HOTLINE
PRINCETON PLASMA PHYSICS LABORATORY
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LABORATORY CONSOLIDATION BEGINS

Tony DeMeo and Pat Stephens in their new offices. The Information and Administrative Services Branch was one of the first groups relocated for Laboratory consolidation.

Jack Joyce has been named chairman of an Oversight Committee that will orchestrate PPPL efforts to relocate all Laboratory personnel and equipment currently at A and B Sites. According to an agreement between the Department of Energy and Princeton University, this must be completed by September 30, 1987.

To meet this goal, a relocation plan composed of three parts has been proposed:

- Construction of a new high-bay shop building at C-Site to house the large shops and heavy machinery presently at A and B Sites.

- Consolidation of some personnel located at A and B Sites to C and D Sites; Leasing of off-site commercial property for employees and small laboratories, for which there is no space immediately available at C and D Sites.

- Construction of a new Engineering Office Building at C-Site to house all Laboratory personnel that must be relocated off-site.

Jack emphasized that "each of these elements is very ambitious. The feasibility of key milestones depends on close cooperation, timely approvals and, in some cases, funding from DOE." Although difficult to accomplish, consolidation of the Laboratory to C and D Sites is "viewed as an opportunity to bring together the various PPPL groups and activities at one place and thereby increase the efficiency of the Laboratory."

There are approximately 340 permanent employees at A and B Sites. Roughly half of these will be moved to C and D Sites and half to offices off-site. In order to accommodate these additional employees, consolidation of C- and D-Site facilities and personnel has started.

Some space already exists and additional space is being created with minor relocations and simple modifications to existing areas. For example, the Information and Administrative Services Branch is currently being relocated to the third floor of the LOB. Modifications and renovations will then be made to the Modules once they are empty, greatly improving the usefulness of the space.

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Consolidation at C and D Sites will require a greater population density. PPPL is using the general government guidelines of 180 sq ft gross or 135 sq ft net per person. Gross square feet include such things as hallways, stairwells, bathrooms--the outside dimensions of a building divided by the number of people in the building. Net square feet are the dimensions of a room divided by the number of people in the room.

One major group that will not be affected greatly during consolidation is the research group. "Research activities must keep moving forward during this period of consolidation," Jack emphasized. "Besides, all research devices and their support personnel are already located at C and D Sites." Some minor disruptions may still occur though, for example, if the Material Test Lab is being relocated and materials need testing. An option will be to have the testing done by an outside facility.

Planning and moving for the consolidation are being handled primarily by PPPL personnel. No additional funding has been provided to the Laboratory by DOE, except for construction of the new high-bay shop at C-Site. Since PPPL must stay within its FY87 budget, Laboratory management has identified funds and resources in the present budget that can be set aside for consolidation efforts. Overtime will be utilized when necessary and day-to-day maintenance will be reviewed carefully as to its absolute necessity. Since no major design and fabrication activities are scheduled at PPPL in FY87, some resources are available. Subcontracts will be sought or temporary personnel will be hired if needed to maintain schedule requirements.

Many day-to-day services such as the availability of adequate parking space, cafeteria services, and shuttle arrangements are being reviewed to make sure they will meet the new requirements caused by consolidation.

Boxes and furniture being moved from one place to another has become a familiar sight at PPPL. Left to right: Patricia Stephens, Larry Jones, and Dominick DeLuca.

According to Jack, "the general feeling is there will be enough parking space." The parking lots are presently underutilized and there are still areas that can be used for parking if necessary. Additionally, when plans for the new building are made, new parking areas will be included.

While there are no immediate plans to enlarge the cafeteria to meet the expected increase in the number of people it serves, ideas such as a more formal scheduling of lunch periods with, perhaps, the cafeteria remaining open longer are currently under review.

Finally, decisions on shuttle service depend on future considerations, such as where the off-site offices will be located. "But," Jack noted, "PPPL, DOE, and Princeton University are cooperating in every way possible to anticipate and provide whatever is needed during the consolidation period and beyond."

"It is interesting to note," Jack said, "that nearly thirty-five years after the beginning of fusion research at Princeton, the Laboratory is finally consolidating to one area. This has always been a goal of PPPL, Princeton University, and DOE. When C-Site was built in the fifties, all research machines and personnel were to be relocated there. For some reason this never occurred. Then, with the abolishment of the Princeton-Penn Accelerator and the construction of TFTR, it was just not practical to move everyone. Now, nearly thirty-five years later, here we are fulfilling our original plans."

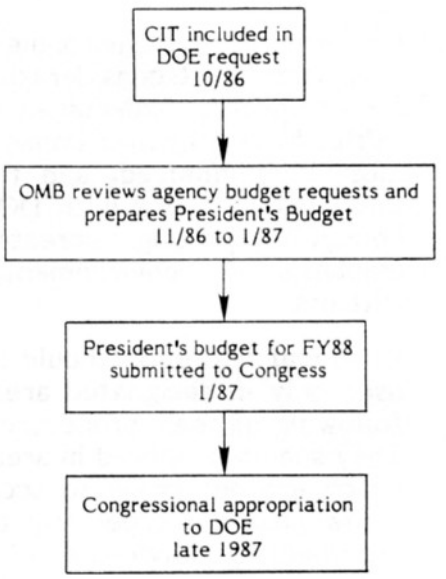
United Way

The United Way needs your help. Although the Laboratory has already exceeded last year's 32% participation record, another 100 donations are needed to meet this year's goal of 50%.

Give yourself an early holiday present. Make a donation to the United Way. What better way to express your concern for those less fortunate? People helping people -- a gift to yourself as well as others.

CIT Funding Approvals Sought; Environmental Assessment Undertaken

The Department of Energy has included the Compact Ignition Tokamak (CIT) as a separate construction item in its budget request for fiscal year 1988. The Plant and Capital Equipment (PACE) cost is estimated to be $300 million, which would be appropriated over five years. Project completion is slated for 1993. The DOE request is now being reviewed by the Office of Management and Budget (OMB). If approved by the Administration, the CIT authorization and initial funding will become part of the President's fiscal year 1988 budget that will go to Congress in January. Congressional action on the budget will come in the latter part of 1987. All designs and plans have been made under the assumption that, if funded, CIT would be located at Princeton.



CIT Funding Process

A conceptual design report and a research and development plan were submitted to DOE in June of this year by the CIT National Design Team headed by PPPL. The DOE Office of Fusion Energy has reviewed this plan and validated the cost estimates included in the report.

Environmental Assessment Underway

To meet the requirements of the National Environmental Policy Act (NEPA), the Idaho National Engineering Laboratory (INEL) was selected in October by the CIT national team to perform an environmental assessment of the Project. Environmental studies were begun this autumn and will continue through 1987.

As part of the environmental assessment, INEL is evaluating the physical environment of the proposed site including its geography, geology, hydrology, seismology, meteorology, and plant and animal life. It is also studying the demographics, socioeconomic factors, land use patterns, and cultural resources of the area. Since the CIT is designed as an addition to the TFTR facilities, these studies will extend the environmental review done for TFTR.

INEL will address all effects of CIT operation, including thermal discharge and liquid and solid wastes. PPPL's Project and Operational Safety Office under Joe Stencel is working with INEL to collect and review environmental data and information from TFTR tritium monitoring to assess any radiological effects of CIT operation. INEL will also evaluate the effects of accidents and abnormal operating conditions and will address facility decommissioning and decontamination.

In April, a draft Environmental Assessment will be prepared and reviewed, and a final report completed in July 1987.

The CIT Team

More than any fusion project to date, CIT is a national effort. The Ignition Technical Oversight Committee (ITOC), chaired by Harold Furth, oversees all aspects of CIT planning. A design physics group headed by Ron Parker of the Massachusetts Institute of Technology, with representatives from most of the U.S. fusion laboratories and universities, is responsible for establishing physics goals and parameters. PPPL leads the CIT National Design Team, which is responsible for machine design and construction. The management of this effort is headed by John Schmidt of PPPL, Project Manager; D.B. Montgomery of MIT is Project Engineer; C.W. Bushnell of PPPL, F.A. Puhn of GA Technologies, Inc. and T.E. Shannon of the Oak Ridge National Laboratory, are Engineering Managers.

A Work Breakdown Structure (WBS) was established for CIT. Under this system, each major element of the CIT and each of its major components are identified. Each WBS element has been assigned to one of the U.S. fusion laboratories, and a WBS manager appointed. The assigned laboratory is responsible for all aspects of that element from design through fabrication, installation, and testing until first plasma.

Fusion Laboratory Responsibility for CIT Elements

CIT Element	Responsible Laboratory
Divertor	GAT
First Wall	GAT
Vacuum Vessel	GAT
Shielding	ORNL
Toroidal Field Magnets & Structure	PPPL
Poloidal Field Magnets	MIT
External Tokamak Structure	ORNL
Internal Remote Maintenance	GAT
Diagnostics	PPPL
External Vessel Remote Maintenance	ORNL
Ion Cyclotron Resonance Heating	ORNL
Electrical Power	PPPL
Instrumentation and Control	LLNL/PPPL
Water Cooling	PPPL
Cryogenics	PPPL
Fueling	LANL
Vacuum Pumping	ORNL
Conventional Facilities	INEL
Cleaning, Disposal, and Monitoring	LANL

GAT = GA Technologies, Inc.
ORNL = Oak Ridge National Laboratory
MIT = Massachusetts Institute of Technology
LLNL = Lawrence Livermore National Laboratory
LANL = Los Alamos National Laboratory
INEL = Idaho National Engineering Laboratory

PPPL is responsible for the CIT toroidal field magnets and machine structure under John Citrolo, diagnostics under Ken Young, and electrical power under Dan Huttar. Bob Fleming has either direct responsibility or coordinating responsibility for fueling, vacuum pumping, cryogenics, water cooling, and cleaning, disposal, and monitoring of radioactive materials, as well as the responsibility for interfacing safety with all the subsystem designs.

Management of the large research and development effort to support CIT is also centered at Princeton under Charlie Bushnell. Systems engineering, the difficult task of coordinating the design of all CIT elements, is the responsibility of George Sheffield. Milt Machalek is responsible for project control and administration, including documentation and procurement. Sallie Young and Natalia Bayes are secretaries for the CIT Project.

While awaiting decisions on project funding, the CIT effort is concentrating on optimizing the conceptual design, refining physics studies, environmental reviews, and management planning.

Diane Carroll

Solvent Disposal Procedures

Staff members should not dump solvents in the waste disposal tanks. Chemicals should never be mixed -- it can be dangerous. It can also increase disposal costs to the Laboratory by as much as $40,000 per year.

There are two ways to dump solvents: A separate solvent collection area can be established or arrangements for disposal can be made through Scott Larson of the Hazards for Disposal Section, ext. 3387. Waste disposal tank locks are also available.

Remember that all chemicals must be disposed of properly. If you have any doubts, call the Hazards for Disposal Section for help.

Environmental Protection

Concern for the environment is an important consideration for any project undertaken at PPPL. Environmental impacts must be minimized, and the Laboratory, in line with DOE policy, is putting increased emphasis on environmental matters.

Chemical materials should be used only in designated areas following proper procedures. They should be stored in areas which are not prone to accidental release, especially by unsuspecting individuals.

The work area should be surveyed to ensure there are no unforeseen hazards.

If there is a spill, it should be reported immediately by calling ext. 3333. The Emergency

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Services Unit's HAZMAT Team will be able to respond quickly to minimize the effects and the area of contamination.

Terpstra Speaks to SOSSO

"Women Getting into Politics" was the topic of a seminar presented to the Secretarial and Office Support Staff Organization (SOSSO) by Jane Terpstra, a Princeton attorney and former member of Princeton Borough Council.

Ms. Joan Terpstra (left), a local Princeton attorney, and MaryAnn Brown (right), Vice-President of the SOSSO.

"Politics does not necessarily mean running for an elective office," Ms. Terpstra told the audience. "It also means being involved in your local community."

According to Ms. Terpstra, there are many ways to become involved: Attending local community meetings, serving on volunteer committees, such as for a library, and joining a local political organization. All provide excellent ways to lay the groundwork necessary for the woman who eventually hopes to be elected to public office.

Ms. Terpstra contends that women have much to contribute to their communities. Many women, because of their day-to-day activities, are particularly well informed and understand and care about changes that might affect them and their families. "Women bring a very special perspective to politics, and they are beginning to be taken seriously in this role. They must not wait for other people to do what is right for them or their community," she said.

The seminar is one of a series of professional seminars sponsored by the SOSSO throughout the year. Everyone on the secretarial or office support staff is eligible to attend with supervisor's approval. For more information on future seminars or to suggest a topic and/or a speaker, call Dolores Bergmann at ext. 2200.

Drug Testing Not for PPPL

PPPL employees have asked periodically if the Laboratory engages in or is about to engage in routine drug screening of its staff. This uncertainty has been accentuated recently by President Reagan's statements regarding federal employee drug testing programs and the Laboratory's program of health evaluation of employees, which includes routine blood tests.

It is not presently PPPL policy to conduct drug screening of its employees, nor is such a policy contemplated in the foreseeable future.

Rafting Trip Planned

Richard Henne has made reservations for 15-16 March 1987 to raft the Cheat and Tygart Rivers located in West Virginia. The cost for rafting both rivers is $78 plus 5% sales tax or $39 plus 5% sales tax per river. If you would like to join him, a nonrefundable $10 deposited must be sent to him by 10 January 1987. His office address is 213 Guyot Hall, Main Campus.

The outfitter for the rafting trips is Appalachian Wildwaters located in Albright, WV. Wet suits are required and may be reserved if needed. Additional information may be obtained by calling Richard at ext. 5706.

Laboratory Offers Science Program for High School Students

"Science on Saturday," a series of eight seminars for high school students, will again be presented at PPPL on Saturday mornings, beginning in January. Topics will be drawn from current research in molecular biology, lasers, astrophysics, supercomputers, particle physics, and, of course, fusion. PPPL scientists, University faculty, and scientists from area industries will present the lectures, tours, and demonstrations. Certificates will be awarded to students completing the series.

The seminars are open to high school students, teachers, and parents free of charge. Those interested can register at the first session, which will be held in the M.B. Gottlieb auditorium on Saturday, January 17th at 9:00 a.m. For more

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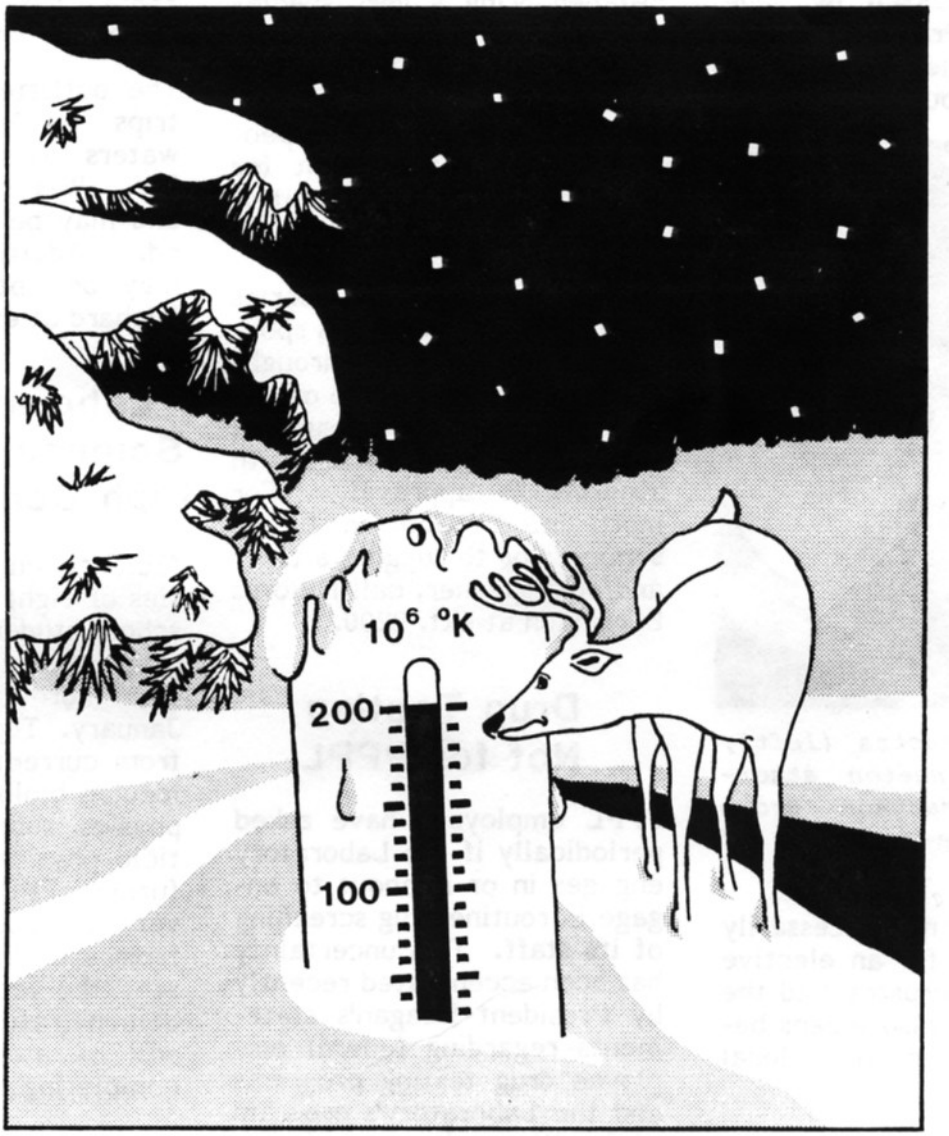
information call D. Carroll, ext. 2751, Mondays, Wednesdays, and Fridays, 8:00 a.m. to 1:00 p.m.

"Science on Saturday" has been offered twice before and was enthusiastically received by all participants. Last year, over 150 students were enrolled.

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.



Best wishes for 1987--and congratulations on 1986. Have a very restful and cheerful holiday!