

Tech Transfer Pays Off

First Check Given

For the first time in the history of PPPL, an invention made here has paid off financially for the inventor, the Lab, and the University. Don Weissenburger received a check for \$5000 for use of his invention, the Spark 1.1 computer code—50 percent of the \$10,000 paid by Grumman Space and Electronics for a nonexclusive license. Of the remainder, the Laboratory received \$2550 and the University \$2450.

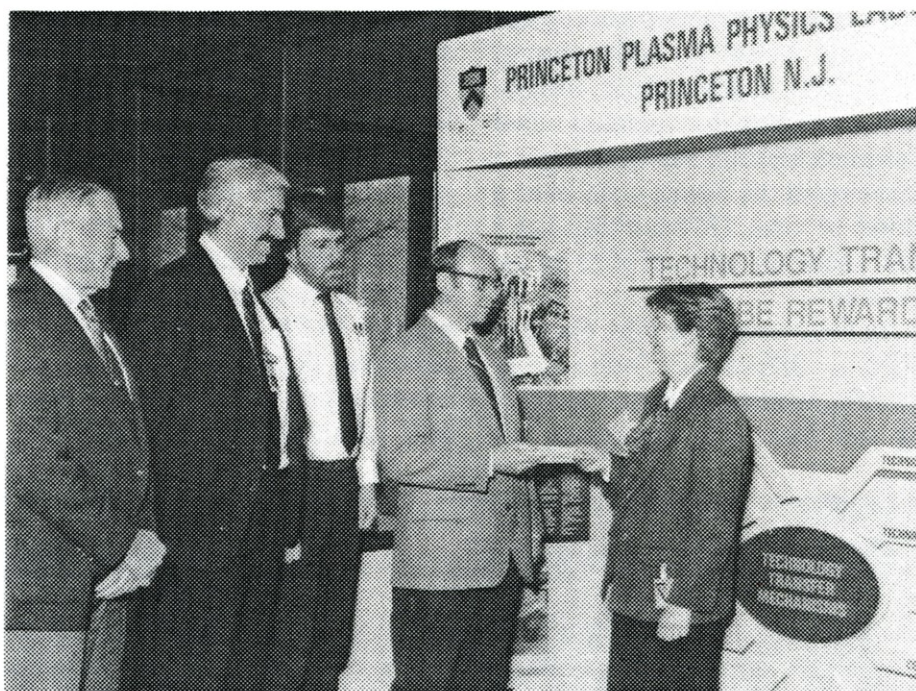
Said Weissenburger, "I'm very pleased with the financial recognition, and I hope others will be encouraged by the fact that their inventions will be appropriately recognized and rewarded."

Dale Meade, Deputy Director of PPPL, who was present to receive the Lab's check said, "We're delighted that technology transfer efforts are now beginning to show financial results. It's important for other creative people here to see that uses for their inventions can be found beyond the Laboratory and that their efforts can prove financially rewarding."

Princeton University's Jean Mahoney, Manager, Technology Transfer and Trademark Licensing, was on hand to award Weissenburger the check. "We're pleased to have the opportunity to celebrate the Laboratory's very first financial results of the patent and technology transfer process and we look forward to future successes," said Mahoney.

In discussing the invention process Mahoney noted, "Most people don't actually set out specifically to

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The sign "Technology Transfer Can Be Rewarding" certainly proved true for Don Weissenburger, who received a check for \$5000 from Princeton University's Jean Mahoney for licensing of his invention by Grumman Space and Electronics. Joe File (left), Dale Meade, and Mike Williams are present to congratulate Weissenburger and receive the \$2550 PPPL portion of the Grumman licensing fee. Photo: D. Applewhite

FEAC Update

Advanced Tokamak Recommendations

The Department of Energy's Fusion Energy Advisory Committee (FEAC) has recommended a new \$400 million "steady-state advanced tokamak" (SSAT) to succeed TFTR. After a meeting here on March 18 and 19 to discuss options, FEAC Chairman Robert Conn outlined recommendations in an April 1 letter to William Happer Jr., DOE's Director of Energy Research. (See *HOTLINE* No. 8, February 28, 1992 for a list of SSAT recommendations discussed at the meeting.)

Conn said, "The SSAT will offer the world fusion program a unique combination of advanced-tokamak physics capability and at least 1,000-second pulse lengths in reactor-relevant plasma configurations."

The new experimental device has a target date for initial operations of 1999. The common thread of physics issues to be addressed is control of the current profile. For example, the issues of second stability plasmas and bootstrap current would be addressed.

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TechTransfer

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invent something; they usually begin with a need to fill and develop a technology to fill it."

That was certainly the situation with Weissenburger's invention. He remembers, "I was in the PPPL Engineering Analysis Division at the time, and we needed a computer code that would do eddy current calculations. (Eddy currents are secondary currents that develop when a magnetic field is rapidly changed.) I developed the Spark code over a period of time (1986-1988) but I didn't actually think of it as an *invention*."

In fact, it was Joe File, Head of PPPL's Office of Technology Transfer, who suggested copyrighting and disclosing the Spark 1.1

program as an invention. Later, when Weissenburger took a position at Grumman, it was File who worked with Jean Mahoney to have Grumman license the Spark 1.1 code from the University.

Tech Transfer a Primary Mission

Until 1980, all inventions made through government laboratories and through government contracts with universities went into the public domain. Explained File, "They were really up for grabs, and other countries took advantage of this free information." The Bayh Dole Act of 1980 permitted universities to keep their inventions and file for patents. In 1984, the Bayh Dole Act extended that permission to government-owned contractor-operated laboratories such as PPPL.

File continued, "The Stevenson Wydler Technology Innovation Act of 1980 required that all government laboratories have an Office of Research and Technology Application. However, it wasn't until 1986 that an amendment to the law made technology transfer a *primary mission* of the Lab and gave us the right to enter into cooperative research and development agreements with industry."

The PPPL Office of Technology Transfer has been in business since 1987, working with the University's Technology Transfer Office to find applications for PPPL inventions, determine commercial potential, and locate licensees. The University's office enters into license agreements and distributes the income from licensed inventions.

Most Wanted Invention Contest Winners Announced

The response to the Most Wanted Inventions Contest was enthusiastic, with 34 contestants submitting 43 creative ideas for inventions. Each of the three winners will be awarded \$50 and an invitation for two to the Patent Awards Dinner to be held May 6. The Contest was sponsored by the Committee on Inventions and the Technology Transfer Office. Winners were picked through a blind selection process based strictly on the idea (no names attached).

Winners

Rush Holt

Administrative Staff and Senior Lab & Shop Staff
A safe, efficient way to store hydrogen for automobile fuel

Pat Zeedyk

Lab & Shop Staff and Office Support Staff
An automobile directional signal that makes a sound which increases the longer the signal stays on

Jack Mervine

Research and Engineering Staff
An energy-inexpensive way to lower the humidity in a room, house or car without a compressor

Lewis Meixler

Special Innovation Award
A work saver—a paper shredder that shreds meeting notices before they are sent

Other Submissions

Charles Ancher
Jill Berger
Norton Bretz
Richard Cargill
Morrell Chance
Karen Clark
Dave Ciotti
Robert Gulay
Paul Hagar
Joe Ignas
David Ignat

Alan Janos
Steve Jardin
Lawrence Lagin
Thomas Lupich
Michael McCarthy
Cheryl Miller
Steve Paul
Delmar Reynolds
Edward Rogers
Timothy Riotto
JoAnne Savino
Dave Shannon
John Spitzer
Szymon Suckewer
John Timberlake
Hiro Takahashi
Tim Vavricka
Michael Viola
Warren West



Trip Tips

Going someplace? The PPPL Travel Office can assist you most effectively with your travel arrangements if you provide needed information well in advance. During a recent travel meeting, guest speaker Marie Gallagher, owner of International Tours of Princeton (ITP) described how you can help. (ITP is the Laboratory's contracted travel agency.)

Gallagher explained the reservations system, including ticket pricing and airline seating assignments and answered questions. A recap of the points made is provided here as a reminder, and for those who were unable to attend the meeting. Should you have any additional questions or comments, please address them to the Travel Office at extension 2658.

Recap

- Before you make reservations, please submit a completed PPPL
- Travel Approval form to the PPPL Travel Office.
- Supply the Travel Office with as much information about your trip as possible. Name the cities and states you will be visiting along with the dates and approximate times of travel. Also include hotel and rental car information, if appropriate.
- When attending a conference, supply the Travel Office with information given to you by the conference host pertaining to special rates on airline carriers, hotels, etc. This will assist us in keeping your travel costs to a minimum.
- At the Travel Office, pick up and fill out a profile sheet of your air travel needs. Your profile sheet will tell us your seating preference, frequent flier numbers, and special meal requirements.
- If you must make changes to your itinerary while away on

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Travel Office Here to Serve

The PPPL Travel Office issued approximately 750 airline tickets and processed 1400 travel vouchers during fiscal year 1991 alone, according to Bob Leckie, Manager of General Accounting. His primary Travel Office responsibilities are policy and procedure and supervision. For the Travel Office, Fran Gantiosa processes travel advances and Dawn Horner is the travel reservationist. All three have additional (nontravel) accounting responsibilities.

"Travel has been nonstop this year," observes Leckie. "We're always working to create the most efficient, personalized service we can. Dawn now has the on-line SABRE computer system, so she can access air reservation information that is up to date within the hour. We encourage questions and feedback, and we appreciate everyone's getting information to us early so we can provide them the best possible travel arrangements."

Much recent travel has been related to Laboratory funding and to ITER meetings, says Leckie. In addition, the four biggest conferences—the APS, IEEE, IAEA, and the Sherwood—take a lion's share of travel time.

The cities most frequently visited are Knoxville, Tennessee (Oak Ridge National Laboratory); Boston, Massachusetts (Massachusetts Institute of Technology); Chicago, Illinois (DOE Chicago Operations Office); and Washington, D.C. Countries most frequently visited are the United Kingdom (JET), Germany (Max Planck Institut), and Japan (JT60-U).

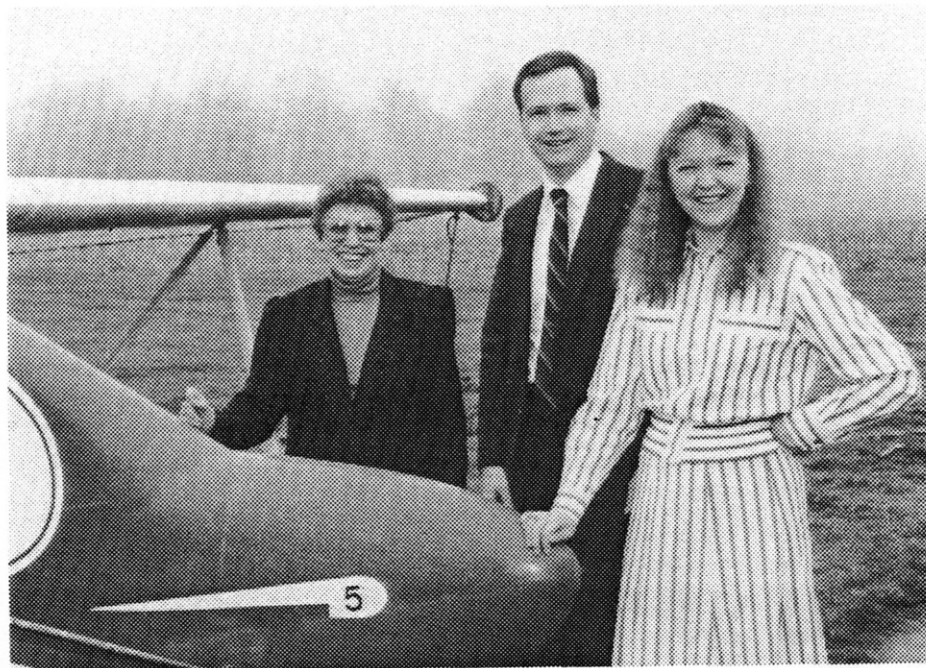


Photo: Denise Applewhite

Perhaps a little wishful thinking goes into planning trips for others. Here Fran Gantiosa (left), Bob Leckie, and Dawn Horner of the Travel Office imagine taking off on an air trip to far away places with strange sounding names ...

Travel Tips

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business or after hours, use the toll free 800 number supplied with your tickets. *You may also use this number while at the airport to avoid waiting at busy ticket counters.*

Questions and Answers

Q Whose responsibility is it to obtain the lowest available fare?

A This is a shared responsibility between you—the traveler—and the Travel Office. Please notify the Travel Office of your future trip *as soon as you know the details.* The more lead time we have, the better our chances are of getting you the lowest available air fare while still meeting your travel requirements.

Q What is the maximum mileage amount reimbursed if you drive your personal auto while on business?

A You will be reimbursed at the number of miles driven times the mileage reimbursement rate at the time of travel. This amount is not to exceed the lowest rate available via commercial transportation.

Q Can the Travel Office give flight information to departments attending group conferences?

A Yes. Simply have a representative from your department contact the Travel Office giving the conference dates and any contract carrier information you may have.

Q What happens if a car rental company refuses to give you the government rate?

A PPPL attempts to obtain government rates for automobiles whenever possible. However, since PPPL employees are not govern-

ment employees, the rental agency (depending on their corporate policy) may refuse us a government rate. This does not happen often, but if you are refused, then ask for the lowest available commercial rate on a compact car.

Q Why don't I always get a seating assignment when I receive my tickets?

A All the major airlines allow only 40% of the seats for each flight to be booked through a travel agency. The remaining seats are filled based upon availability at the time of boarding. This allows placement of handicapped persons and allows able-bodied persons to fill emergency isles. There are times when advanced seating may be cut off early when a change of equipment (plane) is anticipated, or the flight is overbooked.

Q Why is it some people pay less than others for the same flights?

A Each flight is segregated into varying price categories on a "fare basis." Generally, the earlier you make your reservation, the better your chances of receiving a lower priced fare.

Employee Reimbursements to the Laboratory

Please keep the following in mind when reimbursing the Laboratory for items such as telephone and travel.

- The bank has requested that employees *not* write checks in red ink. They do not photocopy well.
- Cash **will not** be accepted if sent through the mail. All cash payments are to be made at the Petty Cash Office where a receipt will be issued for monies received.
- Checks are to be made payable to Princeton University, PPPL, or Princeton Plasma Physics Laboratory.

FEAC Update

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Second stability is a yet-unproven condition in which the plasma jumps to a much higher power density, theoretically allowing the use of less costly lower field magnets to confine the reaction. Through bootstrap current, much of the current used to confine the plasma is generated by the plasma itself, reducing the amount of power needed from external sources for current drive.

Two other alternative proposals were rejected as too costly. One, a staged modification of BPX, would have required \$400 million for its first phase with a final price tag of up to \$800 million. The second proposal, called the "Steady Burn Experiment," would have combined steady-state and near-ignition machines. Proposed by Massachusetts Institute of Technology and Oak Ridge National Laboratory, it would have cost \$900 million.

Conn asked that recommendations for management of the design, construction, and operation of SSAT as a national facility be presented at the next FEAC meeting scheduled for May 20-21 at UCLA.



ESU FIRE SAFETY TIP

Smokers Need Watchers

Carelessly discarded cigarettes are the major cause of fatal home fires. Make sure smokers extinguish cigarettes in large, deep ashtrays. Fill ashtrays with water and drain before putting refuse in the trash can. Check under sofa and chair cushions for cigarette butts before going to bed. And, *never ever smoke in bed.*

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TRANSITIONS

Promotions

Kevin Brink has been promoted to Emergency Services Unit (ESU) driver/operator from the position of ESU Officer.

Ron Leuenberger has been promoted from Technical Assistant to Tritium Health Physicist in Environment, Safety, and Health (ES&H).

Marshall Lewis has been promoted from Technician VI to Health Physicist in ES&H.

Alejandro Melendez has been promoted from Technician VI to Tritium Technician Supervisor in TFTR.

Harry Towner has been promoted to Head, Distributed Computing Services, from his position as Senior Engineer in the Computer Division.

CLASSIFIED

For Sale

Motocross bike—Yamaha YZ 250; 1990 model, like new; \$200;

Riding lawnmower—John Deere 32 inch cut; 1991 model; must sacrifice, \$300;

Color TV—RCA 21 inch; excellent condition; \$45.00;

For bike, lawnmower, or TV, call Mark Kijek, ext. 3417.

Wanted

Boy Scout uniforms—whole or part; two uniforms needed, sizes 12 and 16; call Beverly Falkler, ext. 3444.

New Hires

We welcome these recently hired PPPL employees in the following areas:

Environment, Safety, and Health

Don Gallant, Construction Safety Engineer

Carl Szathmary, Technician V

Computer Division

Ed Weisenberger, Network Engineer

Human Resources

Jo Barbour, Staff Assistant

Information Services

Johanna Van Wert, Senior Writer

HOTLINE

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Sell, Buy, Rent, Give Away or Trade
Send your ad to HOTLINE

Name: _____ Extension: _____

Item: _____

Price: _____

Want to Lose Weight or Stop Smoking? Return This Questionnaire!

The Occupational Medicine Department is interested in your opinion of possible future health programs that may be offered for a nominal cost spanning the lunch period. Please complete the short questionnaire below and return to: *Connie Riviera, Health Promotion Program Director, Dispensary, C-Site* by May 15.

For further information, call extension 3200 or 3235.

- ☐ Yes, I am interested in attending a Weight Reduction Program.
- ☐ Yes, I am interested in attending a Smoking Cessation Program.
- ☐ Other suggestions: _____
- _____
- _____
- _____

Name: _____ Lab Extension: _____

