PPPL
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HOTLINE

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PPPL ACHIEVES UNITED WAY GOAL

(Photo by Ed Farris)

PPPL United Way volunteers and managers who led PPPL's efforts in this year's fund raising drive. A total Laboratory participation rate of 50% was achieved this year!

We met an important milestone in the community life of the Laboratory this year. We reached our long-sought goal of 50% Laboratory participation in the Annual United Way Fund Drive. Moreover, we increased the total Laboratory contribution by 1,000 dollars to $22,000. Congratulations to one and all, and especially the volunteers and managers who led the effort! This is truly a worthy investment in community services.

Special recognition should be given to some of our larger units (a dozen or more employees) for achieving impressive participation percentages:

- TFTR D-T Systems Division—100%
- Plant Maintenance and Engineering Division—87%
- Information Resource Management Office—80%
- Mechanical Engineering Division—71%

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- TFTR Physics Program Division—69%
- Information and Administrative Services Branch—63%

Of the seven smaller units reporting over 60% participation, six achieved 100%:

- Administration Department Office
- Director's Office
- Engineering Department Office
- Graduate Affairs Office
- Personnel
- Research Department Office
- S-1 Spheromak

You may be interested to know Princeton University Main Campus increased its participation from 13% to 20% and exceeded its contribution goal by collecting over $55k in this year's campaign. In total, the Tri-State Area United Way raised $2,300,000, surpassing its goal by $50,000.

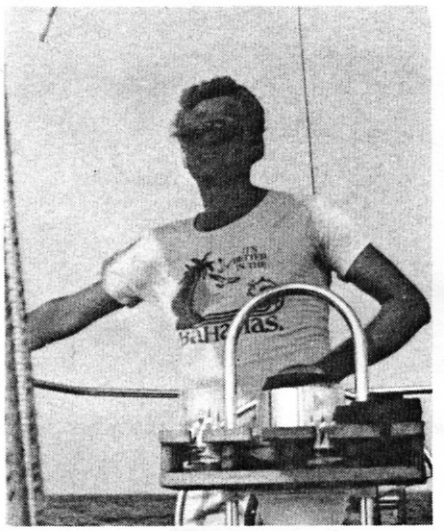
Again, "thanks to you, it's working."

Jim Clark

Jim Clark
PPPL United Way Campaign Chairman

The Modern Mariners of PPPL

by Phyllis Rieger



Roy Jensen enjoys cool breezes as he cruises on his own boat.

It may be winter but some PPPL sailing enthusiasts have spring in their hearts when their thoughts turn to schooners, sloops, cutters, and catboats.

Mary Ann and Don McBride, Roy Jensen, Al von Halle, Dan Crook, Dave O'Neill, Tom Sereni, and Don Abramowitz are among several employees who savor the hot sun, cool breezes, strong wind, and sprays of water—all part of sailing. Al von Halle, a Neutral-Beam Operations engineer, enjoys the sea so much he lives on his boat year round. "You should sit and watch a snowfall while on the water. There's nothing like it," said Al who as a youngster dreamed of having his own boat. Now he owns a 32' full-keel pilot house cutter complete with hot water and heat. He said quite a number of people live on boats all year.

According to Al, "Sailing is the sort of endeavor that requires concentration, both intellectually and physically. At the same time, it's a relaxing escape from 'regular' life."

The other sailboaters agreed. Heeding the call of sail and sea is Tom Sereni, a technician for PBX-M. Tom said, "I enjoy the excitement and joy of sailing. It's quiet and clean and there's something for everyone to do from trimming the sails to plotting a course. I started sailing about 15 years ago with a Scampy which isn't much more than a sailboard. Now, I've graduated to a 29' sloop."

As with Tom, other PPPL mariners began buying or renting a small craft and progressing to a larger one. Or, many switched from powerboating to sailing as Don McBride, Power Systems Coordinator for TFTR, who tried sailing when his wife Mary Ann, who works in the Occupational Safety Branch,introduced him to it. Mary Ann said, "We started out racing Jet 14's with sailors from other clubs located throughout the eastern United States. We met a lot of wonderful people, but I needed more comfort so we moved up to a 26' Columbia. Now, instead of just surviving a race, we are able to discuss weather, wind, and waves."

Don noted, "While we find sailing fun, we also think it's a nice way to know people you work with, outside of the job. We've cruised the Cheaspeake with other employees and really enjoyed ourselves. Sailing is an excellent way to develop and enrich friendships."

Roy Jensen, an electronics techni-

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(Photo by Roy Jensen)

Don McBride (seated) and Dan Crook (standing) relax on Al von Halle's boat.

cian currently calibrating radiation detection equipment for the Health Physics Department, holds a captain's license. He along with Dan Crook, a Torus Vacuum Pumping System technician, probably have sailed the seas more extensively than the others. Roy has sailed craft from Bermuda while Dan has sailed the southern coast of England. Dan pointed out the main difference between sailing the Mid-Atlantic East coasts of the U.S. and England. "It's a lot more tidal along England's shores where tides average 8-9 feet. Along the Mid-Atlantic East coast it's more like 2-4 feet." Both Roy and Dan feel sailing is relaxing as well as good exercise. They say the eastern U.S. coast offers varied and scenic seaports, such as Baltimore Harbor. "One of my favorites is St. Michael's in Maryland," noted Roy who explained the seafood there is superb. "You can anchor in the harbor, blow your horn, and restaurant personnel will come and get you."

While most of the PPPL mariners have learned sailing by hands-on experience, some have taken boating courses or lessons, such as those offered by the U.S. Power Squadrons, the Red Cross, or the U.S. Coast Guard Auxiliary.

"In many ways, boating requires much more skill than, say, driving a car," declared Al von Halle. "There are 'rules of the road' for boats, too," said Roy Jensen who feels boating education is a life preserver. Of course, there are other factors separating knowledgeable boaters from landlubbers, such as marlinspike or knowing which knots to use.

Because sailing seems to be a popular PPPL leisure activity, boaters are organizing a club. "It's not only for those who sail now but for anyone interested," explained Dan. Those with boats are willing to introduce others to seamanship. Two PPPL trips are scheduled for 1988. May 21 to 30 is scheduled for a cruise to the Cheaspeake and August 1 to 14 a trip to Long Island Sound is planned. Three raft up parties are slated for May 30, July 4, and September 5. Interested employees should contact Roy Jensen at ext. 2811 or Dan Crook at ext. 2745, Pager 028.

In late March, a half-hour program on boating is slated for lunchtime. All employees are invited. Look for details in future issues and a special announcement. ○

Inventive Inventors

by Phyllis Rieger

At PPPL, fiscal year 1987 may well be remembered as the "Year of the Patent." Creativity mixed with hard work and perseverance helped Laboratory personnel attain 11 patents. On average, approximately three patents are issued to PPPL inventors every year.

In 1981, Dr. Harold Furth initiated the Patent Awareness Program to recognize PPPL inventors. As part of the program, inventors are awarded $100 per invention disclosure with a maximum of $300 per disclosure shared among inventors if there are four or more and $200 per inventor for each patent application filed (no maximum). An annual dinner, hosted by the PPPL Committee on Inventions, is also held to honor PPPL inventors.

1987 Patents include:

- "Oscillatory Nonohmic Current Drive for Maintaining a Plasma Current," N. Fisch, Patent #4,615,861
- "Variable Control of Neutron Albedo in Toroidal Fusion Devices," D. Jassby and B. Micklich, Patent #4,626,400
- "Helical Axis Stellarator with Noninterlocking Planar Coils," A. Reiman and A. Boozer, Patent #4,663,109
- Resonant-Cavity Antenna for Plasma Heating," F. Perkins, S.-C. Chiu, P. Parks, and J. Rawls, Patent #4,661,304
- "Tokamak Plasma Current Disruption Infrared Control System," H.Kugel and M. Ulrickson, Patent #4,650,632

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- "System and Method of Operating Toroidal Magnetic Confinement Devices," M. Chance, S. Jardin, T. Stix, R. Grimm, J. Manickam, M. Okabayashi, Patent #4,654,184
- "Limiter," S. Cohen, J. Hosea, and J. Timberlake, Patent #4,626,399
- "Steady-State Inductive Spheromak Operation," A. Janos, S. Jardin, and M. Yamada, Patent #4,687,617
- "Push-Pull Circuit with Integrated Transition to Waveguide Output for Use in ICRF Plasma Heating Equipment," W. Bennett, Patent #4,642,578
- "Method and Apparatus for Maintaining Equilibrium in a Helical Axis Stellarator," A. Reiman and A. Boozer, Patent #4,668,464
- "Neutral Particle Surface Alteration," R. Motley, S. Cohen, W. Langer, D. Manos, Patent #4,662,977

In addition, there was one Statutory Invention Registration (SIR) filed in FY87. (SIRs are similar to patents in terms of providing protection for the idea at the same time as making the idea public, but SIRs are not licensed.)

- "In-Situ Determination of Energy Species Yields of Intense Particle Beams," H. Kugel and R. Kaita, SIR #H235

If you have questions about the Patent Awareness Program, feel free to contact Committee on Invention members: John Johnson, Chairman; Schweichard von Goeler, John Lowrance, Richard Rossi, Meg Harmsen, Shoichi Yoshikawa or Peter Bonanos.

According to Peter Bonanos, fewer invention disclosures have been submitted this year than in past years. The Committee encourages all members of the Laboratory to review their work for patentability. Novelty and potential usefulness are the key ingredients; an invention need not be complicated. ○

Gutter Dusters 'Clean Up'

Who says 13 is unlucky? The Gutter Dusters don't. The bowling team of the Princeton University Mixed League took top honors on January 13th as members John Luckie, John Cole, Ron Krzos, Dotty Kerr, and Sarah Thomas rolled to victory as winners of the first half of the 1987-88 bowling season.

The Dusters rolled against the Killer Bees, comprised of Brian VanLiew, Barbara VanLiew, Jim Howell, Matt Lammerding, and Al Cook. According to Sarah Thomas of DOEPAO, "The battle was well fought. Both teams played great."

Will the Gutter Dusters continue to be #1? Will the team regain its 1985-86 season winner position? Several more Wednesdays remain for the Dusters to keep out of the gutter and hold the #1 spot.

The following are the positions which the other seven teams finished in the first half: (2) Foul Play, (3) Killer Bees, (4) Low Rollers, (5) Tornadoes, (6) Strays, (7) Head Pins, (8) Plasmaniacs. ○

Computer Corner

The Department of Energy (DOE) has established policies and procedures for the safe-guarding of DOE computer systems. At PPPL, we must conform to DOE Order 1360.2, "Computer Security Program for Unclassified Computer Systems."

This order establishes the policy that "sensitive unclassified information be protected from improper use, alteration, manipulation or unauthorized disclosure as a result of criminal, fraudulent or other improper actions."

The order defines "sensitive" applications or data as that which requires a degree of protection because of the risk and magnitude of loss or harm that could result from improper operation or deliberate manipulation of the data or application. At PPPL, certain personnel data and proprietary data fall into this category.

The order states that each DOE site must create and implement a Computer Protection Plan (CPP). It also defines what information must be included in the CPP and that a Computer Protection Plan Manager (CPPM) must be named as the responsible person for the creation, maintenance, and implementation of the plan.

Currently, Dori Barnes, ext. 2557, is the CPPM and Carl Scimeca is the Deputy CPPM for PPPL. If you would like further information on DOE Order 1360.2 or PPPL's Computer Protection Plan, please contact either Dori or Carl. ○

Smoke Gets in Your Eyes

Where there's smoke. . . there should be a designated smoking area. It's the law (Title 26, Chapter 184, Public Laws of 1985).

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Smoking is allowed only in permitted areas. Signs are posted throughout the Laboratory defining such places. In offices, where several people work in close proximity, the department head has the responsibility for ensuring that "the right of the nonsmoker to breathe clean air should supersede the right of the smoker to smoke."

Smoking is prohibited at the Laboratory except in the following areas:

1. A smoking section in the cafeteria.
2. Well-ventilated Hi-Bay areas.
3. Private offices while occupied only by a smoker. (Employees are strongly encouraged to close their office door when smoking.)
4. Designated areas established by Department Head/Division Head.

Check your sight, before you light—to make sure you are in a smoking area. ○

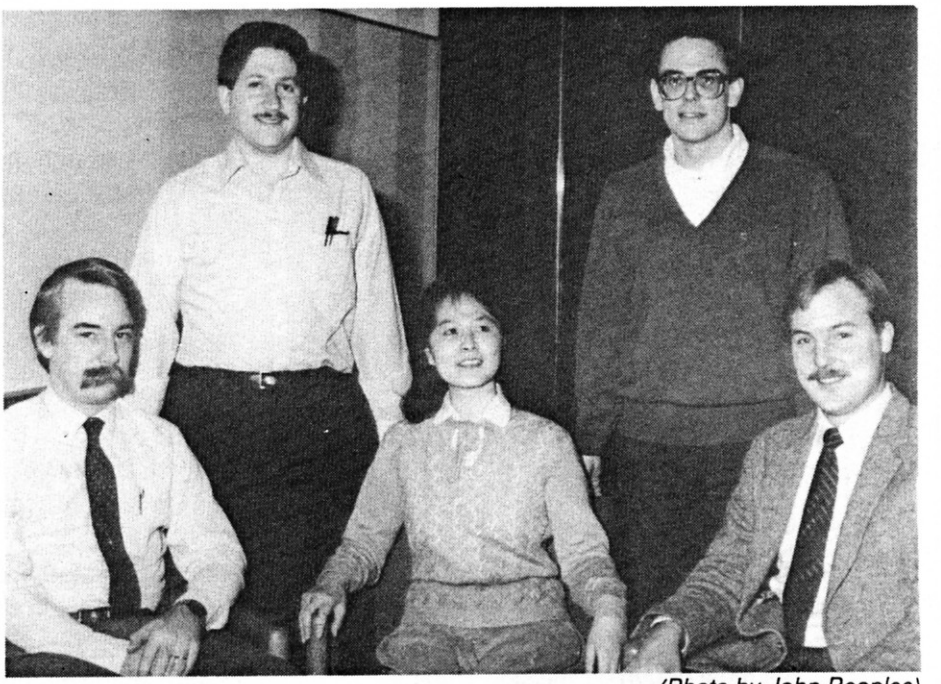
It's True

Salary ranges for staff positions at the Laboratory are available to all employees. Staff members who wish to, may review this information with their supervisors.

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 PPPL Information Services, B366, C-Site, James Forrestal Campus, ext. 2754.

(Photo by John Peoples)

PPPL Employees Anne Ammons (left), Lawrence Dudek (center), and Jane Birtwistle (right) were recently promoted to new positions at the Laboratory. Ann became Departmental Administrator for the Administrative Department; Jane replaced Ann as Manager of Internal Controls in the Controller's Office; and Larry was appointed Head of the Neutral Beam Project Engineering Section in the TFTR Heating Systems Division.



(Photo by John Peoples)

Several new employees joined the Laboratory in recent months. They include, seated from left to right, Rich Rossmassler, a tritium engineer in the TFTR Project's D-T Systems Division; Elaine Lu, an electrical analysis engineer in the Engineering Department's Engineering Analysis Division; and Jim Yeck , CIT Project Engineer in the USDOE Princeton Area Office. Standing, from left to right, are Jerry Levine, a Nuclear and Environmental Safety engineer in the Administration Department's Project and Operational Safety Office and Charles Kessel a nuclear analysis plasma engineer in the Engineering Department's Engineering Analysis Division.

For Safety's Sake

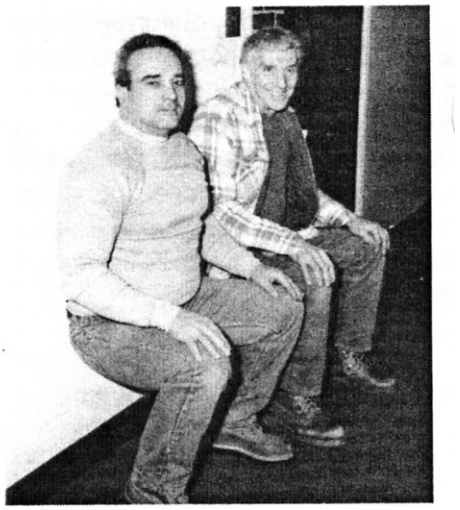
Lifting is a part of everyday jobs. To show employees proper and safe lifting procedures, Department of Public Safety personnel have been conducting special training programs emphasizing back strengthening exercises.

A California orthopedist says back pain is the single most significant factor keeping Americans home from work. Dr. Edward F. Abraham says in the February issue of Working Woman magazine that 93 million workdays and $14 billion are lost each year to the problem. He feels that 15 to 20 minutes of daily exercise can help to keep back pain from returning.

"Many muscles of the body, including those of the buttocks, legs and shoulders and especially the abdomen, help support the back by taking some of the work load off the spine," Dr. Abraham says. "A well-balanced upper torso can reduce spinal stress by 30 percent, and a strong abdomen can decrease it by 50 percent."

Here, technicians Joe Bonfonti and George Prosser demonstrate an exercise that can help employees avoid strains and sprains.

But the most important thing to remember is—THINK BEFORE LIFTING—for your own and safety's sake.



(Photo by John Peoples)

Joe Bonfonti (left) and George Prosser (right) demonstrate back strengthening exercise.

Safety Training Courses

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

Course	Date/Time/Location
Radiation Safety	8-10 March, 8:30 a.m.-Noon Training Trailer D41-5
ASC Training/Meeting	9 March, 9:00-10:00 a.m. MBG Auditorium or 16 March, 3:00-4:00 p.m MBG Auditorium
Confined Space Entry	15 March, 9:00-11:00 a.m. Safety Training Trailer
Skin Protection	22 March, 1:30-2:30 p.m. Safety Training Trailer
Initial Crane Operator Training	23 March, 9:00-Noon 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 every Monday afternoon 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.