoveries is filed.

Patent applications filed since May include:

- Large Angle Optical Scanning by a Curved, Static, Steering Mirror, by A. Ramsey
- Tokamak Device Configurations for Laser Pumping, by D. Jassby
- A Software Package for Controlling Stellarator Equilibrium, by A. Reiman and H. Greenside
- Method for Breaking Up Chemical Wastes by Bombardment of Plasma Ions on Metallic Walls, by R. Motley and W. Langer
- High Current Density, Cryogenically Cooled Sliding Electrical Joint, by H. Murray
- Coil for Production of Optimum Magnetic Fields, by J. Faunce
- Differential Atmospheric Tritium Sampler, by O. Griesbach and J. Stencel
- Coil Protection Calculator, by R. Woolley
- Pico-Second Delay Timer, by L. Meixler, K. Ilcisin, J. Robinson, W. Tighe, and L. Guttadora
- Right Angle High-Voltage Connector, by S. Kilpatrick and M. Dereka
- Personal Computer Equipment Antitheft Device, by T. Kozub and K. Kugel
- Perforated Toroidal-field Coils for Maximizing Neutron Transmission, by D. Jassby
- Woodruff Key Extractor, by R. Pope

For further information about invention disclosures or the patent process, contact Meg Harmsen at ext. 2659.

TRANSITIONS

The HOTLINE offers its congratulations to the following employees, who recently became proud parents:

Eric Fredrickson of TFTR and his wife, Laura, whose daughter, Nicole, was born September 4;

Bill Davis of the Computer Section and his wife, Deborah, whose son, Christopher, was born September 8.

United Way

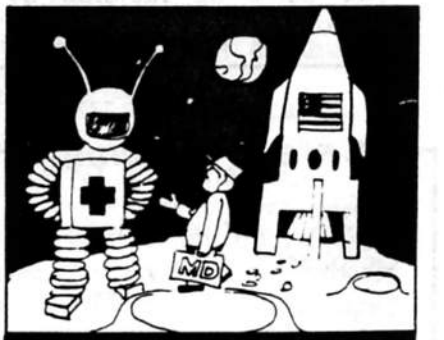
AT WORK

Fitness On The Run

"I'd like to get in better shape, but I just can't seem to find the time."

You've heard -- or even used -- that excuse before. Here are some suggestions on how you can work exercise into your busy schedule:

- Park your car a block of two from your destination, or get off the bus or subway a few stops early and walk the rest of the way. If traveling a short distance, walk or use your bicycle.
- Pass up the elevator or escalator whenever possible and take the stairs instead.
- While watching television, don't just sit there. Run in place, do sit-ups, or work on flexibility.
- Do some manual chores every day, like gardening, mowing the lawn (not on a tractor!), walking the dog, or washing the car.
- When you travel, always pack a pair of walking shoes or a jump rope.



HEALTH QUEST

There is no such thing as fate as far as accidents are concerned. The idea that accidents are unavoidable and will always happen is wrong. In fact, any accident can be avoided by plain, everyday common sense. The trick is to encourage other people to use their heads and safeguard themselves and others from accidents.

Many accidents on the job can be avoided by following sim-

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ple safety rules and using good common sense, such as:

- Learning the right way to do your job;
- Working at a speed consistent with safety;
- Not jumping from one elevation to another;
- Removing protruding nails, or bending them over;
- Staying away from machines you have not been taught to operate;
- Using only tools that are in good condition;
- Reporting any defective ladders;
- Lifting with your legs, and asking for help when the load can't be handled by only one person;
- Keeping your work places and access routes clean and clear;
- Using safety goggles when the job calls for them;
- Not attempting to repair or replace electrical equipment unless it is part of your regular work;
- Treating all electric wires as live wires; and
- Making sure all electric portable tools are in good condition and properly grounded.

Keep in mind that accidents are caused by thoughtlessness -- yours or someone else's. When an accident occurs, it's because someone failed to see that it could happen. If you think ahead of the possible hazards that may confront you, you can plan how to avoid them.

Notary News

Staff members seeking a notary public need look no further than C-Site. Vianna Gleaton (Module I, Room 110) and Kris Mann (office L244) are both notaries. To make an appointment to have documents notarized, call Vianna at ext 2367 or Kris at ext. 3179.

The PPL HOTLINE is issued by the Princeton University Plasma Physics Laboratory, a research facility supported by the United States Department of Energy. Correspondence should be directed to PPL Information Services, Module 2, C-Site, James Forrestal Campus, ext. 2754.

Safety Training

The Occupational Medicine and Safety Office has scheduled the following training courses for October:

Fork Lift Training: October 9, 9 a.m. to noon

Lockout/Tagout Procedures: October 16, 1-3 p.m.

Basic First Aid: October 21, 9 a.m. to noon

Proper Use of Fire Extinguishers: October 22, time to be announced

Lockout/Tagout Procedures: October 23, 1-3 p.m.

Employees must obtain permission from their immediate supervisor to attend any course. Supervisors must call Mary Ann McBride at ext. 3468 to enroll their employees. Attendees will be notified of the time and place their class meets one week before each session starts.