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HOTLINE

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Operators Train for Tritium

Eighteen people are now involved in some aspect of tritium operator training at PPPL in preparation for the introduction of tritium at the Lab. According to Steve Gordon, TFTR Training Coordinator, "Before tritium can be brought on board, we must demonstrate to the Department of Energy (DOE) that our training prepares operators to work safely and effectively within DOE requirements."

According to Dave Turner, who is now in training as a Tritium Shift Supervisor, "We're responsible for many things, including compliance with Technical Safety Requirements (TSRs) that will insure that

"We have been learning all we can about the equipment..."

necessary safety margins are maintained. For example, we will determine if the required systems are performing in accordance with the TSRs by performing routine monitoring and testing."

According to Gordon, some courses are the same as those taken by many other PPPL employees, such as Basic Electrical Safety and Emergency Preparedness. Others are much more technical—for example, classroom training in topics such as tritium theory, nuclear fundamentals, tritium safe handling, tritium systems, and tritium monitoring. Examples of hands-on training topics are: tritium storage and delivery systems, cleanup systems, and the tritium regeneration system.

Tom Walters (left), Tritium Cleanup Systems Engineer, and Chuck Cogbill and Kent Johnson, Tritium Shift Supervisor trainees, discuss operation of the Tritium Storage and Delivery Cleanup System. Photo: D. Applewhite

Written and practical examinations are being given in order to certify trainees at levels required by DOE.

Fortunately, most of the tritium operator trainees already have extensive background working in nuclear environments, and some have already had experience working directly with tritium. Many have worked on nuclear power plants in the Navy and/or in commercial nuclear facilities.

The Tritium Group's staff includes PPPL employees Richard Rossmassler, David Voorhees, and Tom Walters. They supervise and direct the tritium and tritium cleanup operations. PPPL employees in the tritium operators training program are: Al Bara, Lloyd Ciebiera, Denis Shaltis, and Alex Melendez.

The other tritium shift supervisors and operator trainees are subcontractors. They were hired through General Physics, a training and technical services company that

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Tritium Training

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provides consulting and staff augmentation in all areas of power generation for both DOE and commercial nuclear clients.

The subcontract operators began coming on board in October of 1991. They are at different stages of training, which will continue through the next year until deuterium-tritium operations begin.

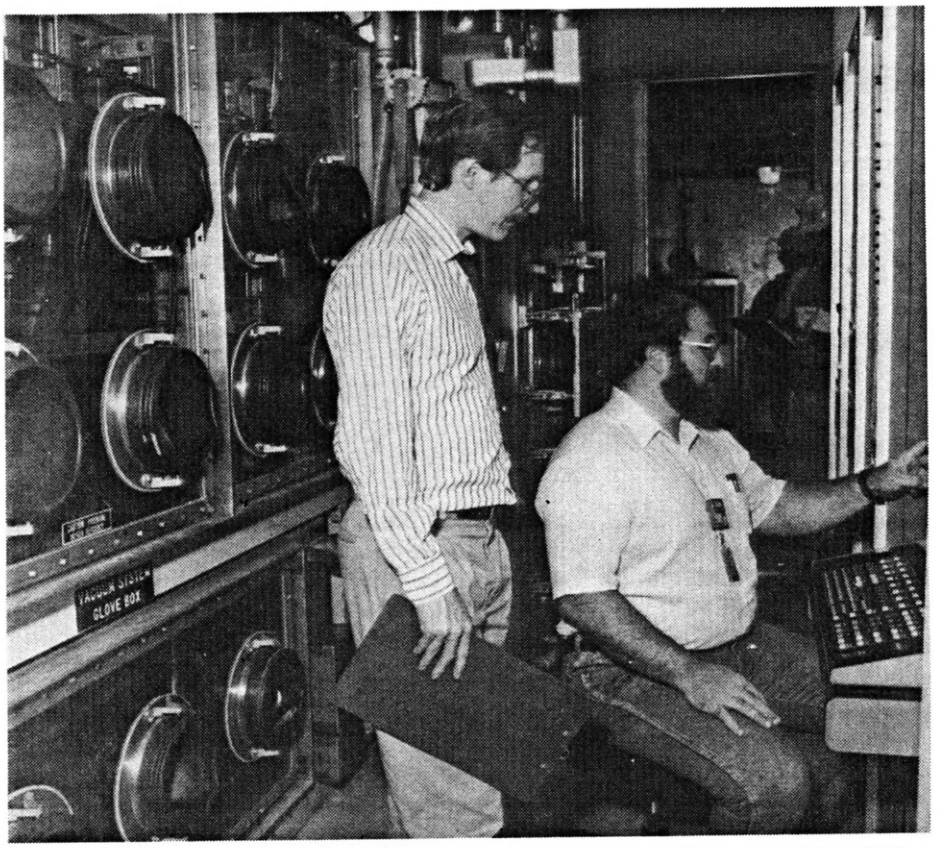
The first group of trainees is expected to complete the certification process in early autumn. The four tritium shift supervisors are in this group, including: Chuck Cogbill, Kent Johnson, David Turner, and Wally Walliser. Also in the first group are Eric Amarescu and Mike Gibson.

The second group now in training to prepare for deuterium-tritium operations includes: Bill Burkett, Mike Casey, Terry Harris, Jim Langford, Nils Steward, and Kent Young.

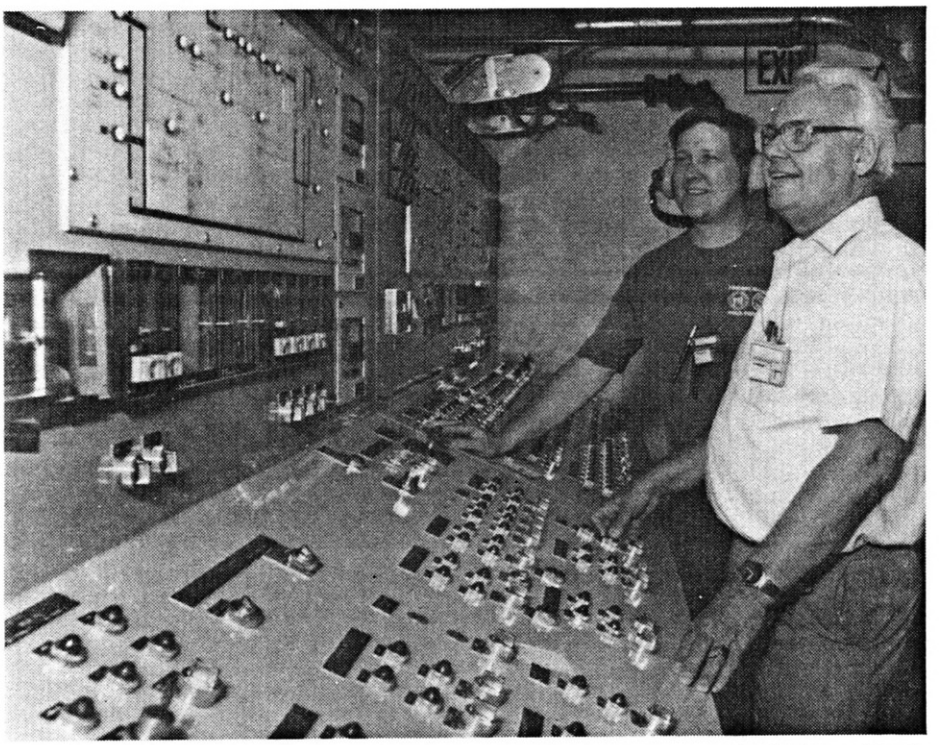
"Since last October," says Tritium Shift Supervisor trainee Kent Johnson, "we have been learning all we can about the equipment. In addition, we have been helping with repairs, instrument calibrations, component labeling, and drawing validations."

"As of now, 160 tritium-related procedures have been developed," according to Dave Turner, also a Tritium Shift Supervisor trainee. "Thirty of these, which apply directly to introduction of tritium into the Test Cell, are not relevant until next year."

Adds Turner, "We must complete the training in the other 130 procedures before the 1000 Curie Test coming up this fall. This procedure training, plus additional classroom and on-the-job training will ultimately result in PPPL certification of the trainees as Tritium Operators."



Tritium Systems Engineer Dave Voorhees (standing), discusses the Tritium Storage and Delivery Distributive Control System (TSDDCS), with Wally Walliser, Tritium Shift Supervisor trainee. Photo: D. Applewhite



Dave Turner, Tritium Shift Supervisor trainee (rear), operates the Tritium Vault Cleanup System (TVCS) under the direction of Bob Sissingh, Tritium Operations Branch Head. Photo: D. Applewhite

See a Hazard? Fix it or Report it!

Everyone here at PPPL has a responsibility to recognize potential hazards and act to get them resolved. Yet, perhaps you've heard someone say—or have even thought yourself—"I have a safety concern, but I don't know how to get it addressed." Or, perhaps you've heard the question, "Why should I bother to raise an environmental, health, or safety (ES&H) issue, since nothing will be done?"

Unfortunately, such attitudes can be dangerous! Unless concerns are expressed, ES&H situations aren't addressed and accidents can occur. In addition to potential employee injuries, the Lab suffers from lost time and diverted resources. In addition, since accidents must be reported to the Department of Energy through the Occurrence Reporting System, our credibility with the Department is also eroded.

How to Report Concerns

So how do you go about getting a problem corrected? First, if you see a potential hazard and have the capacity to fix it, do so! For example, if a fire door is propped open, close it; if an electrical panal is blocked, remove the obstruction.

If you can't fix it yourself, report the problem immediately to your Area Safety Coordinator (ASC), who will then write a deficiency report. (Please remember that hazards will be corrected based on their urgency. A high priority concern may be corrected immediately, while a relatively low-risk issue may only be corrected within the year.)

If the concern is not being effectively addressed through the ASC route, discuss the situation with your supervisor. (Before doing so, check the Laboratory Deficiency Listing to make sure the problem isn't already listed. The Listing is available from Marilyn McBride in LOB Room 350.)

If the concern is not addressed by your immediate supervisor, go to his/her supervisor. It is your right as well as your responsibility to raise such an issue above your immediate supervisor. *You need not fear retribution, because you are protected both by Laboratory policy and by law.*

In instances where the line management organization is not addressing the concern, refer the problem to the ES&H Division by calling ext. 2600. Should ES&H not respond, call the Associate Director for ES&H/QA, or PPPL's Deputy Director or Director. Any of these senior managers can address your concern.

Another route you may take at any point is to fill out a Deficiency Report, Form B—available at many points throughout the Lab. Send the report (anonymously if you wish) to the ES&H Division OSHA Engineer.

Yet another option is to call the DOE Princeton Area Office Hotline for Environment, Safety, and Health at 243-3800. All such calls are answered by DOE personnel and handled on a confidential basis.

Remember, whether you recognize and correct a problem yourself or report it at any of these levels, these actions increase the safety of yourself and your fellow employees. Report your concerns, and help avert unnecessary accidents!

Trenton Students Build Bridges

PPPL Engineers Participate

One never knows what on-going influences a science education program may have. When Mrs. Thomasini, a third grade teacher at Trenton's Harrison School, attended the 1991 Summer Teacher's Institute, who would have thought it would result in her students building bridges—with the help of PPPL staff members Charlie Bushnell, Bob Majeski, and Carl Lindemuth?

Yet, that's what developed. Last fall, a program was held at Harrison School to encourage more commu-

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A trio of children proudly hold up their Certificates of Achievement, which all participants received. Photo: D. Applewhite

Building Bridges

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nity involvement in their science program. Bushnell, one of the PPPL attendees, decided to help the students build simple bridges of tongue depressors and Elmer's Glue, using styrofoam as a tooling material.

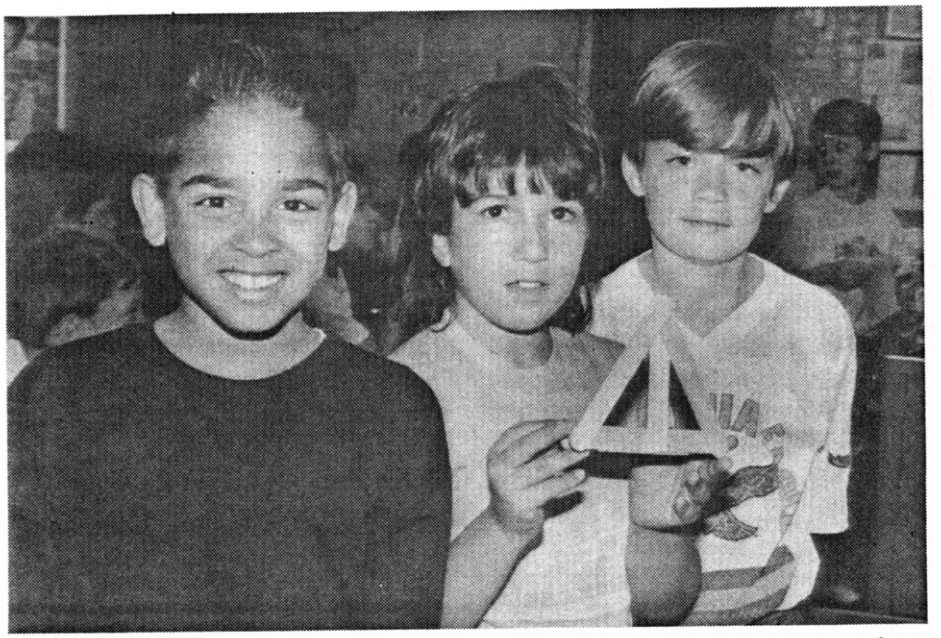
Says Bushnell, "The project, completed in June, was great fun, and the students were very enthusiastic. Kids wrote poems and made paintings about bridges, so they learned in many ways. We showed them how materials, such as wood, steel, and aluminum differ. Then, using wood tongue depressors, they built their bridges. They also experimented with the concept of material orientation to obtain the maximum strength and efficiency."

Explained Bushnell, "The students worked in groups much as engineers often do, so they learned the importance of cooperation in developing a successful project. Competition among the groups as well as between the two third-grade classes that participated added to the excitement and the learning."

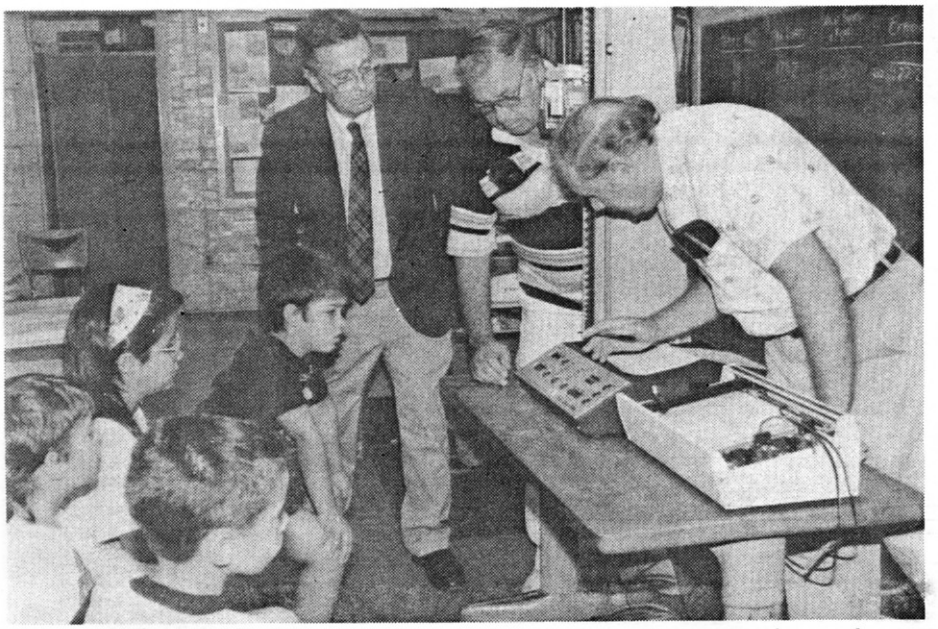
The bridges were load-tested with a portable tester from the PPPL Materials Test Laboratory, headed by Lindemuth. Noted Bushnell, "The children learned the concept that the strongest bridge isn't necessarily the best. The bridges were rated on load capacity, cost of materials, and overall efficiency. The race between the two classes was close, with the winners getting ice cream cones."

Everyone received an official Certificate of Achievement for designing, constructing, and testing a bridge structure in the Harrison School Engineering Contest. No telling which of these young bridge-builders are our engineers of the future!

Diane Carroll, Head of PPPL's Science Education Program, expressed her appreciation by saying, "Charlie, Bob, and Carl did a great job getting the students involved and excited about the bridges project. I'm very pleased that PPPL could participate in this activity."



Children show off their triangular bridge, made with tongue depressors, prior to testing. Photo: D. Applewhite



Charlie Bushnell (left), Bob Majeski, and Carl Lindemuth prepare the equipment to stress-test a bridge while kids eagerly await the outcome. Photo: D. Applewhite

HOTLINE

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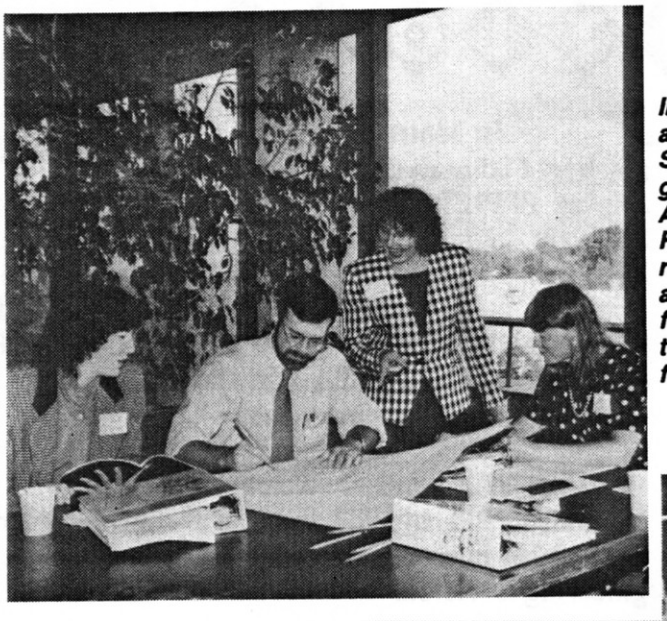
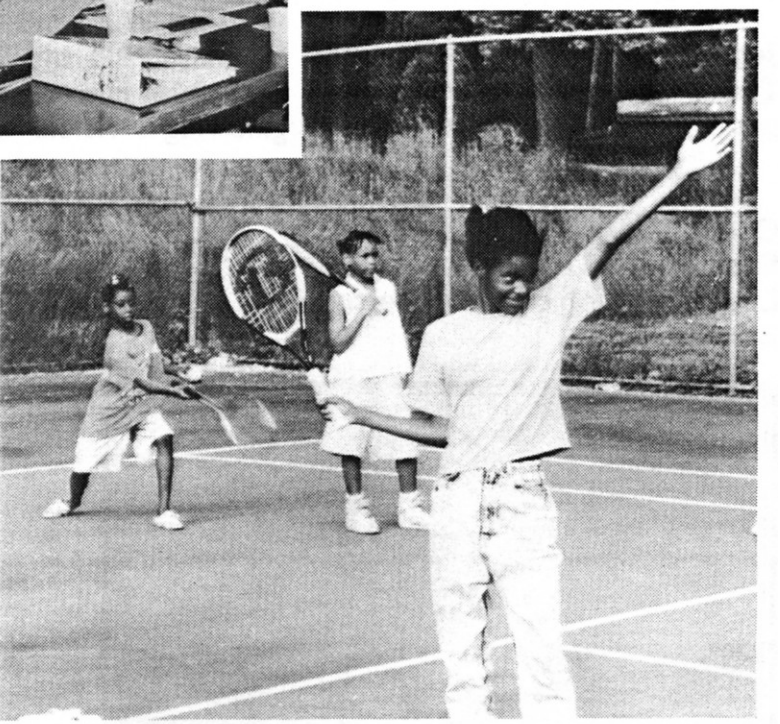
What's Happening at PPPL?



In June, PPPL managers participated in a pilot session of the newly implemented Supervisory Skills Development Program. Facilitating the program was Gloria Asterino of Princeton University Human Resources (standing). Seated, left to right, are Ruby Cochran, Tim Stevenson, and Molly Tompkins. The program reflects the Lab's long-term commitment to development of the supervisory work force.

Photo: D. Applewhite



This summer, Janet Roberts (bottom photo) taught tennis as a volunteer to kids (right photo) in the Safe Haven Program held at Trenton's Holland Middle School. Her tennis program, dubbed "Success for Life" attracted 15 to 25 young people daily. Roberts, Diagnostics Data Base Coordinator at the Lab, is on the PPPL Tennis Team.

TRANSITIONS

Retirements

Joseph Baker, Laboratory Technician III in Technical Operations, retired August 1, after 33 years at PPPL.

Joseph Davenport, Lead Engineer in the Mechanical Engineering Division, retired as of June 30. He had been employed at PPPL since 1958.

Joseph File, Head of the Office of Technology Transfer, retired August 1. He joined PPPL in 1958.

Birth

Congratulations to **Edward Simmons** of TFTR and his wife Lisa on the birth of their daughter Brittany July 18.

In Memory

Herbert Fishman died on June 19. Joining PPPL in 1960, he was a Software Engineer in the Computer Division.

Clarence King died suddenly while on vacation. He was Chef in the Cafeteria for the past ten years.

Willie J. Wicker died on July 9. He joined PPPL in 1967 and was a Technician in the Mechanical Engineering Division.

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Father of employee needs companion for half or full day, weekends in Mercerville, NJ. In good health but somewhat forgetful. Hourly fee and meals. Please call Sallie at ext. 3379.

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ESU FIRE SAFETY TIP

Practice Safety with Electricity

If an appliance gives off smoke or a burning odor, unplug it immediately and have it repaired. Check the cords on all lights and appliances; if they are frayed or broken, have them replaced. Do not overload extension cords and don't run them under rugs or other places where they can be stepped on and broken. If you replace a blown fuse, be sure the new fuse is the correct amperage.

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