BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Saving Energy, Reducing Pollution — Goals of Two New CRADAs

Designing a more efficient oil burner and developing a dual-purpose condensing economizer to reduce pollution from power plants are the goals of two new Cooperative Research and Development Agreements (CRADAs) recently signed by BNL.

The Lab has had extensive experience in developing these technologies as part of the Department of Applied Science's (DAS) Combustion Equipment Technology Program (CETP).

• New York State Energy Research and Development Authority, (NYSERDA) Albany, New York — *Developing and demonstrating a new high-efficiency oil burner with low air-pollution emissions*

About 12 million homes in the U.S., are heated by oil and approximately 350,000 oil burners are replaced every year in the nation. This market, as well as the similar-sized European market, could be tapped by commercializing a new oil burner developed at Brookhaven.

This new invention, called the fan-atomized burner, uses low-pressure air to transform fuel into a fine spray that burns more efficiently. The unit requires only a fan to supply air for combustion, instead of a more expensive compressor used in commercial burners. While the payback time for installing the new burner has not yet been determined, it is expected to be cost-competitive.

Roger Stoutenburgh

During a recent U.S. Department of Energy (DOE)/BNL Combustion Equipment Technology Program Review, (from left) Bola Kamath, President of Heatwise, Inc.; Thomas Butcher, BNL's Department of Applied Science; and Leonard Fisher, BNL consultant, demonstrated the operation of the BNL-developed Fan Atomized Burner to John Ryan and Esher Kueller, Director and Program Manager, respectively, of DOE's Building Equipment Division, Office of Building Technologies.

Funded by DOE's Office of Building Technologies, a prototype of the new burner was developed by the CETP in 1994. It was tested in the home of Thomas Butcher, DAS, who is a co-principal investigator in the CRADA, along with DAS's Roger McDonald.

Said Butcher, "We tested the new burner in my home for one month last winter. In this initial study, we found it was almost 90 percent efficient, compared to about 83 to 85 percent efficiency for conventional burners."

In addition to high efficiency, other benefits of the new oil burner include lower emissions of the pollutants nitrogen dioxide and nitric oxide, reduced maintenance, longer burner life, and the ability to function reliably with low electric power, low-quality fuel, and low firing rates. Since the new burner is comparatively small compared to conventional burners, the whole boiler system can fit into a small closet or be hung on a wall to heat a small extension.

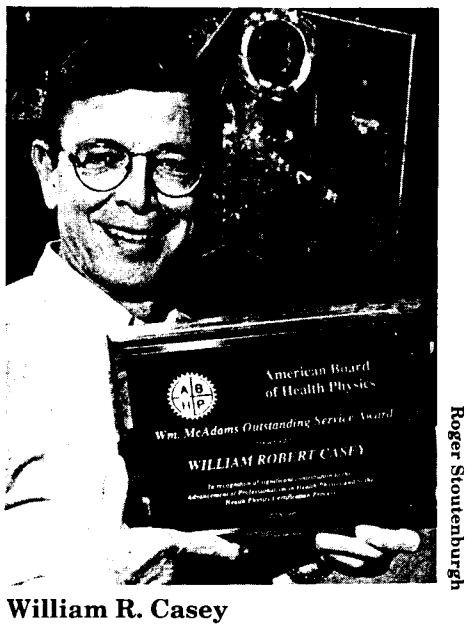
NYSERDA has an exclusive license to the new oil burner in New York State, and the state agency has sublicensed it to Heatwise, Inc., in Ridge, Long Island, which plans to commercialize it.

• Consolidated Edison Company of New York, Inc., New York, New York, and Babcock and Wilcox Company, Barberton, Ohio — *Developing a condensing economizer for improving efficiency and reducing pollution from industrial power plants*

In power generation and process plants, flue gas is released into the air through a chimney. But if these plants are equipped with a dual-purpose heat exchanger called a condensing econo-

(continued on page 2)

Health Physics Board Honors BNL's Casey



Roger Stoutenburgh

William R. Casey

This year's William McAdams Outstanding Service Award, presented by the American Board of Health Physics (ABHP), was won by William R. Casey, who heads BNL's Safety & Environmental Protection (SEP) Division.

At the 40th annual meeting of the Health Physics Society held July 23-27, in Boston, Casey was recognized for "his continuing and dedicated efforts in advancing the profession of health physics through certification." Further, "in contributions to the certification process," Casey provided "dedicated and visionary leadership in another formative period which led to the establishment of the American Academy of Health Physics [AAHP]."

In the health-physics profession, certification is the process undertaken to demonstrate in-depth knowledge in

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Energy Secretary: Accelerator Is One Option For Nation's Future Tritium Production Facility

The heaviest isotope of the element hydrogen and the only one that is radioactive, tritium occurs naturally in very small amounts. When involved in a fusion reaction, tritium releases significant energy, hence it is an important component of nuclear weapons.

While the U.S. strategic need for tritium has decreased due the dismantling of nuclear weapons under START treaties and is now being met by using stockpiled supply or reusing what is recovered from dismantled nuclear weapons, the U.S. Department of Energy (DOE) recognizes that there will be a tritium shortfall after the turn of the century.

Therefore, to maintain the remaining nuclear weapons, DOE must bring a new tritium-production facility on line between 2005 and 2011. As announced by Energy Secretary Hazel O'Leary on Tuesday, October 10, a "dual technology option" for this facility will be explored over the next three years, which means that, by 1998, DOE will choose between building, buying or leasing an appropriate nuclear reactor; or undertaking what is called the Accelerator Production of Tritium (APT).

The concept of using an accelerator to make tritium dates back many years, and BNL's James Powell, Department of Advanced Technology (DAT), and Pierre Grande and Herbert Kouts, both now retired, were among its earliest advocates. In the late 1980s, a BNL and Los Alamos National Laboratory (LANL) team had advocated building a proton accelerator for the production of tritium, but the power requirements for this machine made it prohibitively expensive.

Three years later, when tritium requirements fell by more than half, which made accelerator production affordable, BNL, LANL and Sandia National Laboratory (SNL) performed a preconceptual design study of APT

Roger Stoutenburgh

Pictured when they last met, which was at BNL on August 1, are the members of the senior program-advisory group that is guiding the U.S. Department of Energy's research and development of the Accelerator Production of Tritium. The group includes: (from left) Michael Kreisler, Lawrence Livermore National Laboratory; William Bishop, DOE; Harold Saxton, Sandia National Laboratory; Gregory Van Tuyle, BNL; John Browne, Los Alamos National Laboratory (LANL); James Anderson, LANL; and Robert Bari, BNL.

for DOE. Now, to demonstrate the technical feasibility of such an accelerator and build a prototype by 1999, LANL has teamed again with Brookhaven and SNL, and they are now joined by Lawrence Livermore National Laboratory.

Some $45.5 million has been allocated for APT in fiscal year 1996, and DAT's Applied Technologies Division (ATD) is receiving funds from this sum to begin the design of the APT accelerator and the target.

"Because it is based on well established, existing technology and because of its inherent environment, safety and health advantages over a reactor, we think that APT is a viable option for meeting U.S. needs for tritium production," says Nuclear Engineer Gregory Van Tuyle, who is Deputy ATD Head.

In designing this linear accelerator (linac) and transferring technology to industry so it can eventually build the APT plant, ATD will draw upon expertise and experience at BNL gained from operating the Lab's linac for the Alternating Gradient Synchrotron and carrying out the Lab's Relativistic Heavy Ion Collider Project.

If built, an APT facility will be expected to operate for 40 years. But, over its lifetime, this powerful accelerator could be used for other applica-

(continued on page 2)

Accelerator Option (cont'd.)

tions as well or even exclusively, if the strategic demand for tritium were reduced further.

For instance, it could produce new and rare medical isotopes, be used as a plentiful source of neutrons for materials science and other research, transmute highly radioactive, long-lived waste into less hazardous material, or become the proving ground of a proposed muon collider.

Working with Van Tuyle on this project are the following ATD members: Carl Czajkowski, George Greene, Hans Ludewig, Lewis Snead, Michael Todosow and Robert Youngblood.

Source of Abundant Neutrons

With its 12½ year half-life, tritium decays at a rate of 5.5 percent per year, so it must be continuously replenished in the nation's strategic nuclear weapons.

While a number of nuclear reactions give rise to tritium, they all require an abundant source of neutrons. Traditionally, tritium for weapons has been made in reactors, using neutrons arising from nuclear fission. However, such tritium was last produced in 1988 at DOE's K Reactor at the Savannah River Site in Aiken, South Carolina, which was mothballed due to environmental, safety and health concerns.

Given that less tritium is required for weapons nowadays, using an accelerator to produce tritium has become an economically viable option, as well as one that has several environment, safety and health advantages over using nuclear reactors.

Unlike reactor production of tritium, APT produces the necessary neutrons with no fissile materials or chain reactions; as a result there is no high-level radioactive waste produced and no chance of a criticality accident.

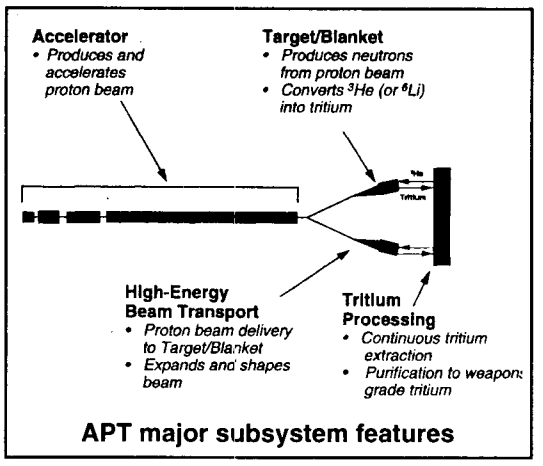
Because of the inherent safety advantages of APT, if selected as the preferred method, an APT facility can be more easily sited. As also announced by the Energy Secretary, if built, APT will be situated at Savannah River, although several other sites had competed to host the facility.

Process Called Spallation

At the proposed APT facility, protons will be produced and accelerated in a 1.6-kilometer (1-mile) conventional linac to an energy of 1.2 billion electron volts, with a current of 100 milliamperes and beam power of 120 megawatts.

Because of the beam's power, the APT linac will draw a lot of electricity, which is a disadvantage. In fact, the expected annual operating cost of the plant ranges between $120 and $200 million, depending upon the cost for electricity.

"If we use superconducting niobium cavities instead of conventional copper technology, then we expect to save 25 to 30 percent in annual operating costs," explains Van Tuyle. "So this is one of the many technical improvements under study."



APT major subsystem features

At the end of the linac, the beam will be expanded to distribute the protons evenly across the face of the target, which will be made of heavy metals such as tungsten and lead.

APT target design will be based on that of spallation targets used at the Los Alamos Meson Physics Facility and other accelerators. The aim is to increase the efficiency of the targets, to get the most neutrons out of a unit of target material. To verify their production efficiency, prototypes will be tested.

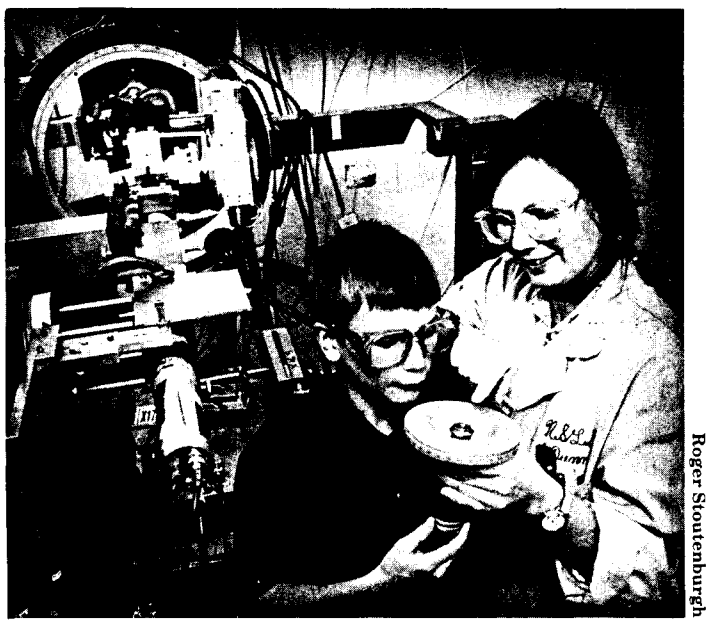
Upon impact, each proton in the beam will cause roughly 25 neutrons to be ejected from the nuclei of the target atoms; in addition, protons and other particles, all having lower energy, will cascade out of the nuclei, as the original atom has its mass and atomic number changed in this process, which is called spallation.

The resulting neutrons will first be moderated, or slowed, by being sent through heavy water. To make tritium, these moderated neutrons will then be reacted with helium-3 gas or solid lithium-6, which will reside in the blanket region of the target. Before use, the tritium will be extracted and purified. — Marsha Belford

Sons Join BNLers in the Workplace for a Day

This past Monday, October 9, was the boys' turn to get the answer to the question "What do my parents do at work all day?", as almost 200 boys ages 9 to 15 participated in BNL's first Take Our Sons to Work Day. Girls were guests at the Lab last April, when BNL first took part in Take Our Daughters to Work Day, organized by the Ms. Foundation.

On their special day at BNL, the boys spent the morning in the workplace with their parents or host parents, who later joined the boys for a box lunch at the Brookhaven Center, compliments of Associated Universities, Inc. The afternoon was devoted to tours of various areas of the Lab site, which included the Biology Department, the Central Shops Division, the Chemistry Department, the Firehouse, the Relativistic Heavy Ion Collider and, for the youngest boys, the BNL Science Museum.


Roger Stoutenburgh

At beam line X16B at the National Synchrotron Light Source, technical intern Patricia O'Grady shows her 12-year-old son Joseph a transition stage from a crystal diffractometer, a device that allows researchers to measure the angles of x-rays as they scatter off a crystal sample. The stage O'Grady is holding must be adjusted manually, requiring researchers to interrupt their experiment frequently to enter the hutch surrounding the beam line. Recently, however, O'Grady completed a motorized transition stage that can be adjusted from outside the hutch. Joseph O'Grady, a seventh grader at South Ocean Avenue Middle School in Patchogue, found his mom's work interesting and enjoyed his whole day at the Lab. "He's in an accelerated science class, so this was good for him," Patricia O'Grady said. "He asked me if he could come back again."

Roger Stoutenburgh

In his Physics Department lab, Physicist Wlodek Guryn and his son David, 11, test the ground connections on a prototype of a time expansion chamber, part of the tracking system for the PHENIX detector being built for the Relativistic Heavy Ion Collider. In addition to spending time in his father's work area, David joined other sons of Physics' staff to witness physics demonstrations set up for the boys in several labs in the department. David, a sixth grader at Arrowhead School in the Three Village School District, particularly noted a demonstration in Senior Physicist Myron Strongin's superconductivity lab in a follow-up report that he wrote for his father about his day at BNL, which he enjoyed very much.

Susan Foster, Human Resources Division, who chaired the Lab committee that organized the day's events, said, "The boys enjoyed spending the morning with their moms and dads as much as their parents enjoyed having them. The day has given the boys a new appreciation of what goes on at Brookhaven and how their parents contribute."

Some of the boys had follow-up comments. "One young man said it was really cool to get dressed and have an extra early breakfast with his Dad and go off to work with him — rather than wave good-bye," Foster related.

She also received a thank-you card from two brothers who wrote, "We now know how it feels to be a working man. When Dad comes home from work, our family will let him unwind."

Two New CRADAs (cont'd.)

mizer, the heat energy and pollution trapped in flue gas could be captured for recycling and disposal, respectively.

Funded by DOE's Office of Energy Research Laboratory Technology Applications Program, Brookhaven is working with Consolidated Edison (ConEd) and the Babcock and Wilcox Company to design a condensing economizer that will be at least 10 percent more efficient than the current technology.

The economizer will also be expected to capture over 90 percent of sulfur dioxide, and up to 90 percent of particulates from oil-fired plants, before these pollutants escape to the atmosphere.

This dual-purpose technology, called integrated flue-gas treatment, may allow ConEd to use less costly fuel to run its power plants. Thus, the company's competitiveness would be improved in the electrical power industry, while reducing sulfur emissions below current levels.

Said Butcher, who is a co-principal investigator in this CRADA, along with Wai Lin Litzke, also of DAS, "As a sulfur-dioxide removal device, this new condensing economizer would provide significant advantages over the conventional technology because it simultaneously recovers energy and reduces pollution. Both efficiency and economics would be improved."

An initial version of the dual-purpose condensing economizer was designed and manufactured by Babcock and Wilcox and the Condensing Heat Exchanger Corporation of Albany, New York. ConEd tested this version and several others, and found efficiencies of up to 99 percent in removing sulfur from flue gas.

"With our CRADA partners, we plan to enhance dramatically the ability of a condensing economizer to capture particulates from oil-fired plants," Butcher said.

"We are studying and testing mechanisms of particle capture, and trying to enhance particle impaction by adding polypropylene fibers to the inside of the appliance." he continued, "The unit is a copper and nickel tube that is fitted with a Teflon® sleeve. When steam is injected into the economizer, particulates get larger and are caught on the fibers."

Babcock and Wilcox is interested in expanding the market of these condensing economizers to gas, oil, coal, wood and waste-fired plants. The company has formed a partnership with the Condensing Heat Exchanger Corporation to manufacture the new technology. — Diane Greenberg

PSI Meeting

The Upton Chapter of Professional Secretaries International (PSI) will next meet at 6 p.m. on Thursday, October 19, in Room C, Berkner Hall, to view the 22-minute videotape "Working Together: Managing Cultural Diversity." A discussion will follow. For more information, contact Susan Carlsen, Ext. 7647, or Flo O'Brien, Ext. 4962.

Honor for Casey (cont'd.)

the field. As was announced at the meeting, Casey, who became a certified health physicist in 1974, became active in the certification process shortly afterwards, joining the Comprehensive Panel of Examiners in 1976 and becoming its Chair in 1981. After completing his tenure with the panel, he became a member of the ABHP in 1982, and was its Chair during a significant time in its history, when the AAHP was being formed.

Continuing to be active in the certification process, Casey also became President-elect of the AAHP in 1993 and served as President in 1994, being "very instrumental in the successful final merging of the ABHP and AAHP." Today, he is AAHP's Past President.

Casey's other accomplishments in health physics cited at the presentation included his service on several National Council on Radiation Protection and Measurements committees, American National Standards Institute working groups, and U.S. Department of Energy (DOE), Environmental Protection Agency and Nuclear Regulatory Commission advisory panels.

Casey was one of the authors of the *Health Physics Manual of Good Practices for Accelerator Facilities* and was a member of the DOE Advisory Panel on Accelerator Radiation Safety. For several years, he has also lectured at the Harvard School of Public Health, on planning for nuclear emergencies.

At BNL since 1973, Casey became SEP Head in 1988. — Liz Seubert

Holiday Parties: Time To Reserve

Recreation Building

Lab organizations and BERA activity groups interested in reserving the Recreation Building in the apartment area for holiday parties may send a representative to a meeting on Wednesday, November 1, at 11 a.m., in the conference room of the Human Resources Division, Bldg. 185A. As in past years, reservations will be made in the order determined by a lottery held for those at the meeting. As long as dates are available, subsequent reservations may be made through Wednesday, November 29, by contacting the Recreation Office, Ext. 2873.

Brookhaven Center

Reservations for parties at the Brookhaven Center may be arranged by calling Christine Ronick, Staff Services Division, Ext. 3545.

Lifeguard Openings

Positions for lifeguards at the BNL swimming pool may open soon. Qualified applicants who have Red Cross lifeguard certification and are interested in applying may complete an application or send their résumé to the Recreation Supervisor, M. Kay Dellimore, Human Resources Division, Bldg. 185.

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The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste. It can be recycled.

Coming Up

A special BERA concert, featuring students from the State University of New York at Stony Brook, will be held on Tuesday, October 24, at 8 p.m. in Berkner Hall. The suggested donation is $6.

Here & There

A brief look at recent events on site and off . . .

Meyer Steinberg, a senior chemical engineer in the Department of Advanced Technology, was an invited speaker at the Sabin Conference on Energy and the Environment, on September 19. Held at the Weizmann Institute of Science in Israel, this conference honors Albert Sabin, who discovered the live-virus vaccine for immunization against polio and was the institute's president, 1970-72. At this forum, Steinberg gave a presentation on "The Role of Hydrogen in the Future Fuel Economy," a long-time focus of his research.

Wanted: BNL Art for Fall Show

BNL artists and sculptors, your finest fine art is needed for the BERA Art Society's upcoming Fall Festival of Art, to be held at Berkner Hall from Monday to Wednesday, November 20-22, daily from 11:30 a.m. to 1:30 p.m., with an evening reception from 5 to 7:30 p.m. on Monday, November 20. Prizes will be awarded for the most popular of all entries and for the most popular of a new category: Art specifically inspired by BNL science or the BNL site.

BNL employees, their family members 15 years and older, retirees and guests of BNL may all contribute. More than one piece may be entered by an exhibitor, to be shown as space permits. All pictures must be ready to hang.

Bring exhibits for the show to Berkner Hall, Room B, the afternoon of Friday, November 17. For the catalog, please complete two forms for each work that you will enter and return them by Friday, November 10, to Robert Chrien, Bldg. 510A. More forms are at the BERA Store, Berkner Hall. Copies are acceptable.

Entry for "Fall Festival of Art" Show, November 20-22, 1995

Name and home phone of artist _____

BNL phone _____ BNL contact _____

Title of work _____

Medium (oil, pastel, tapestry, wood, etc.) _____

Size _____

Please print clearly and return to Robert Chrien, Bldg. 510A, by November 10.

Suggest an ERC Candidate

This January, three members of the Employee Relations Committee (ERC) will complete their three-year terms — giving the Laboratory Director the opportunity to appoint three new members to this eight-person group.

Selection of individuals for the ERC is a sensitive task because of the nature of issues handled by this committee. It is the charge of the ERC to help non-bargaining, non-scientific employees solve work-related problems that they were unable to resolve with their supervisors. Therefore, new additions to the ERC should be people who are able to hear all sides of an issue objectively and maintain the complete confidentiality under which the ERC operates.

If you would like to suggest a candidate for the ERC or request consideration for yourself, contact your department chairman or division head before October 20.

To bring a problem to the ERC's attention, call chairperson Bill McGahern, Ext. 4005, or one of the other current members: Mary Durham, Ext. 7143; Ann Emrick, Ext. 5756; Patricia Fox, Ext. 2939; Marie Hicks, Ext. 3802; Carl Jacobs, Ext. 2244; Michael Kelly, Ext. 3476; and Grace Webster, Ext. 3227.

Service Awards

The following individuals observed their BNL service anniversaries during the month of September 1995:

40 Years

Nicholas Cipolla Jr......Plant Eng.
Lawrence B. Leipuner.....Physics

35 Years

Nicholas C. Combatti.....Biology

30 Years

John Bennett.....Sup. & Mat'l.
Gloria Cusimano.....Mgmt. Info. Sys.
Ralph T. Sanders.....AGS
Herbert Schulman.....Saf. & Env. Prot.
Sharon L. Smith.....Physics
Suzanne C. Van Der Kolk.....DAT

25 Years

Carole L. Kerr.....Director's Off.
Frank E. Paige Jr.....Physics

20 Years

Katherine G. Becker....Adv. Technology
Arokiasamy J. Francis.....App. Science
Brant M. Johnson.....RHIC
Caroline F. Kramer.....Medical
Ming-Shih Lu.....Adv. Technology
Janakiram R. Naidu....Saf. & Env. Prot.
Gordon J. Smith.....Comp. & Comm.
Avril D. Woodhead.....Info. Services

10 Years

Bhupinder Bawa.....Cent. Shops
Marco Donno.....Sup. & Mat'l.
Madeline Hughes.....NSLS
John Z. Larese.....Chemistry
Michael D. Lenz.....Physics
John A. McGowan.....Mgmt. Info. Sys.
Muriel Olenick.....Plant Eng.
James R. Rowehl.....Human Res.
Susan J. Signorelli.....Adv. Technology

Correction

The BNL telephone operators are now on duty from 8:30 a.m. (not 8 a.m. as was indicated last week) to 5 p.m.

Arrivals & Departures

Arrivals

Thomas C. Blum.....Physics
Rayomand H. Gimi.....Chemistry

Departures

This list includes all employees who have terminated from the Lab, including retirees:

Raymond J. Archbold....Saf. & Env. Prot.
Clement Auguste.....NSLS
Michael T. Barriere.....Adv. Technology
Kenneth E. Boehm.....Info. Services
Arland L. Carsten.....Adv. Technology
Sudipta Chatterjee.....App. Science
Nicholas C. Combatti.....Biology
Alyce M. Daly.....Saf. & Env. Prot.
James L. Davis.....Saf. & Env. Prot.
Jack E. Detweiler.....Reactor
Norman M. Fewell.....NSLS
Aharon Friedman.....NSLS
Patrick R. Gilleeny.....Instrum.
Jan M. Guida.....Physics
Darrin M. Jenkins.....Adv. Technology
Hasna J. Khan.....Adv. Technology
Caroline F. Kramer.....Medical
Richard C. Larsen.....Physics
Robert A. Larson.....NSLS
Otto W. Lazareth Jr......Adv. Technology
Paul Le Doux.....NSLS
Harriet Martin.....Info. Services
Walter J. Mason.....Staff Services
Michael J. Niewiarowicz.....Reactor
Dongfeng Pan.....Medical
Laurence Passell.....Physics
James N. Petro.....Reactor
Richard C. Pinnavaia...Saf. & Env. Prot.
Katrina A. Reaves.....Director's Off.
Evelyn F. Ritter.....Chemistry
Rhea Robinson.....Saf. & Env. Prot.
Carl J. Schopfer.....Saf. & Env. Prot.
Robert Shropshire.....Adv. Technology
Sharon Spark.....Info. Services
George O. Stenby Jr......NSLS
Joan P. Taylor.....App. Science
William F. Taylor.....Adv. Technology
Julie A. Teuber.....Reactor
Harry W. Themann.....Physics
Henry C. Thode Jr......Medical
Margaret H. Thompson.....Medical
Arie Van Steenbergen.....NSLS

Let's Dance

The BNL Ballroom, Latin & Swing Dance Club has scheduled the following activities, in the North Ballroom of the Brookhaven Center:

Healthfest Dance Lessons

Tomorrow, Saturday, October 14, as part of Healthfest '95, adult BERA members and their dance partners are invited to take part in two free dance lessons: from 11 a.m. to noon, a ballroom class will be presented by the Dance Club's instructors; and, from noon to 1 p.m., the instructors of the BERA Country/Western (C/W) Dance Club will give a C/W lesson.

Be Social Saturday

Tomorrow evening, Saturday, October 14, all are invited to tango and cha-cha the night away at the next monthly informal social. It will be held from 8 p.m. to midnight, and the suggested contribution is $1 per person, which goes into the club's music fund. For more information, contact John Millener, social chairman, Ext. 3853.

Care to Fox Trot?

On October 18, the Dance Club will begin four Wednesdays of fox trot lessons for beginners, to be held from 6:30 to 7:30 p.m. in the North Ballroom of the Brookhaven Center. Also beginning that day, a four-week paso doble class for beginners will be offered at 5:30 p.m., and six-count swing class for intermediates will be held at 7:30 p.m. The per-person cost is $15 for each series. To register, call Marsha Belford, club president, Ext. 5053.

Bowling

Red and Green League

G. Mack bowled 246, G. Weresnick 245/233/675 scratch, A. Warkentien 246/219/658 scratch, K. Asselta 243/243/644 scratch, E. Larsen 236/206/609 scratch, J. Griffin 235/617 scratch, R. Larsen 234/223/209/666 scratch, R. Prwivo 234/601 scratch, R. Mulderig Jr. 225/224/623 scratch, R. Raynis 225/200/613 scratch, R. Eggert 221, B. Geib 221/602 scratch, K. Riker 220, K. Koebel 216/201/606 scratch, J. LaBounty 210, B. Sick 201, D. Fisher 201.

Purple and White League

M. Meier bowled 247, E. Sperry IV 223, R. Picinich 222/213/180/615 scratch series, M. Guacci 219, S. DiMaiuta 213, M. DiMaiuta 212, P. Manzella 210, R. Raynis 207/195/195, R. Wiseman 207/192/181, D. Riley 200, A. Almasy 197/183, Doug Fisher 196, J. McCarthy 191, K. Riker 190/189, M. Addessi 188, A. Pinelli 186, E. Sperry III 186, D. King 185, D. Fisher 173, T. Meier 171, M. Musso converted the 4/6/7 split, J. McCarthy 4/7/8/10 split, R. Almasy 5/10 split.

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position. Consideration is given to candidates in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action plan, selections are made without regard to age, race, color, religion, national origin, sex, handicap or veteran status.

Each week, the Human Resources Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Human Resources, and second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

Current job openings can also be accessed via the BNL Home Page on the World Wide Web. Outside users should open "http://www.bnl.gov/bnl.html", then select "Scientific Personnel Office" for scientific staff openings or "Employment Opportunities" or "BNL Human Resources Division" for all other vacancies.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

DD 3622. SECRETARIAL POSITION - Requires an AAS in secretarial science or equivalent, excellent communication skills and demonstrated interpersonal skills, a good knowledge of office and Laboratory procedures, and proficiency in WordPerfect 5.1 and/or 6.0 for Windows. Will act as group secretary to Human Factors and Performance Analysis Group. Duties will include preparation of complex scientific/technical reports, travel arrangements, vouchers and viewgraphs. Familiarity with tables and equations is also required, and a good working knowledge of a graphics program such as Harvard Graphics or PageMaker is desirable. Department of Advanced Technology.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

NS 3925. ENGINEERING/PHYSICS ASSOCIATE POSITION - Requires an MS degree or equivalent, excellent communication skills and significant experience with accelerator hardware and control systems. As NSLS Operations Manager, will be heavily involved in daily operations and troubleshooting of NSLS accelerator systems and supervision of control room. Administrative duties include the development, application and enforcement of NSLS Conduct of Operations and Maintenance Management Program and maintenance scheduling. National Synchrotron Light Source Department.

NS 3922. COMPUTER/ANALYST POSITION - Requires a master's degree or equivalent and several years' experience using, programming and administering UNIX systems and maintaining networks. Experience in C, Shell and Perl programming, X-terminals, Informix, security software, firewalls, Ethernet networks and Novell is desirable. Responsibilities will include maintaining a network of HP workstations, X-terminals and PCs, installing software packages, assisting staff with computer issues and assisting in the maintenance of the network. National Synchrotron Light Source Department

Motor Vehicles & Supplies

94 FORD PROBE - loaded, $11,500. 585-2084 after 5.

93 CHEVY SUB 2500 SERIES - black, silver trim, extras, loaded, 454 FI tow pkg., 25.5k mi., excel., $26,990. Ted, Ext. 4289.

93 CHEVY S-10 PICKUP - 5-spd., 2.8 liter V-6, Tahoe pkg., 7k mi., $8,500. Joe, Ext. 2898 or 728-1859.

92 FIREBIRD - T-top, a/t, p/w, p/b, V-8, am/fm cass., alum. wheels, dark red, gar., mint. Rich, Ext. 3351.

92 ISUZU TRUCK - box, 4-cyl., turbo, diesel, 43k mi., $15,500. Bert, Ext. 5156 or 581-4436.

91 BUICK PARK AVENUE - factory moonroof, every avail. option, remote alarm system, well maint., blue, 68k mi., $11,000. Ext. 7631.

91 NISSAN MAXIMA GXE - black, sunroof, p/w, Bose stereo, loaded, 62k mi., $13,500. Don, Ext. 5156 or 366-3878.

89 HONDA CRX - 5-spd., ac, 45 mpg, 2-seater, excel., $4,200. John, Ext. 7671 or 765-1299.

87 AUDI GT - coupe, ac, a/t, am/fm cas., cruise, 90k mi., excel. cond. Ext. 3053 or 286-0612.

87 CORVETTE - coupe, a/t, 45k mi., excel. $14,500. Mike, Ext. 3434.

87 DODGE CHARGER - new timing belt & tires, 91k mi., good cond., $650. Pam, 474-2792.

87 PONTIAC SUNBIRD - new alt., starter, eng. needs work, good for parts, $200. Al, Ext. 2175 or 231-4613 after 5 p.m.

86 DODGE 600 - 2-dr., a/t, full power, runs well, well maint., good cond., $2,450. Bob, 744-3569.

86 TOYOTA COROLLA - 4-dr., 5-spd., ac, cruise, am/fm, gar., 95k mi., excel., $2,850 neg. Bob, 737-1786.

85 GRAND AM - 4-cyl., 5-spd., sunroof, tint, needs exhaust, hit in rear, runs well, passes inspection, $650. Heidi, 281-7873.

85 VW JETTA - sunroof, p/w, alarm, v.g. cond., must sell, moving, $2,500 neg. Mark, 924-0960.

85 TOYOTA COROLLA - 4-dr., a/t, new ac, am/fm, 124k mi., runs well, reg. serv., $1,800 neg. Adam, Ext. 2763 or 929-0785.

85 VOLVO 240 DL - 5-spd., 89k mi., $3,400. Neal, 286-2435.

84 TOYOTA COROLLA - rear back quarter panel damaged, as is, $850. Lora, 696-3436.

83 HONDA PRELUDE - a/t, 2-drs., sunroof, 100k mi.; '82 Honda Civic, 5-spd., 4-dr. h/b, 135k mi., good cond., best offer. Ren, Ext. 2045.

81 MAZDA GLC - reliable but needs new alternator, $450. Trevor, Ext. 4374.

80 CHRYSLER - 4-dr., slant-6, good tires, good cond., $750. 924-8213.

79 HONDA CX 500 MOTORCYCLE - also '80, '81, 2 run, 1 for parts, fairing, radio, hard bags, trunk, etc., $300 for all. Frank D., Ext. 2022 or 399-4480.

77 MGB - good running cond., needs some body work, $1,300. Cindy, 363-6289.

BRAKES - new, rear bonded for Chrysler, $5; air filters, new, Sears & Lee brand for Chrysler cars, $9/4. Susan, Ext. 7647.

PARTS - '86 Camaro 2.8; '84 & '86 S10 Blazer. Rob, Ext. 7668.

TIRES - P235x75R15, 4, Firestone ATX, good cond., $20 ea. Ext. 2434 or 665-4816.

Boats & Marine Supplies

24' SEARAY - sedan bridge, 260 Merc., new Alpha drive, windless, DF, radios, new int., full canvas, hot water, $7,500. Cindy, 363-6289.

24' SEARAY WEEKENDER - 1972, all new int., 302 Ford eng., o.d. reworked in 1994, in water, w/demo, $5,000 firm. Ext. 7908.

16' STAR CRAFT - alum., new navy top, 50-h.p. Evinrude, trailer w/new elec. winch, $1,600. 924-6751.

CLAMMING TONGS - 18' long, $15. Frank, 567-6419.

Furnishings & Appliances

COUCH - L-shaped w/2 recliners, double bed, Wedgewood blue, excel., $450. Claire, 878-4556.

DESK - solid wood, 6 drawers, good cond., $120 neg.; antique TV, family entertainment center, tubes, $275. Carlos, 399-6390.

DESK - mahogany, leather top, French prov., 9 drawers, $150. Bill, 473-3171.

DINETTE - oak, glass, rattan; table w/4 chairs, good cond., $60; lg. trunk, white wicker, $40. Jane, Ext. 4909.

DINING ROOM - table, leaves, pads, chairs, lighted hutch, excel., solid wood. 289-9533 after 5 p.m.

DINING ROOM - large table, 6 chairs, hutch, wood, good cond., $550 or best offer. Julian, 924-0960.

ESPRESSO MACHINE - Braun, excel. cond., $50; lobster pot, $10; elec. wok, $10; microwave, $40; food processor, $150. Joe, Ext. 7762.

LIVING ROOM CHAIR - gold suede, $25; bedroom set, double dresser w/mirror, $25; full-size mattress, boxspring, headboard, new, $100. Frank, 567-6419.

MICROWAVE - Kenmore, large, excel. cond., $50; dinette, 2½" thick oak, round table, pedestal base, 4 chairs, $150. Mott, Ext. 7108.

REFRIGERATOR - GE, 19.8 cu ft., side-by-side, ice through door, white, 4 yrs. old, 1 yr. warr., slight odor, $300. Cindy, 331-4487.

ROCKING CHAIR - dark pine, $75; coal stove, Surdiac, black textured glass front, like new, $275. Ext. 7188.

SLIPCOVER - for couch, green/tan plaid, w/instructional video, good quality & cond., orig. $70, sell for $30. Kara, Ext. 5658 or 941-9359.

STOVE - elec., tabletop, 2-burner, $5; bike helmet, adult, new, $15. Joe, Ext. 2898.

VACUUM - Sears Kenmore, canister, Powermate handle, good cond., $100. Bill, 298-4172.

VACUUM - Fantom, 3 mo. old, no bags needed, HEPA filter, orig. $279, sell for $175. Dan, Ext. 3558.

WATER BED - queen, excel., $200 neg. Ed, Ext. 4080.

Tools, House & Garden

BRICKS - weathered red, approx. 2,000, all full, make offer. Rich, Ext. 2434.

CEMENT MIXER - w/wheel, 8-h.p., $475; coal/wood stove, like new, $550. 924-5192 after 5 p.m.

CHIPPER/SHREDDER - Sears, 8-h.p., hardly used, $375; rototiller, Troy Built Tuffy, brand-new, $400; radial arm saw, Sears, 10", $50. Bob, 878-4556.

FENCING - plastic-coated galvanized wire, 2 new rolls, 3'Hx50', 2 used, $65/all; rototiller, Troy Bilt, 6-h.p., elec. start, $350. Borge, 298-4172.

MONTAUK DAISIES - 3" pot, $1; 4" pot, $2; potted blue or bronze iris, $6; prickly pear cactus, 3" pot, $2. Jim, 325-9293.

PATIO SET - 6 chairs, table, umbrella, all matching, forest green, PVC & print fab., covers, orig. $2,000, best offer. John, Ext. 7313.

PUMPS - 3, B&G, circulating, for hot-water heating system, all work well, $20/ea. Bill, Ext. 4172.

RADIAL ARM SAW - Sears Craftsman, elec., like new, $250 neg. Matt, Ext. 7631 or 981-6234.

SNOW BLOWER - 5-h.p., Briggs & Stratton, 2-cycle, w/chains, self-propelled, $150 firm. Ken, Ext. 5110.

TOPSOIL - 3 yard min., $45/rough; $60/fine screened; delivered. 345-3148.

YARD VACUUM - 6-h.p., Montgomery Ward, needs new bag, $75; Greenbriar 20" rotary mower, $60; Caldor, 20", $50. Dan, 698-7322.

Sports, Hobbies & Pets

BICYCLE - women's, 26", 3-spd., Rollfast, excel., cond., $65. 281-6026.

BIKE - men's, Firenze, odometer, $40. Mat, Ext. 4367 or 878-5610.

CAMERA - Canon T60, w/case, 50mm lens, flash, filters, access., $150. Tom, Ext. 5258.

CAMERAS - Polaroid model 80, complete set, w/flash, meter, film, case, extra camera, excel., $40. Joe, 281-7683.

EXERCISE BIKE - you pick up, $30. Susan, Ext. 7647.

FISHING LURES - custom, hand-crafted wood, surf-casting plugs for striped bass or bluefish. Larry, Ext. 2012 or 734-5234.

FISHING RODS - Diawa, graphite rods, 9', $40; 10', $50, $75/both. Emil, 473-3120.

FLASH GUN - Metz 45TC4, 4 power supply cables, etc., $165. I. Meyer, 929-4326.

FREQUENCY COUNTER - 6-digit, B&K, 40 MHz, counter, model 1801, $60. Bob, 689-9234.

GOLF CLUBS - Lynx Prowler, 3-pw, 1&5, custom metal woods, bag, $100. Emil, 473-3120.

PUPPY - husky, female, w/papers, has shots, black w/white highlights, $500; Lab mix, black, 8 mo. old, w/shots, female, $30. Lorijean, 744-5857.

Audio, Video & Computer

COMPUTER - Apple 2GS, 5¼" & 3½" drives, 1MB RAM, keyboard, mouse, joystick, 10" color mon., ImageWriter color printer, $500. Fred, Ext. 5032.

COMPUTER - 386-20 MHz, 4 MB, 8 MB HD, 3½" & 5¼" drives, VGA, mouse, modem, $340; VCR, Panasonic HiFi stereo, $150 neg. Adam, Ext. 2763.

COMPUTER - Amiga 500, good cond., great for games, $200. Joe, 924-4070.

FAX MODEM - US Robotics Sportster, 14.4k baud, internal, $40. Dick, Ext. 7185.

PRINTER - Panasonic, 24-pin dot matrix, wide carriage, plotter-HP7475A compatible. Paul, 878-3297.

STEREO - Proton #AM300 amp/rec., CD player, cass., 2 Boston speakers, 3 yrs. old, $500 neg. Janet, Ext. 2345 or 929-3910.

TV - 21", console, Zenith, color, works well, asking $100. 924-6751.

TV - RCA, color, 19", good cond., $90; TV stand, $25; stereo cabinet, $25. Joe, Ext. 7762.

TV - Toshiba, 13", color, remote control, excel. picture, on-screen programming, $100; CD racks; wood cassette rack. Kara, Ext. 5658 or 941-9359.

Miscellaneous

BABY'S ITEMS - Port-A-Crib, large, wood; wicker bassinet; swing; all in excel. cond., make offer. Laura Sabatini, 289-9533 after 5 p.m.

BASSINET - gingham cover, mattress, sheets, $35; old-fashioned pram, excel. cond., $40. 474-8715.

CAR SEAT - Century 5000, toddler size, $30; Evenflo high chair, $20; toddler bed, mattress, $30; Fisher Price toddler bicycle seat, $20. Donna, 821-3739.

JACKET - brown distressed leather, men's size 36, good cond., $90; makeup mirror, magnification, $12. Laura, 929-4446.

TICKET - Elton John, Thurs., 10/19, Madison Square Garden. Kathy, Ext. 7105.

Lost & Found

CAT - black & white, female, found in vicinity of Overlook Drive, Wading River. Laura, 929-4446.

Free

DOGHOUSE - for large dog. 3'x4', peaked roof, cedar, you pick up. Joe, Ext. 3635.

KITTENS - homeless, adorable, orange tabbies w/blue eyes, about 8 wks. old. Maryann, Ext. 5124.

KITTENS & CATS - 4 kittens, avail. end of Oct., cats older; white lop-ear rabbit. Lorijean, 744-5857.

STORAGE/STEREO CABINET - solid pine, walnut finish, excel. cond. Bob, Ext. 3509 or 289-9533.

Yard & Garage Sales

LAKE GROVE - 10/14, dining room set, weedwacker, tools, fishing equip., dishes/pots, in-line skates, file cabinet, clothes, 10 Benson Place, off Virginia Rd.

MASTIC - 10/14 & 15, 9 a.m.-4 p.m., furn., household, baby's items, clothes, 59 Strafford St., off Wm. Floyd Pkwy. Dave, 395-3484.

MEDFORD - crafts, gifts, or home, 10/13 & 14, 222 Jamaica Ave., 10 a.m.-4 p.m., south of LIE 63, ¼ mi.

PORT JEFFERSON - 10/14, rain date 10/15, 4-family, 5 Frances Lane, Harbor Hills.

SHOREHAM - 10/14, 9:30 a.m., 5 Sandpiper Ct.

WESTHAMPTON BEACH - 10/14 & 15, new & old, china closet, Mary Kay, sporting goods, Christmas items, sinks, etc., near Strebels.

Car Pools

EXIT 36 - 4th needed. John, Ext. 5181.

Real Estate

Real Estate advertised for sale or rent is available without regard for the race, color, religion, sex, age, national origin, disability or veteran status of the applicant.

For Rent

CALVERTON - 2-bdrm. townhouse, 5 appl., deck, patio, cac, cable, w/w, wooded setting, avail. 1/96, $800/mo. + sec. & refs. Mike, 369-3307.

CENTER MORICHES - 2-bdrm. ranch, 2 bath, kitchen, lounge, Florida room, bay water view, good windsurfing, $1,250/mo. Ivan, 766-5917.

CENTER MORICHES - 2-room apt., full bath, second floor, priv. ent., parking, no pets, nonsmoker, single/couple, near trans./stores, $500/all. Lois, Ext. 3315 or 929-4753 eves./wknds.

E. YAPHANK - 1-bdrm. basement apt., spacious, airy, large roomy bath, mod. kit., well lit l/r, w/w, large windows, landscaped, single, nonsmoker preferred, $525/all. Donna, 924-9282.

FARMINGVILLE - 1-bdrm. apt. for 1 person, furn., nonsmoker, no pets, incls. util., cable, laundry fac., priv. ent., avail. 10/15, $630/mo. Patricia, Ext. 2907 or 758-3952 eves.

GORDON HEIGHTS - 1-bdrm. cottage, eik, full bath, cathedral ceiling l/r, oil heat, gas stove, ceiling fans, w/w carpet,single/couple. Fred Molone, 286-1447.

HOLBROOK - spacious 1-bdrm. apt., priv. ent., near LIE, no pets, working single or couple, 1 mo. rent + sec., $600/mo. Jane, Ext. 4909.

MIDDLE ISLAND - lg. 1-bdrm. co-op upper unit, eik, full bath, w/d, d/w, cac, w/w carpet, terrace, cable, igp, tennis, 10 min. to Lab, $725/mo. 924-9664.

MILLER PLACE - studio apt., very private, near Cedar Beach, $500/mo. incl. util. Isabella, 473-6658.

MILLER PLACE - 1-bdrm. apt., l/r, kit., spare rm., util. incl., priv. ent., gar. 473-1658 after 6 p.m.

N. SHIRLEY - 3-bdrm. ranch, 2 bath, gar., full bsmt., fenced, ½ acre, 2 large decks, pool, new, 10 min. from Lab. John, 395-5922.

PORT JEFFERSON VILLAGE - small house, fully furn. w/all appl., suitable for 1-2 adults, avail. Oct./Nov. to Apr./May, date neg., $1,500/mo. incls. util. 331-7917.

ROCKY POINT - 1-bdrm. apt., eik, lg. l/r, screened porch, deck, perfect for 2, no pets, city water, furn, $750/mo. + utils., Sept. to June. 744-0584.

ROCKY POINT - new 1 bdrm. apt., lg. l/r, eik, full bath, priv. ent., nonsmoker, no pets/children, $600/mo. single, $650/mo. dbl. incl. util. & sec. Ray, Ext. 3301.

RONKONKOMA - new 1-bdrm. apt., sunny, full kit., l/r, priv. ent., cable, w/w, single person, nonsmoker, no pets, avail. Oct. 1, $600/all, 1 mo. sec. 471-6416.

SHIRLEY - 3-bdrm. house, basement, fenced-in yard, close to schools, $850 + utils., 1 mo. sec. Jim, 281-7603 after 5 p.m.

SHIRLEY - 2-bdrm. apt., 15 mins. from Lab, $750 + 1 mo. sec. 281-2746.

SHIRLEY - 2-bdrm., eik, l/r, ceramic tile bath, storage rm., own thermostat, ground floor, no children, $800 + sec. Maria, 399-1756 after 5 p.m.

SHIRLEY - studio apt., furn., carpet, new bath, kitchenette, priv. ent., cable, no pets or smoking, $525 incl. all. 473-6432 or 399-0352.

SOUND BEACH - 1-bdrm. house, l/r, eik, bath, full bsmt., yard, walk to beach, no pets, sec., refs., $600/mo. + util. Ray, Ext. 3301.

WESTHAMPTON BEACH - 3-bdrm., waterfront contemp., 2 bath, dock, water view every room, furn., avail. Oct.-May, $750/mo. Ray, Ext. 7224 or 261-6455.

HILTON HEAD, S.C. - 2-bdrm. condo, sleeps 6, fully furn., 2 bath, tennis, beach, golf nearby, through Dec., $350 per week. Guy, Ext. 3147 or 689-5378.

VERMONT - ski house near Mt. Snow, sleeps 7, avail. week/wknds., $125/night, 3 night min., season rental avail., $5,600 + util., 11/15 - 4/15. Lloyd, 627-7589.

WARDSBORO, VT - new country home, sleeps 8, fp, Jacuzzi, fall foliage, hiking, biking, fishing, between Stratton & Mt. Snow, rent wknds./weekdays. Marilyn, Ext. 5251 or 360-3020.

For Sale

E. PATCHOGUE - S. Country Shores, 3-bdrm. ranch, eik, d/r, l/r w/fp, bi-level, cedar deck, shed, 135'x100', walk to bay & marina, $147,000. Fran, 289-0526.

E. PATCHOGUE - 4-bdrm. Colonial, eik, d/r, l/r w/fp, den, office, 2 full bath, attached gar., bsmt., screened porch, central vac., potential M/D, $155,000. Beth, 447-6517 eves.

E. PATCHOGUE - Cape Cod, 2 floors, 6 rms., 1½ bath, country kitchen w/fp, l/r, 3-bdrm., formal d/r, full bsmt., 200-A service, deck, porches, excel. cond., retiring. Ralph, 758-4018.

E. SETAUKET - 5-bdrm., 3 bath, 3 levels, poss. M/D, sliding dr. leading to wraparound deck, scenic view, 2½ gar., all hardwood floor, 3VSD, cul-de-sac, $192,000 or rent $1,600/mo. 689-6495.

FLANDERS - new subdivision, scenic, wooded, priv. 1+/- acre lots, greenbelted country land w/cul-de-sac, near water, golf, county park, trails, easy access to major roads, lots starting at $39,900. 369-2889.

ISLIP HAMLET - 3-bdrm. Cape, corner plot, fenced, detached gar. & work shed, enc. porch & much more, $117,000. Bert Haug, Ext. 5156 or 581-4436.

MIDDLE ISLAND - 2-bdrm. co-op, upper unit, l/r, d/r, kit., all appl., cac, gas heat, newly carpeted, many extras, pool, tennis, clubhouse, 80% tax write-off, $43,000 neg., must sell. 924-5282.

NESCONSET - 4-brm. Colonial splanch, formal d/r, den w/fp, new kit., ig sprinklers, Smithtown schools, reduced for quick sale, $155,000, or rent $1,500/mo. Mike, Ext. 7941 or 588-4882.

N. SHIRLEY - brick ranch, 1+ acre, 3-car gar, fin. bsmt. w/outside ent., plus 1 bdrm cottage, deck, patio, extras, $124,900. 345-5783.

PATCHOGUE - 4/5-bdrm. ranch, cul-de-sac, 2½ bath, fin. bsmt., 2-car gar., 18 min. to Lab, $160,000. Marge or Faith, 475-6234 eves.

RIDGE - immac., adorable, 3-bdrm. ranch w/Lake Panamoka view on ¼ acre, l/r, eik, 1 bath, master bdrm., new appl., fully carpeted, ample storage, deck, fenced yard, $120,000. Ext. 2826.

ROCKY POINT - 2-story chalet, 1.23 acres, very private, 22 Prince Road, west end, $169,000. Ext. 7774 or 929-6235.

SHIRLEY - Tangiers, custom 3-bdrm. split ranch, ½ acre, fenced, 2 bath, fin. den, oversized gar., porch, bsmt., owner, excel. for M/D, $105,000. 473-6432.

SHOREHAM - 3-bdrm. ranch, 100'x150' prop., playrm., l/r, d/r, eik, w/w, 1½ bath, den w/fp, 2½-car gar., 23'x32' deck, SWRSD, N. of 25A. 821-9547.

S. HUNTINGTON - Cape Cod, vinyl, brick, 4-bdrm., 2-bath, eik, l/r, h/fin. bsmt., fp, deck, double-pane windows, new roof, Dist. 13, $148,000 neg. Evelyn, Ext. 2808.

WADING RIVER - 3-bdrm. Colonial, 2½ baths, 2-car gar., custom kit., Jennair, gazebo, shed, igs, igp, deck, steam bath, satellite dish, SWRSD, 1.1 acre, $189,900. 929-8323.

WADING RIVER - Clarendon, custom 4-bdrm. Colonial, 2½ baths, encl. porch, 1 acre, hardwood floors, mint cond., SWRSD, asking $295,000. 929-6984.

PORT CHARLOTTE, FL - ¼-acre bldg. lot, developed neighborhood, ready to build, $9,000. 929-8323.

NORTH CAROLINA - 1.13 wooded acres, waterfront community, pool, clubhouse, marina, 35 ft. boat slip on Pamlico River, off the Intercoastal Waterway in Washington, NC, $36,000. Ken, 281-5565.

PRINCE EDWARD ISLAND, CANADA - 2.2 acres waterfront, reasonable, will hold note. 395-3914.

Wanted

APT/HOUSE - and housemates, for 23-yr.-old son of BNLer, looking to rent within ½ hr. ride of office in Valley Stream.

BOAT TRAILER - for 16' alum. boat, 1,200-lb. rating. Wayne, Ext. 2284.

CAGE - for guinea pig, class pet. Gloria, 929-3407.

CRIB - wood, good cond., child's bed, child's dresser, good cond only. 474-8715.

HOUSE/CAT SITTER - in Bayport, 12/21-28. Bernice, 472-1735.

PIANO TEACHER SOFTWARE - Miracle, for Nintendo game system. Chris, 395-6112.

METAL DETECTOR - underwater capable. Gloria, 929-3407.

MONITOR - EGA, for use w/XT computer. 661-6078.

MOTOR - Kicker, 5-9 h.p. Emil, 473-3120.

ROOM - in a house near BNL for a professional, neat, nonsmoking woman. Ext. 2783.

ROTOTILLER - gas powered, mini. Harriet, Ext. 2800.

SAXOPHONE - have flute for sale. A. Cambell, 727-7115.

VIOLA - in good cond., reasonable, for college student. Frank, Ext. 2022 or 399-4480.

In Appreciation

Thank you to our friends and co-workers for your sympathy, support and generosity following the loss of our beloved son. —Barbara & Clarence Simpson

Farewell Gatherings

RETIREMENT PARTY - for Larry Passell, Brookhaven Center, Fri., 10/27, 5:15 p.m., $15/person, cash bar, RSVP by 10/24 to Marie Grahn, Ext. 3786, or Rae Greenberg, Ext. 5564.

PARTY - For Ray Archbold, Randy Philips, Bob Mosley, Thurs., 11/9, 6 p.m. at Firehouse, $20 per person, RSVP Ext. 2351.

Ads left out of this issue due to lack of space need not be resubmitted to appear in the next issue.