

PPPL to Celebrate 40th Anniversary

Carl Sagan Will Speak

PPPL will celebrate its 40th Anniversary during a week of activities, kicking off with a Staff, Family, and Community Day on Saturday, October 26.

Well-known astronomer Carl Sagan has been invited to speak on

the topic "Fusion and the Environment" at a banquet on Thursday, October 31, and tickets will be available to all PPPL employees. PPPL Founder Lyman Spitzer will be honored.

"A questionnaire about banquet

choices has already been sent out, and response has been very good," says Dori Barnes, who directs the Banquet Subcommittee. "We are considering the responses carefully as we plan the banquet."

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Logo Contest Response Enthusiastic

Four Winners Chosen

"The response to the call for PPPL 40th Anniversary Logo designs was wonderful, with 50 entries submitted," says Jim Gorman, chair of the Souvenirs and Decorations Committee. "Because so many entries were excellent, and because we can use the logos for a variety of purposes, four winners were chosen—rather than one, as originally announced."

The four winners are: Greg Czechowicz, Karen McKee, Teri Daynorowicz, and Jim and Tay Mueller. Each will be awarded a \$50 savings bond during the 40th Anniversary festivities.



Greg Czechowicz



Karen McKee



Teri Daynorowicz



Jim and Tay Mueller

PPPL to Celebrate

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Other highlights will include a program on the past, present, and future of plasma physics on October 31, and awards and ceremonies on November 1. World leaders in plasma physics and other dignitaries will participate, and the programs will be of interest to a broad audience.

"We're very excited about this special occasion, and we have many committees working hard to make it enjoyable and memorable," says Rush Holt, Assistant Director of the PPPL Office of External Affairs and Chair of the Celebration.

According to Holt, additional volunteers are encouraged to join the committees. Please contact the appropriate subcommittee chair given below if you would like to participate.

Sally Connell and Pete Del Gandio direct the following subcommittees, which are listed with their chairs:

Logistics: Chris Gillars, Rich Gallagher

Displays, Demos, Tours:
Halsey Allen

Food: Bobbie Forcier

Dori Barnes directs the following subcommittees:

Publications: Carol Phillips

Souvenirs, Decorations:
Jim Gorman

Banquet: Jeff Gettelfinger

Educational Activities:
Diane Carroll

Publicity: Tony DeMeo

Rush Holt is the overall chair for the following subcommittees:

Scientific Program/Celebration Awards:

Rush Holt

Invitations:

John Johnson

Teachers, Students Broaden Science Horizons

This summer, through the Science Education Program, PPPL has once again hosted three educational programs for teachers and students—the Teacher Research Associates Program (TRAC) for high school teachers; the Summer Teachers' Institute for elementary school teachers; and the Summer Science Awards Program for high school students.

High School Teachers

This summer, three of the PPPL staff members who acted as mentors were Mike Ulrickson, Head, TFTR Limiter Impurity Control Section; John Timberlake, Engineering and Scientific Staff, Surface Physics; and Dennis Manos, Branch Head, Surface Physics.

The three TRAC teachers assisting them were: Chuen-Chin Hsu Chen of West Windsor-Plainsboro (WW-P) High School, Ron Saunders of Trenton Central High, and Michele Herzer, of Neshaminy High. They were involved in the search for more efficient, safer ways to coat the TFTR bumper limiter and/or in work related to the Atomic Beam Experiment.

These teachers were among the 11 TRAC participants chosen from 50 teachers who applied for the eight-week paid assistantships that began July 1. All had PPPL mentors who are scientists and engineers. The teachers were involved in many research projects, ranging from plasma diagnostics, microcomputers, and data visualization, to health physics, surface science, and lasers.

Benefits of the program have proven wide-ranging for the teachers. For example, Trenton High



Mentor Boris Grek works with Rajini Ramakrishnan, a Summer Science Awards student, on a TFTR Laser Diagnostics problem. Photo: Denise Applewhite

chemistry teacher Flossie Jackson observed, "While here, I've noticed that many excellent technicians gain their experience through on-the-job training, and I look forward to telling my students that there *are* good jobs out there for technicians with a high school diploma. I think all of us are learning that a wide variety of careers are available in the sciences." Says Rick Gaston, math teacher at WW-P High, "The TRAC experience has helped me gain further perspective on what the research process involves and to learn more about new applications and recent developments in various fields."

Elementary School Teachers

A total of 40 teachers have attended the Summer Teachers' Institute during two eight-day sessions.

Multiplying this by 25 students per classroom, a minimum of 1000 students will benefit from their teachers' experiences in the coming school year alone. As part of the Trenton School Partnership, the second session was specifically for teachers from the Trenton School District.

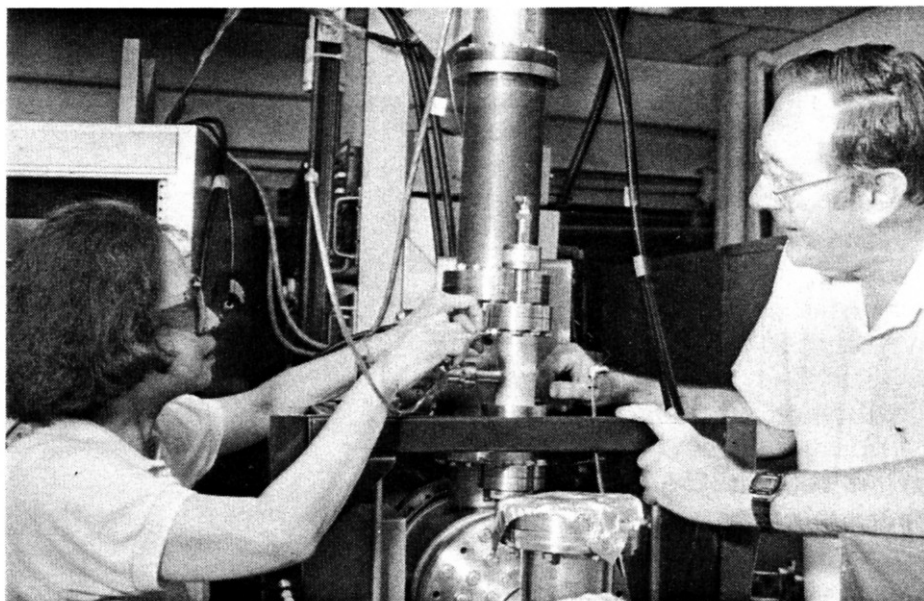
Said Diane Carroll, Head of the PPPL Science Education Program, "It's important to get students excited about science while they're young. Our goal is to provide teachers with the tools they need to inspire students' interest and confidence in their ability to do science projects relevant to their lives."

"The STI participants teach grades 4, 5, and 6. The focus is on creative approaches to making physics more real for these young students. by using a hands-on approach," according to Institute Director Yvette Van Hise. For example, teachers were challenged during a "Physics Olympics," to create an efficient paper airplane using sound aerodynamic principles. Courses are taught by experienced science education teachers trained through the American Institute of Physics.

High School Students

"When we first began the Summer Science Awards Program, PPPL staff were reluctant to work with high school juniors and seniors, because they had the idea they might break something. But after seven years of the program, the students are in great demand," observes Carroll.

And no wonder. The 15 students participating this summer were chosen from about 150 applicants, so they were well-prepared and very talented. At PPPL they have been exposed to a wide variety of scientific endeavors, ranging from data



TRAC teacher Chuen-Chin Hsu Chen adjusts bolts on the high-vacuum system while mentor John Timberlake looks on.

Photo: Denise Applewhite



During the Physics Olympics, Summer Teachers' Institute participant Gayle Mills-Holmes throws her paper airplane to test its adherence to aerodynamic principles while two other Trenton elementary school teachers, Beverly Hill and Mary Andrews, watch. Interested PPPL staff launched a few paper airplanes of their own out the third floor windows of LOB, but unfortunately, they won no prizes because their entries were unofficial.

Photo: Denise Applewhite

analysis to materials testing, applied physics and engineering.

For example, Mark Herschberg of WW-P High has been examining meteorological data for accuracy. Ken Monahan of Hightstown High and Rajini Ramakrishnan, also from

WW-P High, have, among other activities, been plotting graphs that show the path of lasers when they are shot into the plasma in TFTR. "What we're doing here shows real application to what we studied in high school," Ramakrishnan noted.

Training Advisory Committee Develops New Strategies

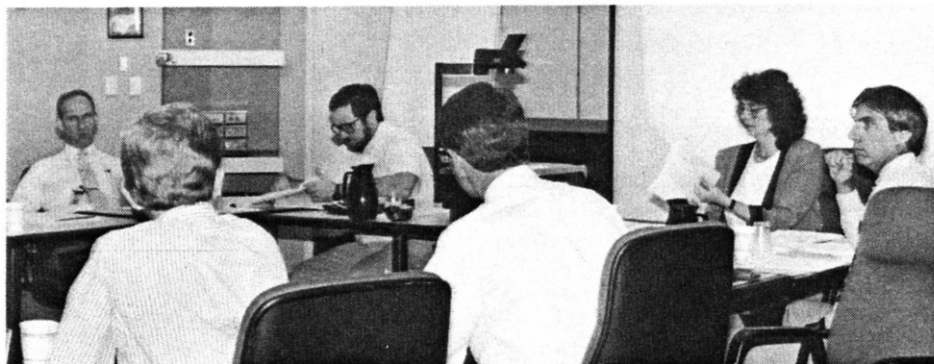
During their initial eight-hour meeting on June 19, the revised Training Advisory Committee developed a charter which defines their scope and purpose.

Said Sue Murphy, Manager, Certification and Training, "Our job is to centralize and focus training, so that it can most effectively meet the needs of Laboratory employees. This new committee replaces a previous training subcommittee and enlarges its scope."

Representatives of PPPL groups most concerned with training rolled up their sleeves to hammer out this important baseline document. They included: J.W. Anderson, Head of Security and Emergency Preparedness, Dori Barnes, Head of the Computer Division, John DeLooper, Associate Director of Environment, Safety, and Health and Quality Assurance, Rich Gallagher, Plant Maintenance and Operations, Chris Gillars, Division Head, Materiel Control, Steve Iverson, Head, Department of Personnel and Administration, Mike Williams, Head of the Engineering Department, Ned Sauthoff and Steve Jardin, Head and Deputy Head, respectively, of the Physics Department. Aaron Lemonick, acting as a consultant, also attended.

The purpose of the charter reads, in part:

The Training Advisory Committee has been established to review and assess the Laboratory-wide training program in light of the standards set forth in Laboratory Policy. In addition, its function is to recommend to the Director on: the extent, scope and appropriate budget for the training



John DeLooper (left, facing camera), Mike Leonard, Sue Murphy, and Ned Sauthoff confer with J.W. Anderson and Chris Gillars (backs to camera) and others during the initial meeting of the Training Advisory Committee June 19.

Photo: Dori Barnes

program; the priorities among various training initiatives; and the process and procedure for qualifying and, where appropriate, certifying PPPL employees and subcontractor employees.

The charter also specifies that the Training Advisory Committee, (TAC) will meet monthly and will consist of representatives of the following departments: BPX; Engineering; ES&H/QA, Physics, TFTR, the Office of Resource Management, and the Office of Personnel and Administration. Two resource members from the Lab at large will be included, and the Head of the Office of Certification and Training will chair the meetings. Representatives may be department heads or others nominated by them.

Mike Leonard spoke at the meeting about the parameters of a DOE order concerning training that must be implemented in preparation for the introduction of tritium.

During a second meeting on July 25, the Training Advisory Committee reviewed the charter, which is now in the approval stages. In addition, an outline was developed

for a General Employee Training Program. The Program, to be introduced in October, will replace Basic Safety Training and will begin to implement the DOE order discussed by Leonard. If you have ideas or concerns regarding any aspect of training at the Lab, Sue Murphy is available to assist you.

HOTLINE

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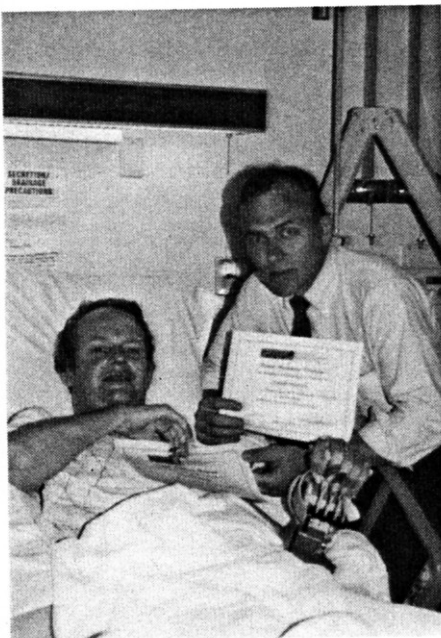
Invention Puts Lab at Forefront of Safety in Tritium Monitoring

The Differential Atmospheric Tritium Sampler is an environmental monitor for detecting tritium in the air. The device, which was awarded a patent in 1990, was invented by Otto Griesbach and Joe Stencel, both of the Environment, Safety, and Health (ES&H) Division.

Says Stencel, "We first tested the Sampler out during the Canadian tritium release experiment in 1987, and we now use it for environmental measurements here at the Lab. With the use of the monitor, I believe we now have more data concerning tritium in the environment than any other facility in New Jersey, including the Department of Environmental Protection."

"Otto was the real brains behind this invention," adds Stencel. "He has been ill, and we miss having him here at the Lab. He helped put PPPL at the forefront of environmental tritium monitoring." Stencel recently gave Griesbach his Certificate of Recognition for the patent while visiting him at a Philadelphia hospital. Griesbach is undergoing rehabilitation therapy for an illness.

The Differential Atmospheric Tritium Sampler was recently described in the Department of



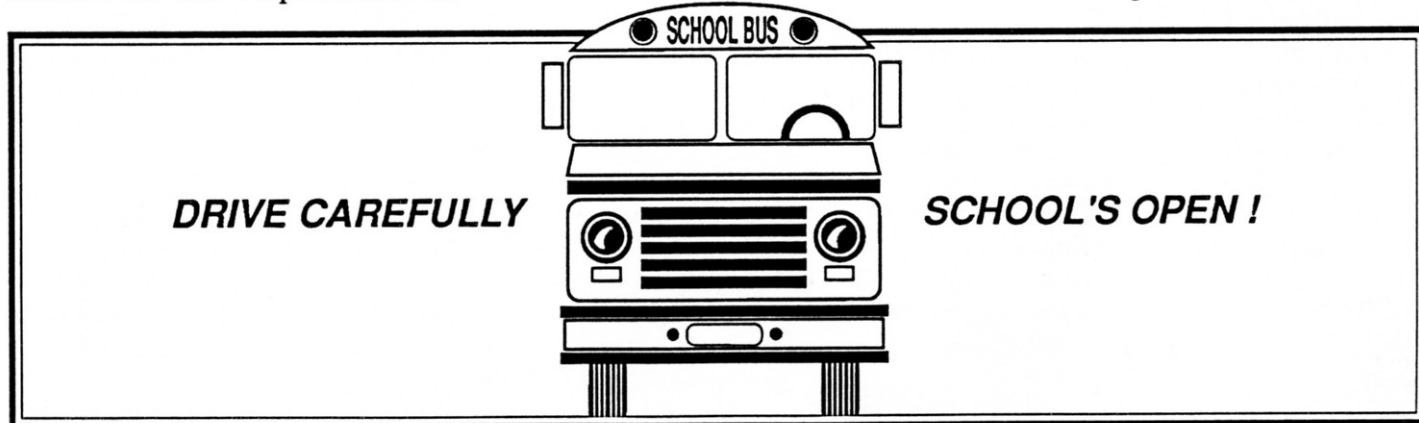
Otto Griesbach (left), and Joe Stencel are pleased to have had a patent issued on their invention. After the Patents Dinner in May, Stencel brought Griesbach his Certificate of Recognition to the Pennsylvania hospital where he has been undergoing rehabilitation therapy.

Energy's Technology '90, an R&D Technology Transfer Program, along with several other PPPL technology transfer ideas. During operation of the Sampler, air is passed through a series of three traps

called molecular sieves to remove moisture and any tritiated water—water with tritium in it. A palladium catalyst combusts any hydrogen or tritium gas present and deposits it in the third trap. The word "Differential" in the title indicates that the monitor has the ability to differentiate between the tritiated water and hydrogen or helium gas.

The uniqueness of the Sampler lies in its use of a carrier gas to fuel the catalyst. The carrier gas also provides an efficiency check on the process.

Stencel explains, "We purchase carrier gas that has been analyzed to ensure that it is below an explosive mixture for hydrogen. Also, we specify our source of hydrogen to be a petroleum by-product, which is normally obtained from deep wells and therefore has essentially zero tritium concentration. Last year we received some tanks of gas in which the hydrogen was obtained by electrolysis of surface water in upstate New York. Tritium is a form of hydrogen, and surface water contains low levels of tritium; because of the monitor's sensitivity, we saw the tritium in the carrier gas before it was used."



PPPL Employees Honored at Two Service Award Events

The length of the list of those honored at two service awards ceremonies this summer attests to the large number of employees who chose to work at PPPL for many years. A total of 197 staff members were honored with service awards, and 26 retirees were honored. All awards were for calendar year 1990.

All-University Celebration

Lab employees and retirees participated in a Princeton University ceremony on June 19 at Forbes College. During the festivities, those retiring with ten or more years of service received a silver gift. In addition, those with 25 years of service who continue to work at Princeton received a traditional rocking chair. PPPL retirees have been listed in earlier editions of the HOTLINE. PPPL employees who have worked at the Lab for 25 years include: John Gennuso, Daniel Huttar, Donald Knutson, Richard Neindorff, Robert Persons, Eleanor Schmitt, and Willie Wicker.

Some of the PPPL honorees who attended the Princeton University June 19th Retirement/Service Awards Ceremony at Forbes College gathered afterwards for a picture. They are listed with years of service and, if retired, with an R. First row, left to right are: Marie Steer-11,R; Anne Romano-13,R; Charles Beach, Jr.-27,R; Samuel Hand, Jr.-34,R; Richard Shamon-33,R; David Mullaney-35,R; John Gennuso-25; Charlotte Harrison-26,R; second row includes: Walter Olkowski-10,R; Robert Persons-25; Daniel Huttar-25; Monte Frazier-27,R; Henry Fallon-27,R; John Boychuck-29,R; Richard Neindorff-25; Joseph Mayercak-31,R; and Eleanor Schmitt-25.

Photo: Robert P. Matthews



PPPL Celebration

Honored on July 11 were 197 PPPL staff members with five to thirty-five years of service. Deputy Director Dale Meade presented the awards during the ceremony held in the M.B. Gottlieb Auditorium. Those honored chose their awards from a variety of possible selections. Honorees are listed below.

Years of Service

Five Years

Bert Allen
Donald Bumgardner
Alexander DeSantis
Rae Federico
Jerry Gilbert
Yvonne Harris
Sue Hill
John Johnson
Cheryl Miller
Sophie Monaghan
Cecelia O'Brien
Constance Riviera
Catherine Saville
Steven Scott
Wayne Snyder
Gary Stines
Brentley Stratton
William Tighe
Richard Weisel

Ten Years

Vytautas Abraitis
Harold Anderson
John Anderson
Dieu Au
Alan Bara
Jeffrey Barnard
Joseph Bartolick
Michael Bell
William Blanchard
Carl Bunting
Edward Bush
Theodore Cashel
Lloyd Ciebiera
Lawrence Corl
Danny Crook
Mark Cropper
Robert Cutler
David Cylinder

Thomas Czeizinger
William Davis
Thomas Deverell
Frances Dimmick
Sidney Dorum
Lawrence Dudek
George Fleming
Wesley Foraker
Rosemarie Fuchs
Jerry Gething
Christian Gillars
Kristopher Gilton
Thaddeus Golian
Theresa Greenberg
Robert Gulay
Donald Harnsberger
Stephen Hayes
Marilyn Hondorp
Aleksandar Ilic

Alan Janos
Frances Jenner
Stephan Jurczynski
George Kalescky
Stanley Kaye
Eugene Kearns
Mark Kijek
Gregory Klank
Harry Krotz
William Langer
Scott Larson
Philip Larue
Dolores Lawson
Walford Little
G. Douglas Loesser
Jason Lynn
Milton Machalek
Elizabeth Manuel
Michael McCarthy

William McCreedy
Kevin McGuire
David Miller
John Mount
Robert Mucha
Harold Nastelin
David O'Neill
Joanne Ofgant
Walter Olkowski
Robert Persing
Michael Quigley
Dorothy Quinn
Eileen Rabiger
Louis Raics
Martha Redi
William Richardson
Edward Rogers, Jr.
Phyllis Roney

■ ■ ■

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PPPL Employees Honored

Continued from page 6

Ten years

Guy Rossi
Craig Salmon
Barbara Sarfaty
Nadirah Shakir
Patricia Shangle
Carol Silvester
Jerry Siminoff
Edward Simmons
Charles Skinner
Marie Steer
Allan Stevens
Gale Stevens
James Stevens
Cheryl Such
Charles Sule
Rodney Templon
Clarence Thompson
Robert Tucker
Stephen Tureikas
Andrew Vanisko
Richard VanKirk
Michael Viola
Alfred Von Halle
George Walton
Frederick Wasylenko
Russell Wester
Justine Whitley
Jack Wills
James Wilson
Irving Zatz

■ ■ ■

Fifteen Years

Gregory Bates
Jeffrey Bennett
Joseph Carson
Chio Cheng
James Chrzanowski
Sally Connell
Anthony DeMeo
James Dickinson
Michael Dudas
Hartmut Gentzik
Roger Gould
Leon Green
James Greenhough
Douglas Gunn
David Johnson
Edmund Kaminsky
Gary Kater
Michael Knorr
John Lawson
Stephen Lengyel
Janardhan Manickam
Lewis Meixler
Donald Monticello
Robert Mosley
Frank Polom
Robert Popp
Ramon Pressburger

Kenneth Quadland
Stephen Ragolia
Gregory Rewoldt
Ned Sauthoff
Thomas Sereni
Rosemarie Shangle-Johnson
Florence Short
Robert Sorenson
James Strachan
Szymon Suckewer
Hironori Takahashi
Kenneth Tindall
Charlene Totaro
Harry Towner
Michael Ulrickson
Silvester Vinson, Jr.
Robert Walls
Robert Walsh
John Wheeler

■ ■ ■

Twenty Years

Daniel Bonfrancesco
John Clark
Edmond McBride
Hector Morales
Hideo Okuda
Denis Shaltis

■ ■ ■

Twenty-Five Years

John Gennuso
Daniel Huttar
Donald Knutson
Richard Neindorff
Robert Persons
Eleanor Schmitt
Willie Wicker

■ ■ ■

Thirty Years

Herbert Fishman
Joseph Frangipani
Leslie Gereg
Edward Hall
Jack Joyce
Thomas Lupich
John Semler
Robert Shoemaker
Harry Smith

■ ■ ■

Thirty-Five Years

George Martin
Carl Oberman
Richard Palladino
Louise Schauffer
Daniel Zydorski

■ ■ ■

TRANSITIONS

Promotions

Kay Collins has been promoted from Secretary 8 to Administrator I in the Deputy Director's Office.

Tom Furman has been promoted from Emergency Driver to Fire Captain in the Emergency Services Unit.

Geoffrey Gettelfinger has been promoted from Staff Engineer to Section Head in PBX-M Engineering.

Alex Juhasz has been promoted from Technician V to Technician VI in Quality Assurance.

Barbara Nini has been promoted from Executive Secretary to Administrative Secretary in the office of the TFTR Project Head.

Tom Sines has been promoted from Technician IV to Technician V in Tokamak Operations.

New Hires

Welcome to the many new members of PPPL staff hired in the following areas:

Plant Maintenance and Operations (PM&O)

William Allard, Plumber

Francesco Amodeo, HVAC Technician

Diane Griffin, Janitor

John Jackson, Electrician

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TRANSITIONS

Continued from page 7

New Hires

Jorge Micolta, HVAC Technician
Candis Seals, Staff Assistant
Kenneth Shaffer, Electrician

Materiel Control

Patricia Potts, Storage and Distribution Clerk

James Scott, Hazmat Coordinator
Timothy Vavricka, Shipping Clerk

Security

Mark Buscavage, Security
Daniel Tomalin, Security

Safety Office

Joan deVastey, Industrial Hygienist
James Grouss, Health Physics Technician

Ed Panik, REML Technician

Quality Assurance, Quality Control (QA/QC)

George Peak, Quality Control Inspector

Pat Vallese, Technician

Procurement

Linda Damon, Buyer
Linda Stone, Buyer

Computer Division

Frank Bauer, Computer Operator
Michael Campbell, Computer Operator

William Yuen, Computer Operator

Technical Shop Mechanical Group

Doug Blanchard, Technician

Robert Cook, Technician

Other Categories

Denise Applewhite, Technician in Photo Lab

John Collins, Vacuum Engineer in TFTR

Richard Kaeser, Attorney
Amelia Marrero, Accounting Clerk in Accounting

Retirements

Anthony Dutton, a Technician in the Heating Systems Division of Systems Engineering, retired on June 21, after 12 years at PPPL.

Charles Emerson, Technical Associate in Research, retired after 15 years at the Lab on August 16.

Joe Hengeli, Technical Associate in Engineering, was with PPPL for 34 years before his retirement on July 31.

Ken Hobson, Technical Associate in Engineering, retired June 30, after 33 years at the Lab.

Richard Rossi, Associate Director of Administration, served at PPPL for 24 years before retiring as of June 30.

Louise Schaufler, Administrator V in Engineering, was with the Lab for 36 years before her retirement June 30.

Marie Steer, Staff Assistant Materiel Control, retired May 24, after 10 1/2 years at the Lab.

William Steer, a Technical Assistant in Engineering, retired July 4, after 14 years at the Lab.

Pat Terraciano, a Technician in Engineering was at PPPL 15 years before retiring May 31.

Obituaries

George Beauregard died June 19. He retired from the Laboratory on December 30, 1983 after 24 years of service.

Charles A. Johnson died on June 19. He had been employed at PPPL as a TFTR Technician since 1959.

Marge Potter died on July 27. She had been employed in Facilities Engineering since 1986.

Jerome West died on August 18. He had been employed in Facilities Engineering since 1972.

Florence Short died June 15. She had been employed at PPPL for the past 15 years. Memorial contributions may be made to the American Cancer Society, 3076 Princeton Pike, Lawrenceville, NJ, 08648, or to St. Jude's Cancer Research, 505 N. Parkway, Memphis, TN 33103.

Birth

Best wishes to **Andy Vanisko** of Quality Assurance and his wife Valerie on the birth of their son Andrew on June 13.

CLASSIFIEDS

For Sale

Entertainment '92 Discount Books. Two-for-one offers on restaurants, sports, movies and more. New Improved Central New Jersey Edition will be available in September. Still only \$35. Call Greg at ext. 3370.

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