

NEW DEPUTY DIRECTOR APPOINTED FOR TECHNICAL OPERATIONS



(Photo by John Peoples)

E.C. Brolin became Deputy Director for Technical Operations on 4 January 1988.

E.C. (Tip) Brolin has been appointed PPPL's Deputy Director for Technical Operations (DDTO), effective Monday, 4 January 1988. Mr. Brolin is a former Vice-President of Burns and Roe Enterprises, Inc., a firm specializing in power plant and reactor design and construction. He is a licensed nuclear engineer.

As DDTO, Mr. Brolin will be responsible for the operation of TFTR, PBX-M, and the smaller machines, for the direction of the Engineering Program,

and for the facilities and activities which support these projects. He will also be responsible for the design and construction of the Compact Ignition Tokamak (CIT) device.

In making the announcement, PPPL Director Harold Furth noted that "Tip's extensive experience with the technical management and safety aspects of major nuclear construction projects will be particularly valuable to the Laboratory as we move into the deuterium-tritium (D-T) phase of TFTR

operations and undertake the construction of CIT. Tip considers our fusion-power mission to be a true challenge, and has a lively interest in the development of the Laboratory's innovative research projects and its engineering capabilities."

Mr. Brolin received a B.S. in civil engineering from Tufts University in 1959, and a M.S. in mechanical engineering from George Washington University in 1970. Mr. Brolin worked in the Naval Nuclear Propulsion Program under Admiral Rickover and was responsible for the design and construction of the NR-1, a nuclear-powered deep-submergence oceanographic research vessel. He joined Burns and Roe in 1974 and worked on a series of reactor and power-plant projects, beginning with the Liquid Metal Fast Breeder Reactor at Clinch River, Tennessee. He held the post of Director, Nuclear Plant Services Division, before becoming Vice-President at Burns and Roe in 1984. He left Burns and Roe in 1987 to start his own consulting practice.

Tip Brolin replaces Don Grove, who topped off thirty-four years of major achievements at the Laboratory by agreeing to serve as DDTO following the departure of J.R. Thompson, Jr. in October 1986. Beginning this month, Don will be carrying out special assignments utilizing his extensive experience in technical management, Laboratory-DOE interfaces, and community relations. ○

Compact Ignition Tokamak Technical Briefs

- A major project milestone will be passed this month when the CIT Project holds its Conceptual Design Review, scheduled for January 19, 20, and 21. An International committee with representatives from Europe, Japan, and the Soviet Union will meet at Princeton for an extensive review of both the physics and engineering aspects of the new machine. Project staff are making finishing touches to the CIT conceptual design, to be followed by the publication of a host of reports, including a conceptual design summary and a comprehensive systems design document. These activities mark the end of the conceptual design phase of the CIT Project.
- The CIT Environmental Assessment (EA) is nearing completion. Shortly, the document will be sent to USDOE's Assistant Secretary for Environment, Safety, and Health for approval. The EA was prepared in accordance with the National Environmental Policy Act of 1969 and was written by scientists and engineers of the Idaho National Engineering Laboratory (INEL), USDOE's lead laboratory in fusion safety. It includes an extensive assessment of potential radiological and nonradiological environmental impacts on air and water quality and the ecology, both generally and related to PPPL employees. Approval of the document by the USDOE is necessary before CIT facility construction can begin.
- Twenty-three CIT Project staff are currently housed at 307 College Road East along with the three PPPL engineering divisions, occupying a total of about 40,000 square-feet. Approximately 30,000 square-feet of additional space is being rented by PPPL in the adjacent 305 College Road East. The new space will serve as CIT headquarters, eventually housing about 150 Project staff, including representatives of other laboratories and industrial participants in the CIT national design team. Occupancy of the new building is expected to commence in March.
- A preproposal conference was held on December 8 for the award of a CIT systems engineering subcontract. The successful offerer will be responsible for supplying up to ten engineers to handle system design integration, configuration control, and maintenance integration. The CIT Systems Engineering Group, headed by Jim French of Ebasco Services, Inc., will play a critical role during design and fabrication of CIT components. They will be responsible for insuring that various component designs are compatible and that everything fits together. The group will maintain up-to-date data and drawings on all subsystems. This is especially important for the CIT Project because of design responsibilities being divided over several laboratories and industries.
- CIT's aggressive R&D program, underway since FY86, is continuing in FY88. If fully funded, this year's activities will include the start of fabrication of a number of prototype subcomponents, including a complete toroidal-field (TF) winding, the poloidal-field (PF) solenoid, and remote maintenance hardware. Much work has already been done, including extensive testing on the explosion bonding of Inconel to copper, required for CIT's innovative coil system.
- Ken Absher has been appointed USDOE Project Manager for CIT. He will be stationed at USDOE/PAO reporting to Milt Johnson, beginning in late January. Mr. Absher comes to Princeton from USDOE's Richland (Washington) Operations Office where he has been Supervisory Nuclear Engineer on the N Reactor.

CIT Contracting Workshop

by Phyllis Rieger

Contracting for large procurements of hardware and services for specialized machines requires understanding the equipment as well as the many aspects of contracting. How do I describe what I want, find the right vendor to do the work, and insure he delivers what I requested?

To help engineers and other technical personnel understand the procurement process and practices, the Lab

recently held a three-day workshop called, "Procurement Practices for the Engineer." This workshop focused on preparation of statements of work, vendor selection, and other contracting information.

According to Milt Machalek, Head of CIT Administration, "This workshop, a joint effort between PPPL Quality Assurance and the CIT Project, was a first-of-its-kind effort at PPPL.

"Steve Stryker, a contracting expert, conducted the classes. Even though this was an 'engineering' workshop, the 28 participants represented a broad spectrum of talent associated with the CIT Project. Represented areas included: Engineering, Quality Assurance, Administration, Procurement, and the DOE-Princeton Area Office."

Harry Howard, Head, PPPL Quality Assurance and Reliability, had sup-

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(John Peoples)

Steve Stryker, contracting expert, recently conducted a workshop on "Procurement Practices for the Engineer."

ported the development of a practical CIT procurement practices workshop to help the project prepare for the procurement phase of the project. Harry had previously encouraged the attendance of Ray Camp, Hugh Dyer, and Milt at a similar General Services Administration workshop in the spring of 1986. Their reports strongly recommended the course and the instructor.

Harry said, "The course proved of value in two ways—the participants

gained an understanding of the difficulty of the Procurement Department's job, and a working appreciation of the tools and teamwork required to assure that a quality product (one that meets specification/s) is delivered to the project on time—something that seldom happens by accident!"

Milt reported that participants evaluated the workshop, finding it very useful. Many felt more sessions of this type should be given at PPPL.

Workshop participants included: J. Citrolo, J. Alton, R. Ernst, M. Machalek, J. Ofgant, R. Strykowski, P. Murray, J. Lowrance, C. Bushnell, H. Murray, E. Perry, E. Fredd, W. Reiersen, J. Giarrusso, N. Sauthoff, W. Rauch, W. Stark, S. Schoen, D. Vest (INEL), R. Fleming, H. Howard, J. Malsbury, W. Osborne, R. Parsells, N. Spang (INEL), J. Yeck, J. Balodis, and K. Gruetzmacher (LANL). ○

Copier Safety

Leaving the photocopier's cover open while making copies is bad for you eyes, says a report in the Puritan-Bennett Corporation's LIFE LINE.

According to Dr. D. McLaughlin, a Menorah, Kansas ophthalmologist, a photocopier's bright light contains ultraviolet rays, which can damage the eyes' retinas and perhaps cause cataracts. "Whenever possible, close the radiation-proof cover when you use the copier," advises Dr. McLaughlin. "If the item you're copying is too big for the cover to close, shut your eyes and look away." ○

U.S. Fusion Budget Appropriated

The Federal budget for 1988, enacted by Congress and signed by President Reagan in late December, includes \$335 million for fusion energy research and development. Laboratory Director Harold P. Furth believes that, within this budget, the Department of Energy will support the continuation of a strong research program at Princeton. The appropriation includes a total of \$16 million for development, design, and engineering related to a new Compact Ignition Tokamak (CIT), to be built by the mid

1990's on the Forrestal Campus adjoining the site of the currently operating Tokamak Fusion Test Reactor (TFTR).

"We are gratified that, even in these days of severe fiscal restraint, the Laboratory will receive the funding needed to support the TFTR project along with preparations for CIT construction," said Dr. Furth. "During fiscal year 1988, we will be able to refine the CIT design and complete the environmental studies for this important next step in the U.S. fusion program.

Service Awards

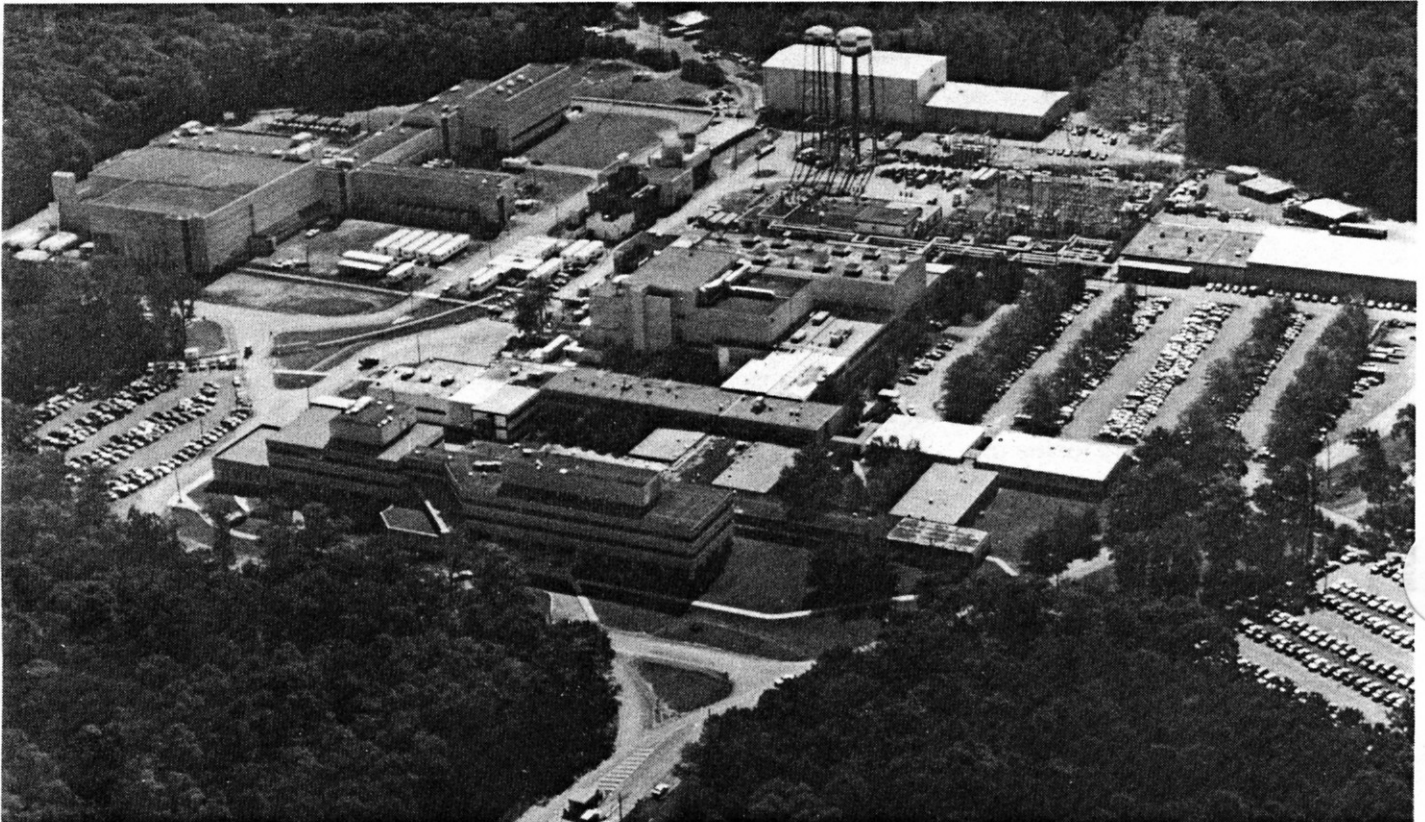
If you celebrated a 5, 10, 15, or 20 year service anniversary during calendar year 1987 you are eligible to receive a Laboratory service award. Eligible employees are given the opportunity to choose from a number of items commemorating their years of service. Selection sheets have been

sent to employees with qualifying service in 1987.

Any PPPL staff member who had an anniversary during 1987 and did not receive a selection sheet can obtain one by writing to Bobbie Cruser, LOB 134, C-Site. Please be sure to include

your name, social security number, hire date, and anniversary attained in 1987.

Bobbie would like to remind employees that if they had breaks in service, only time worked as a permanent employee counts toward qualification for service awards.



John Peoples, PPPL photographer, took this recent aerial view of C/D sites. In the foreground is the guard's booth and the Laboratory Office Building. The TFTR facility is located in the upper left of the photo, while the new High Bay Shop can be seen behind the water towers in the back.

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