

PPPL
ORC Employee Opinion
Survey Response

Employees Produce Communication Vignettes

This month the Laboratory begins a series of pilot Workshops on "Communication Skills for Managers and Supervisors." These workshops are unique in that the series of video-taped vignettes used to demonstrate various communication tech-

niques feature PPPL employees and were produced in-house by Ed Farris and John Peoples of Photography Services.

Dick Schoenlank of the American Management Association directed the sessions and will instruct the workshops.



(JOHN PEOPLES)

Ray Camp of Quality Assurance and Reliability and Mary Ann McBride of Occupational Safety are coached in the art of "role playing" by Richard Schoenlank from the American Management Association.



(JOHN PEOPLES)

Here, Angelo Candelori of the Administration Department and Dori Barnes of the Computer Division receive help from Richard Schoenlank as they prepare to tape a vignette on good communication techniques.



(JOHN PEOPLES)

Bill Johnson from Personnel (left) makes a suggestion to budding PPPL thespians Dori and Angelo as they prepare to role-play a counseling situation. Producer Ed Farris (standing in background) likes Bill's suggestion.

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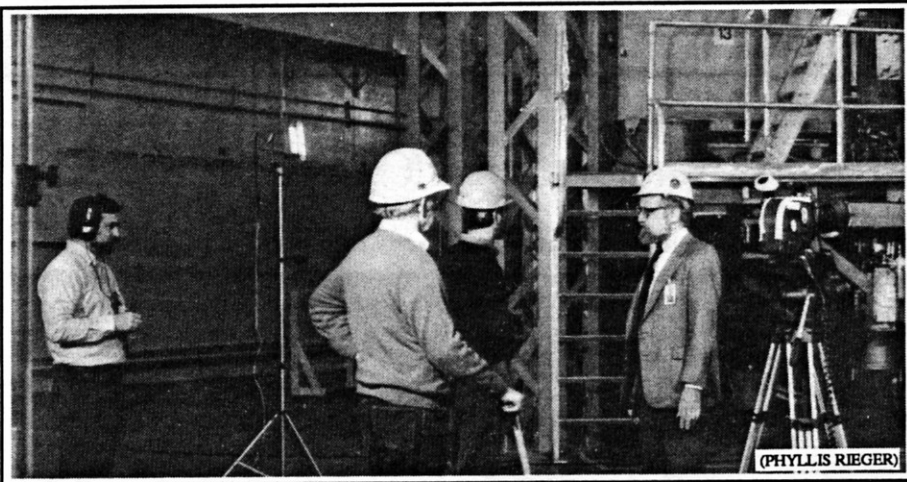
This logo will be used to identify actions and programs which have been developed or are being introduced in response to employees' concerns and comments on the opinion survey conducted at the Laboratory. The results of the employee opinion survey, administered by Opinion Research Corporation (ORC) during the summer of 1986, have been the basis of changes which have already been implemented or are scheduled over the coming year.

The Laboratory management has strived to respond to those items where we felt we could make a difference in improving the quality of the working environment," said Steve Iverson, Personnel Director. "Because it's easy to forget changes we've made over the past nearly two years, we felt it was appropriate to use a symbol to focus our attention on some of them," he added.

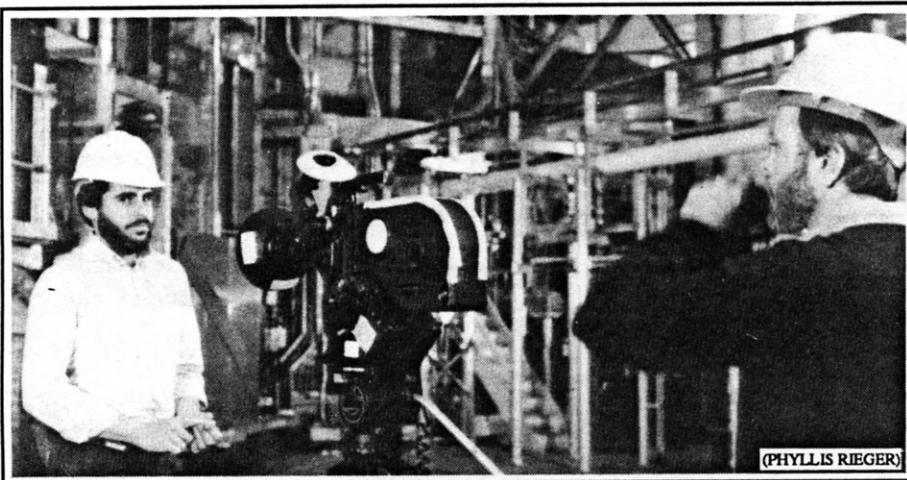
The PPPL/ORC logo will show up on materials about the Employee Development Program (EDP), Deputy Director's Roundtable meetings, Compensation Workshop related items, including a handbook about compensation that will soon be distributed to all employees, the pilot Employee Recognition Program (ERP), and other items that impact the working life at the Laboratory. Iverson pointed out that "Use of the logo is a way of saying 'This is a program for all of us...the Laboratory's way of responding to needs we collectively stated in our responses to the opinion survey'." He concluded, "Watch for it!"

National Geographic Films Fusion

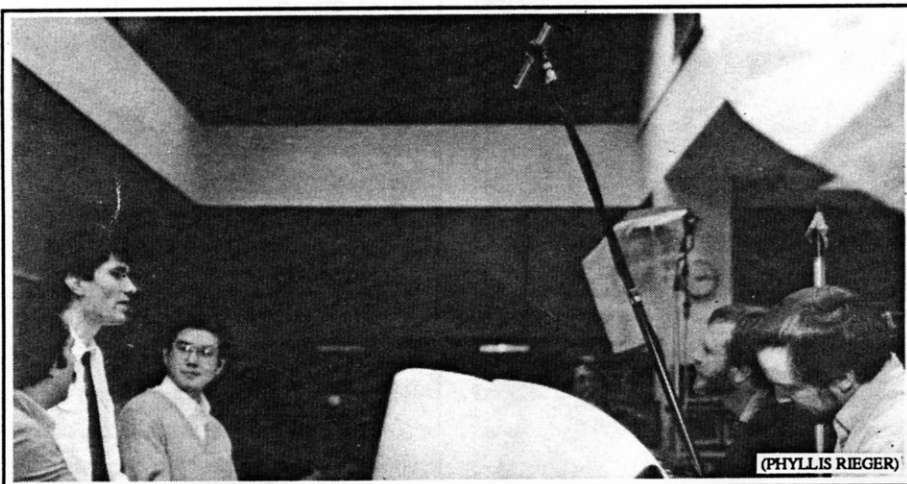
by Phyllis Rieger



Called on to explain the fusion process, Lab Director Harold Furth (right) gears up for his action shots with the TFTR as background. Sound man is at left.



PPPL's photographer Ed Farris (left) acts as a stand-in for National Geographic Society science filmmaker Joe Akin who tests the lighting for his fusion film.



Physicist Steve Cowley (middle left) gives his views on fusion's future with Rob Goldston and Masayuki Ono. Michael Zarnstorff is in background. Other physicists who appeared on camera included Ray Fonck, Cynthia Phillips, and Brentley Stratton.

Lights, camera, action prevailed from April 11-13 as a film crew from the National Geographic Society focused their lenses on PPPL personnel including Lab Director Harold Furth.

The crew, headed by science filmmaker Joe Akin, and assisted by PPPL Photography Services Section employees John Peoples and Ed Farris, shot sequences in the TFTR, the PBX-M control room, and CICADA.

According to Associate Director Donald M. Cooper of National Geographic, the Society "is producing a film that will make the subject of fusion interesting and understandable to high school students. Your willingness to make the remarkable facilities at Princeton available to us is greatly appreciated."

He said the film should be completed by year's end. The Lab will obtain a copy for special showings, probably in early 1989. ○

Shapiro Addresses Secretary and Office Support Staff

Vivian Shapiro, wife of Princeton University President Harold Shapiro, addressed members of the Secretary and Office Support Staff Organization (SOSSO) at their annual luncheon on April 13th. Mrs. Shapiro spoke on the changing roles of women and how this affects the family, especially with regard to young children.

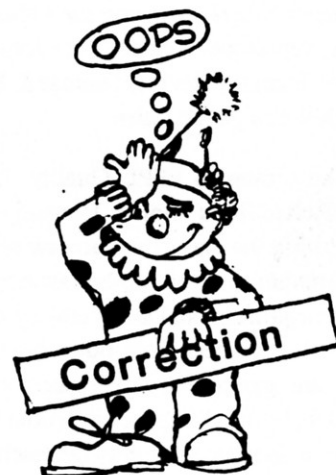
Mrs. Shapiro received her B.A. from McGill University, Montreal, Canada and her M.S.W. from the University of Michigan, School of Social Work. Mrs. Shapiro was an Associate Professor in the School of Social Work at the University of Michigan before coming to Princeton.

(continued)



(PHYLLIS RIEGER)

Members of the SOSSO greeted Vivian Shapiro before she spoke before a noontime gathering of the group. Mary Ann Brown, who handled the arrangements for her visit, said, "She was very gracious and was extremely pleased to be the guest speaker at our annual luncheon celebrating National Secretaries Week." Seated (l-r) are Sophie Monaghan, Sonja Patterson, Dolores Bergmann, and Athene Kan. Standing (l-r) are Edna Kalmus, Mary Ann Brown, Vivian Shapiro, SOSSO Chairperson Chris Ritter, and Nadirah Shakir.



In Vol. 9, No. 13, a line in the DOE CIT Engineers' story should have read, "Ken Absher earned his B.S. Degree in Engineering from UCLA and an M.S. Degree in Nuclear Engineering from the University of California, Berkley."

We apologize for these errors.

ATF Achieves First Plasma

The Advanced Toroidal Facility (ATF), a major new, \$29 million US fusion experiment at the Oak Ridge National Laboratory (ORNL), has achieved "first plasma" operation. The device is of the "stellarator" type, first invented in the US by Lyman Spitzer, Jr. in the early 1950's, but more recently pursued primarily in Europe and Japan. The ATF is the first new stellarator to be built in the US in 20 years.

According to Michael J. Saltmarsh, head of the confinement projects section in ORNL's Fusion Energy Division, "ATF should help us understand the physics of this class of magnetic confinement devices, which includes the more commonly studied tokamaks. Our goal is to contribute to the development of toroidal fusion devices, based on tokamaks and stellarators, that will be reliable and economical sources of electrical power."

Unlike the tokamak, which relies on a pulsed plasma current for containment, a stellarator such as the ATF uses only

externally applied magnetic fields to confine the plasma. Therefore, a stellarator can be operated continuously.

The ATF represents the largest of the four major stellarator devices currently in operation throughout the world, including Heliotron-E (Japan), Wendelstein VII-AS (West Germany), and URAGAN (USSR). The Oak Ridge National Laboratory maintains productive collaborations with these countries, as well as with US universities, in many areas of stellarator design and operation.

The manufacturers of the major components were Chicago Bridge and Iron Co. (helical coils), the Princeton Plasma Physics Laboratory (poloidal coils), Pittsburgh Des Moines Steel Corp. (vacuum vessel), and Westinghouse Electric Corp. (structural shells).

(Reprinted with permission from the April 1988 Fusion Power Associates Executive Newsletter.) ○

Quality Concepts Reviewed

by Phyllis Rieger

It's back to school for four PPPL Quality Assurance engineers who are broadening their understanding of quality concepts by participating in a special course.

Judy Malsbury, Hugh Dyer, Bob Parsells, and Ray Camp are four of fifteen students enrolled in a refresher course program geared to review subjects of the Certified Quality Engineer exam which is scheduled for June as part of the American Society for Quality Control Certification Program.

While most of us are watching the evening news on Monday nights, Judy, Hugh, Bob, and Ray are studying auditing, statistics, reliability, information systems, human factors, and design of experiments, among other topics from 6-9:00 p.m. The class meets for ten weeks in Room 3 at 307 College Road East. Edwin Shecter of

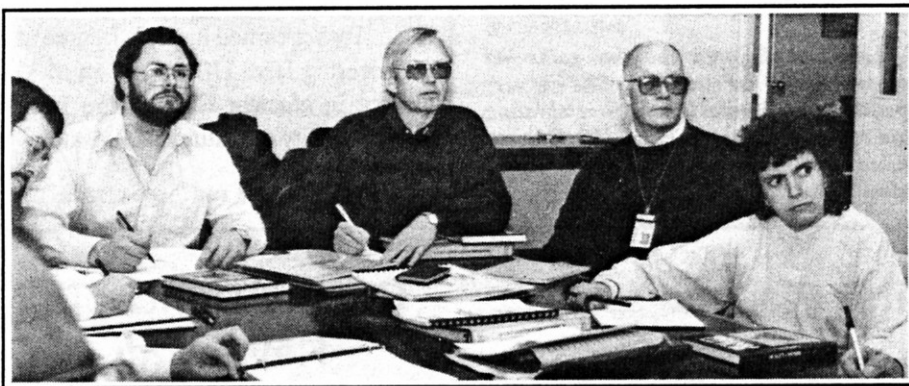
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Lawrenceville is the instructor. Other students represent Johnson & Johnson, Ortho, Specialty Resins, Thomas & Betts, and Bell Telephone Labs.

According to PPPL Quality Assurance/Reliability's Harry Howard, "By sponsoring the class, the Lab saw several opportunities. Our employees are expanding their professional skills and by meeting with engineers from other organizations are gaining new perspectives. In addition, by providing the classroom facility our industry/community outreach program reaches groups which might otherwise be overlooked." Harry said, "A

check with area industry and business brought to our attention that other quality assurance professionals had an interest in a refresher course but no such course was offered in the area. We, at PPPL, took the initiative to sponsor one and found it was a worthwhile endeavor." Other courses may be offered in the future.

Judy Malsbury said, "Certification by the American Society for Quality Control is an important step in professional development. By participating in quality assurance courses, one can continue to keep informed about the latest developments in the field to do the best job possible."



(PHYLLIS RIEGER)

Ray Camp, Bob Parsells, Hugh Dyer, and Judy Malsbury (left to right) participate in a refresher course on quality control.

Road Construction Update

by Robert Smart

The latest word from Princeton-Forrestal Center is that they hope to start work on the College Road Overpass at Route 1 later this spring. At this time, they're working on the final design, getting necessary New Jersey Department of Transportation approvals, and lining up contractors. Barring unforeseen problems, the dirt may start moving in during late May or June. Construction should take about 18 months, but the bridge portion of the Overpass may be open before that.

The Princeton-Forrestal Center will keep us advised of any roadway changes that could impact the Laboratory. We will keep you advised in future HOTLINES.

In case you haven't already heard or figured it out, that new driveway serving

Robert Wood Johnson Foundation, off our access road, will be their entrance while the overpass construction is in progress.

At the same time Princeton University is developing plans to provide an access to the Forrestal Campus, including PPPL, off Scudders Mill Road. This may help staff to avoid Route 1, and will provide a good second access to the Lab when Route 1 has problems. Unfortunately, this road is scheduled for construction with the commercial development of A-Site and after the ongoing demolition of our old A- and B-Site facilities. Present projections call for construction in the early 1990's.

How many of you remember working for a quiet, little Lab in a sleepy, little town called Plainsboro?! ○

Operator-Assisted Calls Can Be Expensive

PPPL's Telecommunications Manager Marge Barnett is advising Laboratory staff to be careful when placing operator-assisted calls — including credit card calls — from hotels, airports, hospitals, and privately owned pay phones. According to Marge, "many of these facilities have contracted with an Alternative Operator Service (or AOS) which resells the services of major long-distance carriers such as AT&T and MCI. The facilities receive a commission from the AOS. Naturally, this results in increased toll charges to the user."

AOS companies are not required to follow AT&T operator-assisted rates, even when an AT&T credit card is being used. Furthermore, there is usually no indication that an AOS is involved in the call. Marge noted that this may result in charges that are four or five times higher than the MCI or AT&T rate. She advises PPPL travelers to inquire as to rates before placing calls. An alternative would be to make the call from a public telephone. Several state Public Utility Commissions are reviewing the situation, and controls may result. ○

Video View

Employees can borrow videotapes on a variety of subjects from the Lab's Photography Services Section (PSS).

Over 30 videotapes are available and cover such topics as the TFTR first plasma, '87 Open House, and four segments of PPPL's video magazine, "In Focus." There are a number of tapes on the TFTR construction and other subjects related to the Lab's work.

Within the last two months, over 40 employees have borrowed the tapes.

Call ext. 2090 if you have questions or visit the PSS located in Room A138. ○

Paper Bin Removed

In case you haven't noticed, the bin used to collect old newspapers for recycling has been removed from the upper parking lot at C-Site. Gathering and pick up of papers for recycling was originally instituted by a group from main campus that has now discontinued the service.

If anyone cares to make new arrangements with a community organization that will periodically provide pickup, the bin will be set up again.

Contact Connie Stout in Plant Maintenance and Engineering, ext. 3377, to make arrangements. ○

Additional Lockers in Place

Additional lockers have been placed in the first floor hallway connecting the RF Building to the shop area. These lockers may be used for weekly storage of athletic equipment on a first-come, first-served basis. Shared use is encouraged.

Lockers are for weekly use; overnight locks are allowed. The lockers will be cleaned each Friday afternoon after 2:00 p.m. Any articles remaining in the lockers at that time will be deposited in the Security Office. ○

More Notaries

After the recent HOTLINE article identifying several members of the staff with Public Notary licenses, it was brought to our attention that there are several others who also hold licenses. They are Madge Mitas, Room S208, C-Site, ext. 3100 and Edward Moshey, 307 College Road East, ext. 2306. ○

Found

Found outside the cafeteria at 307 College Road East a pair of men's reading glasses in a light brown frame. Contact 307 receptionist Amy Bellow, ext. 2331. ○

For Sale

Call Marilyn Hondorp, ext. 2656, regarding any of the items listed below.

- Volkl skis and poles with size 7-1/2 Ricker boots. \$75.
- Bunk beds including boards and mattresses. \$100.
- 1974 Toyota Corona. New water pump and muffler. Low mileage. \$600. ○

TIAA Increases Dividends

The Teachers Insurance and Annuity Association (TIAA) Board of Trustees has voted to raise to 9% from 8.5% the total effect rate of interest credited on new premiums to TIAA Retirement Annuities for the 12 months beginning March 1, 1988. For cashable TIAA Supplemental Retirement Annuities (SRAs) the total interest rate will increase to 8.75% from 8.5%.

"We are pleased to be crediting these competitive rates to TIAA participants for current premiums," said Dr. Clifton R. Wharton, Jr., chairman and CEO of TIAA-CREF, the \$60 billion pension system for higher education. "In addition," he noted, "the TIAA Board voted dividend rates ranging from 9% to 11.25% for TIAA Retirement Annuity and cashable SRA accumulations resulting from past premiums. These rates reflect the investment returns that are being earned on past and current TIAA investments."

As the fixed-income component of the TIAA-CREF pension system, TIAA invest policyholder contributions in commercial mortgages, publicly traded bonds, direct loans to business and industry, and income-producing real estate. During 1987, TIAA made new investments totaling \$3.7 billion. TIAA assets, which totaled \$33.2 billion at year-end, produced a net investment income rate of 10.84% for 1987. The estimated average net investment income rate for all U.S. life insurance

companies last year was 9.33%, according to the American Council of Life Insurance.

TIAA-CREF provides a nationwide portable pension system for staff members of approximately 3,950 U.S. colleges, universities, independent schools, and related nonprofit educational institutions. ○

TRANSITIONS

The HOTLINE offers congratulations to the following employees:

Tony Bleach in the Accounting and Financial Controls Division and his wife Neile, whose son, Kristopher Anthony, was born April 24.

Beth Ann Crosby in the Procurement Division and Thomas Reardon who were married on April 9.

Bobbie Cruser in the Personnel Division and Ralph Forcier with the Carpentry Shop on main campus who were married April 23.

Eugenia Holland in the Procurement Division and **Daniel Spears** in the Computer Division who were married November 14.

Catherine Howard who retired after fifteen years of service. Cathy was Head of Administration for the Research Department.

Graduate student **Alain Brizard** who recently became engaged to **Dinah Larsen** in Academic Affairs.

JoAnn Nagy in the Procurement Division and Peter Palladino who were married January 9. ○

Thank You

I would like to thank everyone for their expression of sympathy and help when my brother died. This was a very difficult time. Your kindness is appreciated and will always be remembered by me and my family.

Joyce Bitzer



Do you know where to call in an emergency? PPPL employees should dial ext. 3333 to report fire, injury, crime, etc. For nonemergencies use ext. 2535 or 2536.

Crimes are sudden, unpredictable, and arbitrary events. Most crimes produce a crisis in the victim's life. In the case of rape and other violent crimes, the victim's life may be changed forever.

Four Myths about Sexual Assault

Myth: Rape is motivated by sexual desire.

Fact: Rape is an act of violence, not sexual passion. It is an attempt to hurt and humiliate, using sex as the weapon.

Myth: Most women are raped by strangers in high-risk situations — hitch-hiking,

walking alone at night, going alone to a bar.

Fact: Rape can happen in these situations, but approximately one-third of all victims are attacked in their homes and in over half the reported rapes, women know their attackers.

Myth: Women invite rape by dressing seductively.

Fact: Victims do not cause rape. It can happen to anyone — children, grandmothers, students, working women, mothers, wives, the rich and the poor. Rape victims often are simply in the wrong place at the wrong time.

Myth: The majority of rapists rape only once.

Fact: Most rapist continue until caught. And rape is one of the most underreported crimes.

What to do if You are a Rape Victim

- Get help. Go to a safe place and call

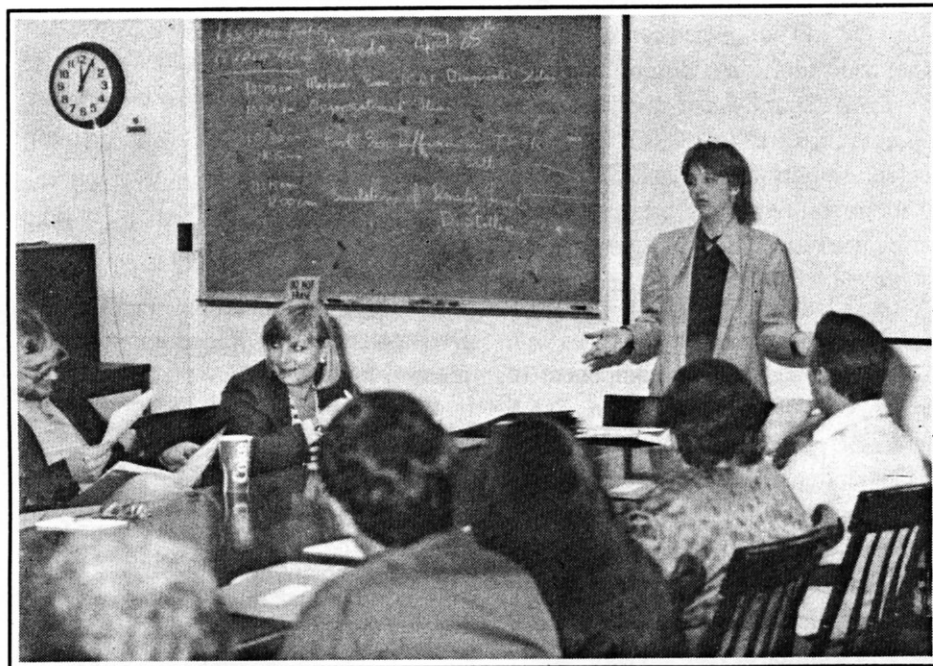
the police.

- Don't shower, bathe, or destroy any of the clothing you were wearing.
- If there is a rape crisis center or hotline in your community, call. They usually are listed in the telephone book under rape, community crisis center, or sexual assault hotline.
- Make sure you get medical attention for any injuries and are tested for venereal disease and pregnancy.
- Rape victims feel rage, guilt, anger, and helplessness. The best way to handle these emotions and recover from the rape experience is to talk about it ... with sympathetic friends and family or counselors from the rape crisis center, mental health agency, or a women's clinic.

If you know someone who has been raped, show her you care. Be supportive, go with her to court, and let her know she did the right thing to survive. ○

— Health and Safety —

Employees Attend Stress Management Seminars



(ED FARRIS)

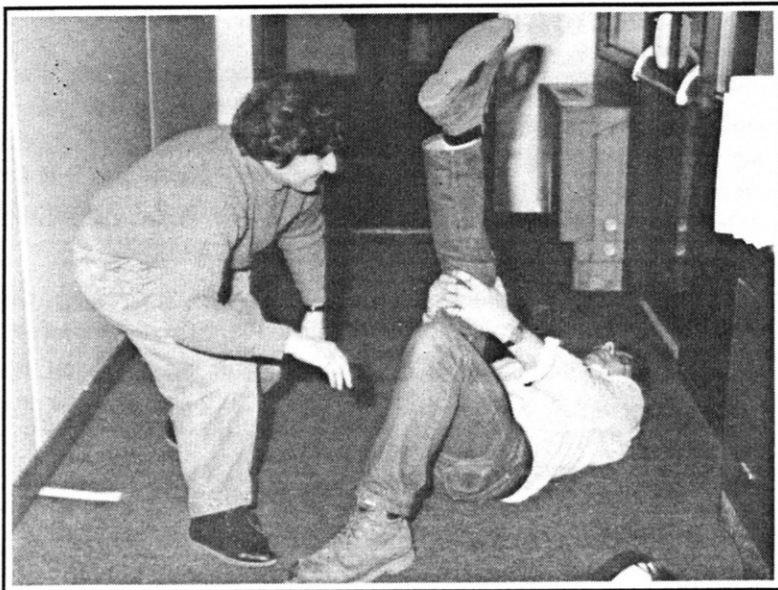
The lunch-hour seminar format is informal and friendly. Here participants interact with seminar leader Cecilia Mitchell as they eat their lunch. Sessions are purposely kept small at 25 participants per session.

The Occupational Medicine Office has begun a series of lunch-hour seminars intended to provide employees with information on such topics as stress management, diet information, cancer education, etc.

"Coping with Stress," presented by Cecilia Mitchell from Family Service Princeton Area, was the topic for April. During the lunch-hour seminar, participants learned about the various kinds of stress and how it affects their health. Short questionnaires were completed to determine an individual's stress level and "healthstyle." Discussion included tips for managing stress and for improving health.

A packet containing information booklets on the topics of discussion, a source list of suggested reading, and information on Family Service Princeton Area was provided. ○

Lab's Commitment to a Safe Work Environment is Ongoing



(JOHN PEOPLES)

Here, Mary Ann McBride shows technician Richard Such an exercise designed to stretch his muscles so he can avoid injury.

The right way to warm up, the best sit-up, and safe lifting procedures are three of several topics reviewed by Mary Ann McBride of the Occupational Safety Branch in the "Sprains and Strains" class.

As part of the Lab's commitment to safety, the Branch has been sponsoring a one hour class for all employees to create better safety practices and to increase awareness of personal fitness.

According to Mary Ann, "The Branch developed the program because in 1987 the Lab suffered 267 lost work days and 654 restricted work days due to strains or sprains. Safety has to be a daily, conscious effort by all of us to avoid needless accidents." ○

Beating the Average 'PI'

by Mary Ann McBride

The Laboratory is in a very competitive position with other major laboratories for deuterium-tritium (D-T) projects like the Tokamak Fusion Test Reactor (TFTR) and the Compact Ignition Tokamak (CIT). A good safety record is essential to prove to the government and our neighbors that we can handle such experiments safely.

Department of Energy (DOE) contractors are ranked by a safety performance index (PI) rather than one of the conventional injury incidence rates. A mathematical formula calculates the number and severity of the accident with the number of manhours worked to arrive at the PI. A lower number indicates a safer operation. The PI average among the facilities under the jurisdiction of the DOE Chicago Operations Office is 4.0.

The Laboratory's goal for CY88 is 2.0. There have been 34 lost work days and 37 restricted work days as a result of seven accidents since January, for a first quarter average of 3.2. We all must practice good safety habits if we are going to meet this goal. ○

Beware, Hot Weather Damages Film Badges

Summer months mean baseball, beaches, bikinis, and hot car seats! Hot cars are hostile environments not only for uncovered thighs but for film badges as well. High temperatures will cloud the film in the badge, giving a false positive reading that is not indicative of the true film badge exposure. So

- if you've been issued a film badge, do not keep it in the car (especially dur-

ing June, July, and August). Leave it in your desk or locker when you go home, and

- don't bet on the Orioles! ○

Memorial Day Begins Busy Driving Season

Memorial Day Weekend kicks off our peak driving season. With millions of motorists on the highways, law enforcement and safety officials ask that you drive with special alertness throughout the holiday period to avoid becoming a statistic. (Last year, 416 people died during the Memorial Day Weekend on our Nation's highways.) Below are some safe driving tips:

- Observe speed limits.
- Yield the right of way, even if the other driver is wrong.

(continued)

May is National Physical Fitness and Sports Month.
Shape Up America!

- Keep a safe distance from the car ahead of you; never tailgate.
- Drive defensively; wear seat belts and have passengers buckle up, too.
- Drive during daylight hours whenever possible.
- Avoid heavy meals when driving.
- Don't drink and drive.
- Have your car checked and serviced before beginning a trip.
- Take frequent breaks on trips.
- Keep your car well ventilated.
- Switch your eyes off the road frequently.
- Stop for the night when you become tired. ○

Health and Safety Dates to Remember

Most PPPL employees are not exposed to radiation in the course of their work at the Laboratory. However, restricted areas do exist at the Lab and, therefore, it is a requirement that all employees receive basic safety training every two years. Accordingly, the Occupational Safety Branch offers classes in Basic Safety Training the first and third Mondays of each month. If you have not had basic safety training in the past two years, you should make arrangements to attend.

Call Mary Ann McBride, ext. 3468 to register.

The Occupational Safety Branch is sponsoring a Health and Safety Fair May 24-26. Participants include Occupational Medicine, Public Safety, and Dillon Gym. Watch your mail for more information.

Mammography screening will be available to PPPL female employees over age 35. A mobile van will be on site July 19. If you qualify and have not received notification, call Jane McCormick at ext. 3235. ○

Safety Training

The Occupational Safety Branch has scheduled the following safety training courses for June:

<u>Course</u>	<u>Date/Time/Location</u>
Laser Safety	16 June, 9:00 a.m. Safety Training Trailer
Fire Extinguisher	21 June, 1:30-3:00 p.m. Safety Training Trailer
Basic Electrical Safety	22 June, 9:30 a.m. Safety Training Trailer

Employees must obtain permission from their immediate supervisor to attend these classes. Supervisors should call Mary Ann McBride at ext. 3468 to enroll their employees.

Basic Safety for new employees is offered the first and third Mondays of each month at 1:30 p.m. in the Safety Training Trailer.

CPR is offered every Tuesday at 9:00 a.m. in the Safety Training Trailer. Contact Mary Ann McBride, ext. 3468, to enroll.

Reserve These Dates

PPPL Annual Picnic will take place Saturday, September 10 at Great Adventure. Tickets will go on sale in late July.

PPPL Holiday Dinner Dance will take place Friday, December 9 at the Princeton Forrestal Marriott. Details to be announced later.

The PPPL HOTLINE is issued by the Princeton University Plasma Physics Laboratory, a research facility supported by the United States Department of Energy. It is primarily an internal publication. Correspondence and requests to reprint material should be directed to Carol Phillips, Editor, PPPL HOTLINE, P.O. Box 451, Princeton, NJ 08543 or phone 609-243-2754; Inter-office correspondence should be addressed to Room B366, James Forrestal Campus, C-Site.

This issue of HOTLINE designed by Carol Phillips