BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Trustees Confirm Samios As BNL Director

Nicholas Samios has been appointed Director of BNL effective May 1. The announcement was made on Monday in a letter to all employees from Robert E. Hughes, President of AUI.

In his announcement, Hughes said Samios was chosen by the AUI Board of Trustees after a thorough search and that "Dr. Samios' warm human qualities, his intellectual strength, and his energetic lifestyle will serve him well in the demanding role of Director."

Samios has been acting director since January 1 of this year. At that time he said he planned to rely on the directorate already in place and he emphasizes that this still holds. "We have a strong directorate and a strong staff," he says. "Seven Lawrence Award winners, eight National Academy of Sciences members and three National Academy of Engineering members indicates a diversified, healthy Lab."

The director's job is a challenging one and Samios is fully aware that he is taking it on when the economy of the country is in difficulty and all areas will suffer, including science. "Our task is to keep on doing good science during these times," he says, "and my specific goal is to keep alive the construction of a high energy collider to be finished in the late 80s."

As further evidence of an active Lab, he points to the Light Source as a feather in our cap and the technical turnaround on the superconducting magnets as a real plus — "we now have the best magnets available," he says.

Plans are in the works for him to meet with employees and he regrets that these meetings will have to wait a few months. It turns out that this is the season of visiting committees and with all the other commitments of a new director, his days are jammed.

Samios is, as he says, "a product of the New York City school system" — Stuyvesant High School, Columbia College, Columbia University. He was also on the faculty of Columbia before coming to Brookhaven in 1959. He was leader of the Nuclear Interactions Group from 1965 to 1975, chairman of the Physics Department for the next six years and in February 1981, was named Deputy Director for High Energy and Nuclear Physics.

His research career has been distinguished and he is well known for his discovery of the Omega minus particle and for the first charmed baryon. He knows that with his new job, he is saying goodbye to active research, but he can be comfortable with that. "The director's job is a challenging one," he says "and it is one to which I want to devote all my energies."

Although Samios will serve at the pleasure of the AUI Board of Trustees, AUI policy requires that no later than 1987 an evaluation be undertaken by the Board and the Director to determine the desirability of his continued service.

Samios and his wife, Mary, live in Belle Terre, with their daughter, Alexandra, a student at Port Jefferson Jr. High School. Their two sons, Peter and Gregory, are students at the University of Rochester.

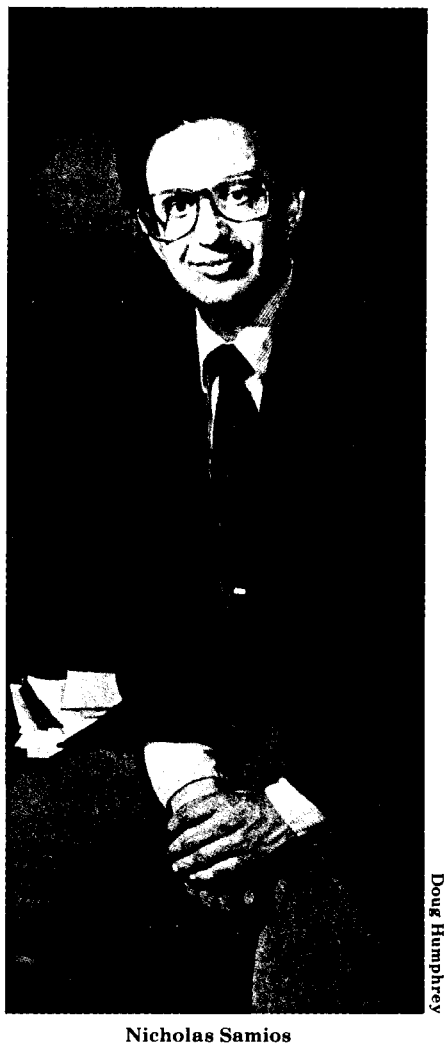
Past BNL Directors

Philip M. Morse — Served as first director of BNL, from 9/1/46 to 9/30/48... Professor emeritus, M.I.T.

Leland J. Haworth — Director, 10/1/48 to 4/1/61... Commissioner, Atomic Energy Commission... President, National Science Foundation... Died 3/5/79.

Maurice Goldhaber — Director, 7/1/61 to 1/14/73... AUI Distinguished Scientist... President, American Physical Society.

George H. Vineyard — Director, 1/15/73 to 12/31/81... BNL Senior Physicist, now on leave at University of California, Santa Barbara, and Harvard.



Doug Humphrey

Nicholas Samios

Evolving Controls For ISABELLE

Through the Ice Age and the Stone Age and the Age of Reason, through evolution and revolution, for several billion years, the Earth has revolved around the sun with an unfaltering stability.

Until recently, the idea that humanity could duplicate this stability would have met with scorn. But the protons that will circulate through ISABELLE's two beam lines must be stable enough to complete 10 billion revolutions in 24 hours, for several consecutive days. "ISABELLE will be incredibly stable," says John (Rusty) Humphrey, head of the ISABELLE Control Group, "the most stable thing people have ever made."

Such stability can only be achieved if ISABELLE's 30,000 variables are themselves very stable — built and maintained to tight tolerances. This maintenance will require monitoring 30,000 points at one time, so it will be immediately evident if something goes wrong at one of them. How will this be accomplished? "That's part of why the ISABELLE control system exists," says Humphrey.

The control system now being built for ISABELLE is a complex computerized network. Its components will be connected by more than three miles of cable, which will begin at the main computers tied into three control consoles. Data will bus along the highway through ten process computers and arrive at 36 stations. From those, data will be bused locally to 1,500 controllers connected to 30,000 devices for monitoring variables. Already, about 2,000 feet of cable have been installed in the AGS Linac and in a portion of the ISABELLE injection line.

Bob Frankel leads the effort to build the cable system, named RELWAY for RELiable process data highWAY. Essentially, RELWAY takes its technology and parts from the cable TV industry, using large-scale integrated circuitry and standard protocols whenever possible. Adapting this technology to meet ISABELLE's special environment has resulted in a broadband system offering several different channels. On each channel, a communications service can run at the rate of one to ten megabits/second. Via RELWAY, data can not only be sent to several devices simultaneously, but consoles can also receive information about the status of the variables the devices monitor. The ISABELLE Control Group is combining sophisticated programming, computer hardware and RELWAY to create a system that will immediately alert ISABELLE's operators if something is out of tolerance and threatening the beam's stability.

Such a situation is not to be taken lightly. Every machine failure means that valuable experimental time will be lost. If a potential problem can be flagged, it might be fixed before any harm is done.

In most cases, repairs will be routine. But, when the unforeseen happens will there be any way to avoid shutting down the accelerator to experiment with alternatives? Yes.

Jim Neiderer of Applied Math is leading the effort to build a model containing all the specifications and parameters pertinent to ISABELLE. As he explains, "The model will allow for a variety of options in a given situation — say with magnet settings. If you change the settings, what will be the consequence to the beam? With the model, you can test assumptions. You don't actually change anything until you have determined the best alternative."

Modeling will be used during all phases of ISABELLE's lifetime for designing, troubleshooting and experimenting. "This will contribute importantly to the flexibility of ISABELLE to do new physics," Humphrey says, "The models can be used to explore the effects of new strategies or proposed modifications upon stable beam operations."

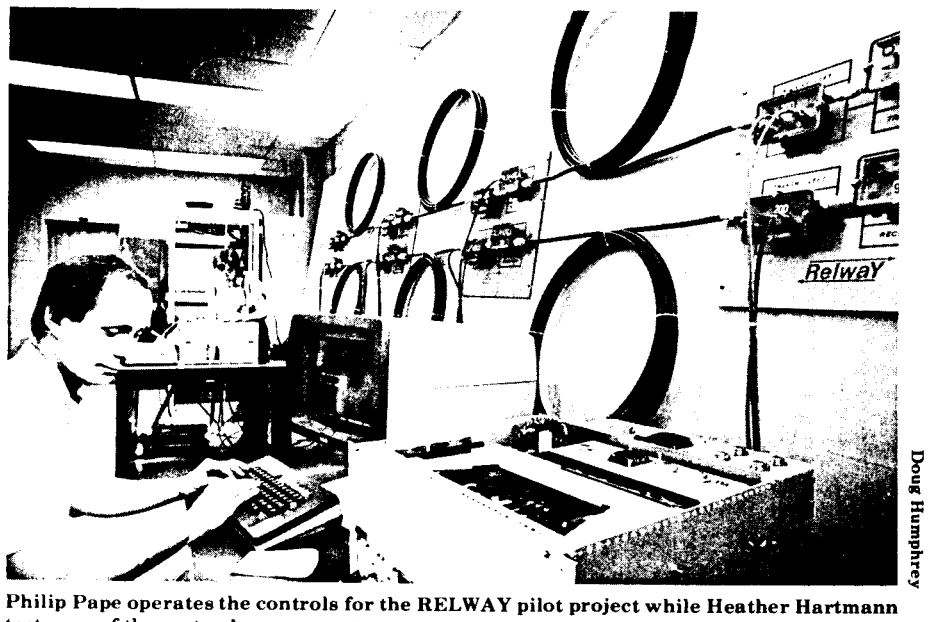
Controls for an accelerator as large and complex as ISABELLE might normally be expected to require about three man-centuries of labor to complete. But Neiderer says, "We are paying very close attention to managing the software part of the project with the goal of cutting man-centuries, hopefully by as much as one-half."

To accomplish this, Humphrey says, "Everything must be done efficiently and carefully and cleverly." While this is true of all aspects of accelerator development, it is particularly important to controls. In this fast-paced field, today's state-of-the-art technology could be out-of-date tomorrow. Still, for the Controls Group to meet their schedules, certain tasks must begin now. Humphrey's solution is to "partition the problem. We'll do the things with a lot of industrial technical push later on," he says.

The ISABELLE control system is being designed to have a mean time between failures of ten days, more than enough to allow for projected run times. Humphrey says that "This is a very high standard for a system of this size," and points out that it is an order of magnitude higher than that achieved at CERN's SPS, where the time between computer breakdowns averages one day.

Engineers Thomas Clifford, Susan Kennell and Brian Morris and technician Patricia Taibbi are working on software for ISABELLE's control system. Hardware is the province of engineers Alexander Herman, Doug Pope and Robert Warkentien, whose efforts are supported by technicians John Czachor, Heather Hartmann, Karl Kohler, Philip Pape and William Venegas. The core management team of Frankel, Humphrey and Neiderer is proud of their people's efforts. "This system is in the mainstream of control system development," sums up Humphrey. "We are really doing some fine stuff."

—Anita Cohen



Doug Humphrey

Philip Pape operates the controls for the RELWAY pilot project while Heather Hartmann tests one of the system's components.

A Book Report

June promises to be a very productive month for John O'Brien. Almost simultaneously with the release of his record album, he anticipates the publication of a hardcover book containing eight reports he has written.

Though the Government Printing Office will print the book, all other preparations are being completed at BNL. This is the first hardcover book to be typeset on the Photography and Graphic Arts (P&GA) Division's computerized photo-typesetting equipment. Composing its 500-plus pages was greatly facilitated by the fact that all 13 reports had been previously typed on P&GA's Daconics word processing unit and stored in its memory.

After being edited to meet the format established for the book, the copy is transferred via an interface to the Composition Group's type-setting equipment. With the keystrokes already in memory, typesetters need only to format the material as to spacing, type styles and sizes, and so on. As of now, P&GA has completed 80% of the book's composition and illustration. Of the book's five chapters, four are printer-ready.

In addition to O'Brien's work, the book will contain five other reports by Jerry Cadwell, Bernard Keisch, Kun Mo Chung and Eugene Weinstock. When these reports were originally written, each of the authors worked in DNE's Technical Support Organization for Nuclear Safeguards. The book will be published by the Nuclear Regulatory Commission which recognized that the authors' combined efforts constituted a unique collection of materials. Entitled "Alternative Nuclear Fuel Cycle Arrangements for Proliferation Resistance: An Overview of Regulating Factors," the book will concentrate on the institutional and regulatory aspects of nuclear power, including international relations, nonproliferation, safeguards and the legal implications of licensing nuclear facilities and fuel.

As the primary author, O'Brien has been most responsible for the book's production. He admits he still has one major task — the index —but even that will be made easier by P&GA. O'Brien will list the index items randomly and give them to the Word Processing Group for typing. There, the Daconics has a program that will alphabetize the index for him.

O'Brien has been impressed with P&GA. "They have the complete organization necessary to turn out a high-quality job," he said. "I've worked with printing and publishing outfits before, so I can say they are extremely good."

—A.C.

Staying Healthy After Forty

Dr. Jane Porcino will speak on "Health Issues of Women Over Forty" at the dinner meeting of the Women in Science on Thursday evening, May 20. Dr. Porcino has a Masters degree in Social Work and a Ph.D. in Gerontology. She is Director of the Gerontology Program in the School of Allied Health Professions, State University at Stony Brook, and Chairman of the Geriatric Interschool Committee at Stony Brook's Health Sciences Center. She is also the founder and Director of the National Action Forum for Older Women and was a New York State delegate to the 1981 White House Conference on Aging.

Jane Porcino

Ms. Magazine chose Dr. Porcino as one of "80 Women to Watch in the 80's." Her awards include "Branch Woman of the Year," American Association of University Women and 1982 Achiever Award of the 110 Center for Business and Professional Women. Dr. Porcino has written numerous articles and her new book, "A Handbook for the Second Half of Life," will be published this year.

Dinner will be served in the Brookhaven Center at 5:15 and the meeting will follow at approximately 6 p.m. Please make dinner reservations by sending a check for $7.50 payable to BNL-WIS to Ellen Gannon, building 801, before May 17. Everyone is invited to attend.

Magnetic Effects

Participants from all the major high energy physics laboratories converged on Brookhaven last Monday for an intensive four-day "Workshop on Accelerator Orbit and Particle Tracking Programs."

Max Cornacchia, head of the organizing committee at BNL, said the aim of the workshop was "to try to understand the effects of magnetic imperfections on an accelerator beam." Superconducting magnets have become an important component of today's accelerators. With the extremely high magnetic fields these magnets generate, the magnetic imperfections are heightened and play a greater roll on the beam stability than on conventional magnets. The widespread interest in exploring these effects was evidenced by the international attendance at the workshop; of the 60 attendees, 27 came from outside the U.S. As Cornacchia explained, "Although the topics may sound esoteric, they are of great practical importance in designing superconducting magnets."

The workshop opened with theoretical sessions, moderated by Ernest Courant, and included speakers from Fermilab, Padua University, Cornell, SLAC, the University of Maryland and BNL. John (Rusty) Humphrey was moderator of the computer program session which began Tuesday. Among the topics discussed were particle tracking studies used to study the effects of changes in the beams at Fermilab's Energy Saver/Doubler, DESY's HERA, SLAC's PEP and BNL's ISABELLE (see "Evolving Controls For ISABELLE"). A session on experimental observations, moderated by Robert Jameson, concluded the workshop.

Some Musical Arrangements

By the end of June, John O'Brien's dream should come true.

O'Brien's dream is to produce a record album featuring his original music. But dreams like this don't usually come true overnight; they take time, money, talent and dedication. Dedication and talent were no problem for O'Brien, but money and time were somewhat harder to come by.

For O'Brien, who is a full-time scientist in DNE's Division of Reactor Safety, music is an avocation. He compares his efforts as songwriter, musician and record producer to an automobile lover's spare time passion for buying and restoring old cars. "It takes a lot of time and money. It's a big project," he says, "maybe it will pay off, maybe it won't. But in the end I'll have something tangible to show for it."

What O'Brien will have in the end is an album to showcase the songs he's written. Once it's in this form, he hopes that some established artist will hear his music and choose to record it again. "I would feel very accomplished having somebody record a song I wrote on a major label," he says.

If a song of his became even a moderate hit, O'Brien might recoup at least some of his financial investment. "When I decided to go ahead with the project," O'Brien says, "I knew I had to hire the best possible musicians and make a high quality studio tape, then press an album. I saved some money and blew it on this."

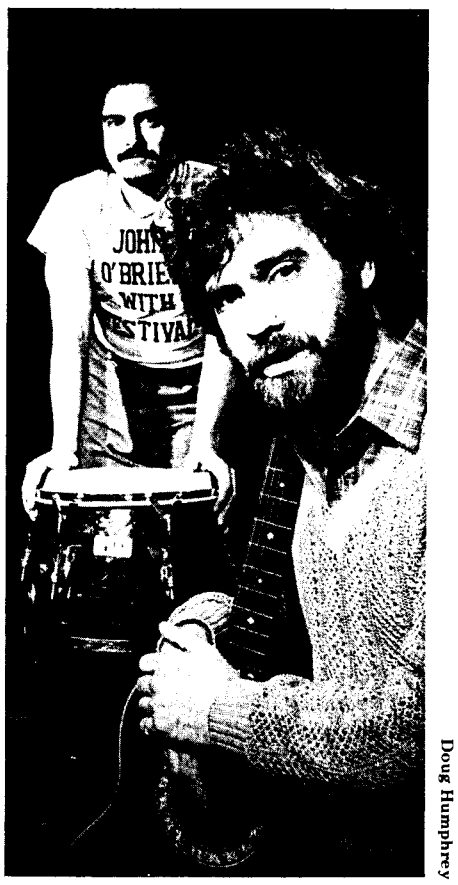
To complement his own rhythm guitar, piano and vocals, O'Brien's first hire was Bruce Wands, a bass player with whom he had teamed since 1978 to form the duo Holy Smoke, ending the solo act he had had since coming to Long Island in 1976. Prior to that, O'Brien had played with the Crystal Revelation, a group popular in upstate New York.

After Wands, lead guitarist Frank Albino and drummer George DeAngelis joined the group. When the four musicians began to play O'Brien's adult-oriented fusion-style rock with its heavy Latin rhythms, O'Brien says, "We realized there was a lot of polyrhythmic stuff going on in the music and that a good percussionist could really help bring it out. That's when I thought of Jorge."

Jorge "Paco" Ubiles is also a part-time musician who works full-time at BNL as a senior drafter in Physics. Like O'Brien, he has played in bands since his teens, starting as a lead guitar player. He switched to percussion about eight years ago.

O'Brien signed Ubiles on to play conga drums, timbals and Latin per cussion "toys" such as cowbells, tambourines and shakers. Ubiles says his instruments "add flavor to the music. It's like cooking actually. The more you add the better it sounds." To Ubiles, working with O'Brien "is kind of like a dream come true. I'm a musician getting paid to do an album. It doesn't usually work that way."

Now, O'Brien says, "We've rehearsed enough that the songs are very tight. We've already recorded the basic tracks for all the songs and expect to finish all the studio work by mid-May. The album should be mixed, mastered, pressed and released by late June." The album will be titled "John O'Brien with Festival" and the nine songs on it will range from a quiet solo by O'Brien to the full sound of the five-piece group.



Doug Humphrey

John O'Brien (right) and Jorge Ubiles

Although it is his project — his money and his music — O'Brien gives a great deal of credit to the musicians he has assembled. "Everybody's very talented," he says. "These guys have contributed so much, the arrangements are much better than I could have done by myself."

While it wasn't in the original plan, the group will continue to pool their talents after the record is finished. In fact, the album will help them audition for weekend playing dates. Already John O'Brien is scheduled to play with Festival May 28 and June 19 at The Cinnamon Tree in Greenport.

Will it be worth it? Will the hours, the dollars, the energy O'Brien has invested result in the realization of the ultimate dream of any songwriter — collecting royalties on a hit record? "Anything is possible," says O'Brien, "but the likelihood is that I'll spend a pretty reasonable amount of money and I'll end up with an album to give to friends or sell when I play. But this is a labor of love. I would be happy if people just listened to the record and said they thought it was good."

—Anita Cohen

Lecture Reminder

Richard Lester, M.I.T., will speak on "The Nuclear Power Problem: Interregnum or Irreversible Decline?" at a Lab-wide colloquium on May 12 at 3:30 p.m., Berkner Hall. Reception at 3 p.m.

Doug Humphrey

Meeting briefly between workshop sessions is the Organizing Committee: (from left) Jim Neiderer, Bjorn Wiik (DESY), Max Cornacchia, George Parzen, Ernest Courant and Rusty Humphrey.

BROOKHAVEN BULLETIN

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BERNICE PETERSEN, Editor
MONA S. ROWE, Assistant Editor
ANITA COHEN, Reporter

35 BROOKHAVEN AVE., UPTON, N.Y. 11973
Telephone (516)282-2345

Equipment Demo

The new SLC-II Robotic Communication System manufactured by Digital Pathways, Inc. will be displayed in Room C, Berkner Hall on Tuesday, May 11 at 1:30 p.m. Dr. Mel Schwartz will demonstrate the equipment.

Sci-Tech Info

A representative from the Institute for Scientific Information (ISI) will present a seminar on its various services from 1 p.m. to 4 p.m., Wednesday, May 26, in the Physics Seminar Room. ISI provides a number of manual and computerized services designed to make the difficulty of locating sci-tech information easier (and less costly) for the librarian and the user. Some of the services already available at BNL in the Research Library and some of the branch libraries include a number of Current Contents, several types of citation indexes, and a wide variety of on-line searching capabilities.

Please contact Judy Liu at Ext. 3487, or one of the branch librarians Patricia Aud-Isaacs, Ext. 2064, Donna Albertus, Ext. 2909, Sandra Lane, Ext. 7159 and Helen Todosow, Ext. 2398, before May 21, to reserve a place.

Arrivals & Departures

Arrivals

James J. Lipka ..... Biology

Departures

None

Model Plane Show

The BNL R.C. Model Flying Club will hold its annual indoor show in Rooms B&C of Berkner Hall on Friday, May 14, from 11 a.m. to 1 p.m. In addition to a display of models, a movie will be shown. Everyone is invited.

Afro-American Club

On Tuesday, May 11, the Afro-American Culture Club will have their first meeting of the new fiscal year. To be discussed will be the budget, this summer's picnic, and other club business. It is also time to renew memberships, and new members are being sought. We will meet in Room D, Berkner Hall, at noon.

The Afro-American Culture Club will feature Harvey Thomas as its speaker on Wednesday, May 12, at noon in Berkner Hall, Room B. The topic of his address will be "Affirmative Action Update." We wlecome one and all to join us.

Notice

Effective Monday, May 10, the North Gate will once again be open to two-way traffic.

Nursery School

The Upton Nursery School is accepting applications for the 1982-83 term, which begins in September. Classes are for three and four-year-old children, from 8:30 to 11:30 a.m., two mornings or three mornings a week.

Applications are available from Karen Brunschwig, 924-0030; Janice Thern, 924-3550; or Ruth Fernow, 928-8465. A written request can also be sent to Upton Nursery School, Box 324, Upton, N.Y. 11973.

Motorcycle Club

There will be a club meeting on Monday, May 10, in the Recreation Building at 5:15 p.m.

The Montauk ride is scheduled for tomorrow, May 8. Meet at the Cafeteria parking lot at 9 a.m. Bring a bag lunch or plan to eat out. Rain day is Sunday, May 9 — same time and place.

PSI News

The Upton Chapter of Professional Secretaries International will hold its first organizational meeting on Tuesday, May 11, in Room B of Berkner Hall at 5:15 p.m. Checks made out to SAGA FOODS for $6.00 should be sent to Susan Carlsen (Bldg. 535A) by Monday, May 10. Members and nonmembers are welcome.

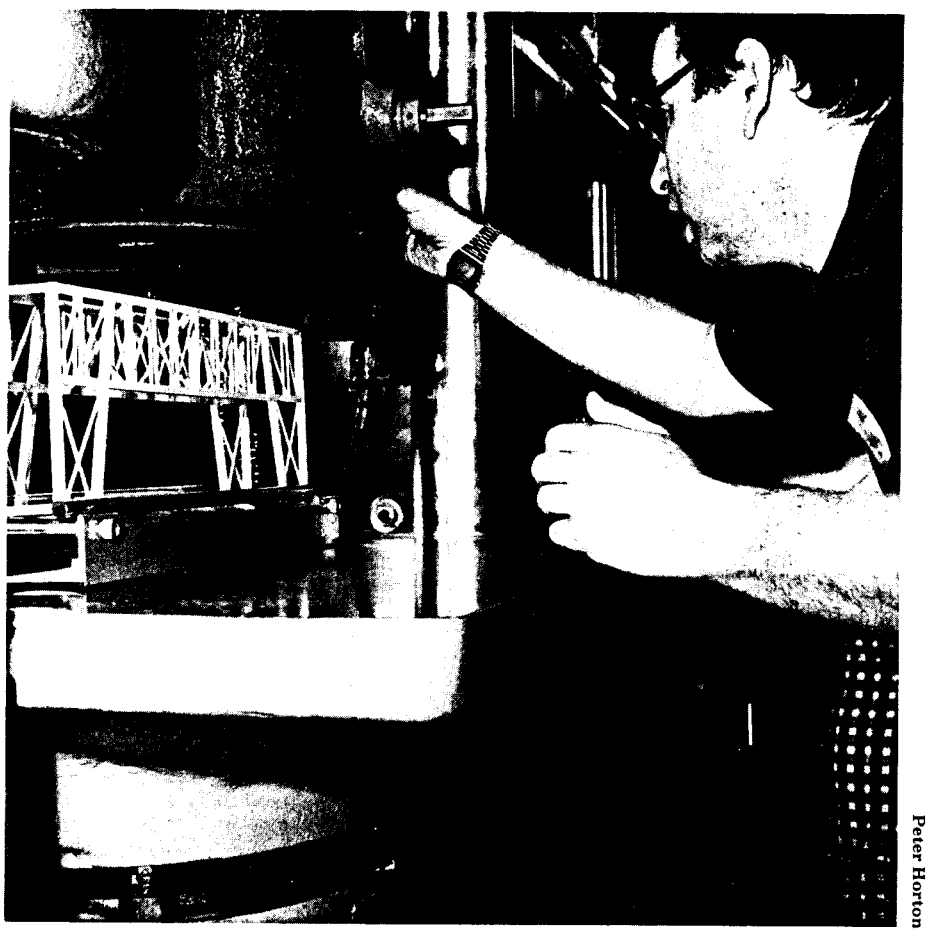
Tea & Sherry Time

"Spring in Japan" will be the theme of the Hospitality Committee's Spring Tea and Sherry Party, planned for Thursday, May 13, from 3:30 to 5:30 p.m. at the Brookhaven Center. Displays and demonstrations will feature such traditional Japanese delights as a tea ceremony, kimonos and their accessories, Japanese cooking and origami. All women employees and wives of Laboratory employees and guests are invited to the party where tea, coffee and sherry will be served along with an assortment of cookies, vegetables and dips. Babysitting will be provided free of charge in the gymnasium.

Cafeteria Menu

Week Ending May 14, 1982

Monday, May 10		
Cream of tomato soup	(cup)	.60
	(bowl)	.70
Ham & potato au gratin		1.70
Italian-style chop suey		1.70
Hot Deli — Sausage & pepper hero		1.85
Tuesday, May 11		
Lentil soup	(cup)	.55
	(bowl)	.65
Roasted turkey breast & stuffing w/giblet gravy		1.80
Corned beef "sliced to order" & cabbage		1.75
Hot Deli — French toasted ham & cheese		1.70
Wednesday, May 12		
Split pea soup	(cup)	.55
	(bowl)	.65
Old-fashioned beef stew on egg noodles		1.85
Baked lasagna & 1 veg. & garlic bread		1.75
Hot Deli — BBQ pork sandwich	(bread)	1.75
	(roll)	1.85
Thursday, May 13		
Beef noodle soup	(cup)	.55
	(bowl)	.65
Sauted chicken breasts on rice		1.80
Veal pattie Parmesan & 1 veg.		1.75
Hot Deli — Roasted top round of beef	(bread)	1.85
	(roll)	1.95
Friday, May 14		
Fish chowder	(cup)	.60
	(bowl	.70
Beef hash & 1 veg.		1.70
Shrimp & fries		1.95
Hot Deli — Clam boat		1.85



Peter Horton

Marty Woodle makes some final adjustments before this bridge is subjected to the pressures of the hydraulic stress tester.

Holding Up Under Stress

At 77.1 grams, bridge No. 197 was one of the lightest entries in the BNL Model Bridge Contest. But it was strength, not size, that was being tested last Saturday when 174 bridges were placed in the hydraulic stress testing machine in Bldg. 480 to determine which one could support the greatest load in proportion to its mass. Though bridge No. 197 only held 945 pounds, its load/mass ratio was 12.26 lb./g, making it the clear winner. For his engineering efforts, East Islip H.S. student Dan Reidy won a programmable calculator and a trophy for his school.

Second place and a calculator chronograph went to Joe Caico, also of East Islip H.S., whose 106.4 gram model held 1,142 pounds for a ratio of 10.73 lb./g. Two Riverhead H.S. students, Stephen Andes and Radford Arner, took third and fourth places respectively and won Exacto knife and tool chest sets.

This is the second year that the contest has been held at BNL. Like last year, all the bridges were constructed only of balsa wood and Elmer's glue. Unlike last year, when models could be supported along their full length, this year's bridges had to be designed to allow room underneath for the passage of a 3"x12" block, representing water traffic. While this restriction weakened the bridges so they could not attain the ratio of 20.69 achieved by last year's winner, it also made the bridge builders' assignment more realistic.

During the testing, held last Saturday in Bldg. 480, contest coordinators Jackie Mirzadeh and Janet Tempel were assisted by DEE's Don Horne and Carl Klamut, as well as Bill McGahern and Marty Woodle of ISABELLE.

Cooking Exchange

The next meeting of the Cooking Exchange will be held on May 12 at the Recreation Building. The theme will be vegetarian foods, featuring such dishes as stuffed eggplant and meatless burgers.

Meetings are held from 12:30 to 2:30 p.m. and are open to employees and their immediate families. There is a charge of $1.00 per person at each meeting and babysitting is provided at 50¢ for each child.

For more information call Mary Daum (744-1898) or Ruth Fernow (928-8465).

Bowling

White League

D. Adams rolled a 223, G. Schuman 201, S. Long 170/170/150, B. Belligan 234, B. Sells 207, K. Griffin 181, J. Griffin 203/265/653 scratch, J. Ferrante 219. The Gropers remain in first.

Purple League

J. Sheehan bowled a 220 and converted the 5/10 split, G. Walker 3/7/10, B. Jellett 6/7, B. Benson rolled a 204, A. Pinelli 200, G. Spira 203

Red & Green League

T. Prach had games of 234/209 for a 636/717 series, C. Bachsmith 200, R. Jones 214/211, R. Larsen 203, A. Almasy 207.

Pink League

J. Thiede had games of 184/169, R. Rosati 161, C. Beckner 182, D. Johnson 160, H. Keeley 190/181.

Quilting Club

The newly formed BERA Quilting Club will have a "Sewing Bee" on Tuesday, May 11, in the Brookhaven Center from 9:30 to 11:30 a.m. This will be an opportunity to work on your own quilting or other needlework project while enjoying the company and inspiration of others. BNL employees and their spouses are invited to attend. Expertise in quilting is not required to join this group. For more information, call Bernie Benz, 928-1068 or Beth Pile, Ext. 3186.

NYC Train Trip

The Hospitality Committee is planning a group railroad trip to New York City on Wednesday, May 19. Departure will be at 7:55 a.m. from the Patchogue LIRR station. Round-trip fare for adults is $3.50; children under six years ride free.

Reserve a ticket by sending your fare through the U.S. mail to P.O. Box 322, Upton, New York 11973, no later than Thursday, May 13. Please make checks payable to "Brookhaven National Laboratory," and put the date of the trip, your BNL life number and your telephone number on the check. Your tickets will be given to you on the train. Refunds will be made only if cancellations are received by the Monday morning preceding the trip.

Classified Advertisements

Placement Notices

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

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment.

Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Personnel Placement Supervisor, Ext. 2882.

The vacancies listed below have been exempted by the Director's Office from the current freeze on open requisitions.

LABORATORY RECRUITMENT: Opportunities for present Laboratory employees.

1695. FIRE SERGEANT - Safety and Environmental Protection Division.

1696. FIREFIGHTER - Previous substantial firefighter experience is required. Completion of New York State EMT course and possession of training certificate is highly desirable; if not, completion of course within one year is required. Must be willing to work shifts at the completion of a thirteen week training period. Safety and Environmental Protection Division.

OPEN RECRUITMENT: Opportunities for present Laboratory employees and outside applicants.

1697. ELECTRICIAN A - (Four temporary positions to 10/1/82) - Under minimum supervision lays out, constructs, installs, maintains, repairs and operates electrical systems, equipment, controls and related devices. Requires mimimum of five years' industrial electrician experience. Plant Engineering Division.

Autos & Auto Supplies

74 HONDA CIVIC - rebuilt eng., low mi., 30 mpg, excel. cond., new brakes & muffler. Sharon, Ext. 3755.

69 DODGE CHARGER BODY - excel. cond., primed, $450 neg. 473-5890 after 5 p.m.

74 CHEVROLET STEP VAN - V-8, 4 spd., refrigerated, insulated, fiberglassed, heavy duty front and rear, $4,000. 654-5169.

71 VW BUG - rebuilt eng., new trans., good rubber, $550 or best offer. 878-2681 eves.

MCHAL MOTORCYCLE HELMETS - (2) police style, $80/pair. 758-7411 after 7 p.m.

TRUCK CAMPER - 11' Concord. 281-6325.

78 TRANS AM - 6.6 LT, gold/beige int., p/s, p/b, DE, new brakes & exhaust, am/fm, 8-track, T-top, 4 spd. Roy, Ext. 4664 or 744-8779.

79 SUZUKI DS100 - trail bike, excel. cond., new tire & chain, $500. Pete, 289-0145.

73 PINTO WAGON - running cond., $200 or best offer. Ext. 4714 or 744-5093.

77 MONZA TOWN COUPE - 4 cyl., 4 spd., very good cond., $2,500. 585-5375.

66 VW BUG - rebuilt eng., good tires and body, $595. 929-3594 after 5 p.m.

68 VALIANT - 6 cyl., auto., needs torsion bar. Ken, 289-8212.

76 FORD GRANADA - auto., p/s, air, $2,000. Ext. 3908 or 585-4038.

70 CHEVY IMPALA - 4 dr. sedan, $250. Mike, Ext. 4293 or 567-9362.

78 GOLD WING HONDA - GL1000, 4,000 mi., like new, $2,600. 473-8783.

73 MAVERICK - 4 dr., 302 auto., good cond., low mi., p/s, good tires, super clean int., $1,200. Ed, 722-3893 after 6 p.m.

HONDA MOTORCYCLE - 750cc, many extras, must sell, $1,600. 698-5088.

RADIAL TIRE - 165x13, new, mounted on Datsun 1978 F10 wheel. John, Ext. 3292 or 286-1348.

80 FIAT STRADA - new radial tires, am/fm stereo, Rusty Jones undercoating, 31 mpg, $4,100. Ext. 2231 or 369-2557.

77 JEEP CJ5 - 4x4, 6 cyl., gas saver, 14,000 orig. mi., excel. cond., $4,395. Jeff, 732-3842.

79 HONDA HAWK - 400cc, like new cond., $1,200. 588-0805 eves.

79 CAMARO - T-roof, 4 spd., p/s, p/b, am/fm stereo, 8 track, full inst., excel. cond., many extras. 473-6735 after 6 p.m.

TIRES - (4) 14.35x15 Groundhawg, very good cond., low mi., $275. 286-1522 eves.

AUTO BODY PARTS - for late model Chevy Blazer, have 2 rear quarter panels, tailgate w/glass, fiberglass cap, no rot. 286-1522.

80 SUZUKI - GS1000L, luggage rack, mint cond., warranty, $3,000. Ext. 7187 or 981-9474.

68 FORD FAIRLANE - 6 cyl., runs well, has radiator leak. Bob, Ext. 2533 or 924-0585 after 6 p.m.

76 K2-400 - bought new in 1977, 7K mi., custom seat, many extras, excel. cond., $950 neg. 589-8394 eves.

TIRE - JR-78-15. 924-4991.

76 VW DASHER - 4 dr., a/t, am/fm, $2,800 or best offer. Marjorie, Ext. 3396.

72 CHEVY IMPALA - 2 dr., good cond. in/out, $550; 1969 Datsun, $50. Steve, Ext. 4297 or 929-6877.

75 FORD PINTO - 2300cc, a/t, a/c, am/fm, radials, needs some work. Bob, Ext. 2533 or 924-0589 after 6 p.m.

65 PLYMOUTH VALIANT - good running cond., body good, $450. 924-5192 eves.

SHOCKS - rear load levellers. Ext. 3919.

76 CHEVY 1/2 TON PICKUP - 350 eng., 3 spd., two-tone color, 8' bed, cap, white slat wheels, $3,750. Steve, Ext. 4297 or 929-6877.

81 PONTIAC - T-1000, 5,000 mi.; 78 Honda Accord LX; both with warranty. Ext. 3985 or 265-3612.

76 HONDA MOTORCYCLE - CB 550, excel. cond., 12,000 easy mi., new battery, $1,000. Langella, 369-3024.

73 PINTO SQUIRE WAGON - 4 spd., a/c, w/w radials, 75,000 mi., service manual, runs & looks new, $1,295 or best offer. 473-2473.

77 TRUCK CAMPER - 11½' Aristocrat, loaded, mint cond., must sell. Mike, 878-1325.

73 CHEVY VAN CAMPER - p/s (tilt), p/b, roof lifts, refrig., sink, stove, good tires, $1,800. Fred, Ext. 4823.

Boats & Marine Supplies

16' RUNABOUT - Mod V, fiberglass, 65 HP Mercury outboard w/elec. start & power trim, trailer w/spare & power winch, extras, used 6 times, asking $4,000. 929-4522 after 5 p.m.

19' REINKEN BOW RIDER - 1978, 85 HP Evinrude, trailer, skis, Coast Guard package, $4,200. 744-4595.

20' MAKO - 1979, hull, mint cond., $5,500. 929-4020.

20' FIBERGLASS - very wide, $350. Steve, Ext. 2023 or 744-0047.

18' GARVEY - clam boat and 40 HP Johnson eng. plus extras, must sell, $800. John, Ext. 3292 or 286-1348.

SAILBOARDS - fiberglass, complete, new, $595. Dinos, Ext. 4666 or 477-1783.

16' ALUMINUM - open fisherman's boat, 40 HP elec. start outboard, MFG trailer, $900. 924-6751 eves.

TRAILER WINCH - heavy duty, 9 to 1 ratio, good cond., $15. Joe, Ext. 4069 or 261-7825.

12' FIBERGLASS BOAT 10 HP Evinrude motor, oversized trailer, $725 or best offer. Brian, Ext. 2059.

18' RHODES SAILBOAT - w/trailer & small outboard, $1,400. Tom, Ext. 7196 or 286-2505.

35 HP JOHNSON OUTBOARD - manual start, alternator, $600. Steve, Ext. 2023 or 744-0047.

ANCHOR - Danforth 8-S, 50', 3/8 nylon line. Ext. 4727.

Yard Sales

YARD SALE - May 8 & 9, 10 a.m. to 4 p.m., 18 Highview Blvd. (off South Country Rd.) Brookhaven.

YARD SALE - May 22 & 23, Wading River. Lois, Ext. 4904 or 929-4753 for info.

YARD SALE - May 8 & 9, 2 families, furniture, toys, odds & ends, live plants and terrariums for Mother's Day, 39 Nottingham Dr., Middle Island. 924-9232.

Free

FOR ADOPTION: Stray male shepherd 6-7 yrs. old. Well trained & obedient. Ext. 2926.

Miscellaneous

GOLF CART - $15; freezer, $150; step ladder, $10; house jack, $20; bureau, $60; mirror. 475-5052.

WALNUT CHEST & MIRROR - 42", w/comb. drawers/doors, excel. cond. 584-7750 after 6 p.m.

WHIRLPOOL AIR CONDITIONER - window model, 5,000 BTU, 7.5 energy rating. Ext. 2301 or 727-4515 after 5 p.m.

35 MM SLR - Miranda REII plus 35 mm W/A lens, $150; Canon Speedfinder, $85; both brand new. 473-3604.

BELL & HOWELL - Electronic Technology course, 8 volumes, $25. Dick, 878-1580 after 6 p.m.

10 SPEED BIKE - men's 24" Huffy with Shamino Derailleur, excel. cond., $60. George, Ext. 4227 or 751-0894 eves.

G.E. AIR CONDITIONER - V115, 12 amps, 12,000 BTU, window unit, $150. Ralph, Ext. 7513.

AIR CONDITIONERS - (2), 5000 & 7500 110V, $75/both. Steve, Ext. 2023 or 744-0047.

23 CHANNEL CB - base station, antenna, and 50' cable, $75; aluminum screen house, used one season, vinyl roof, currently $333, yours for $200. 744-5892 eves.

TOYS - used but good cond., cheap, in Shirley area. Helen, 281-8848.

CONTENTS OF HOUSE - furniture, appliances, air conditioner, radial arm saw, dehumidifier, 20" fans, many other items. 744-2766.

BARBER CHAIR - porcelain, 1940's, great conversation piece, $150; electric barber pole light, $120. Mike, 669-9482.

MINOLTA CAMERA - SRT102, 35mm, 50mm 1:17 lens, shutter 0-1000, good cond., $125 firm. 281-0360 eves.

WEBER PIANO - upright, antique. Henry, Ext. 3499 or 728-8798 after 5:30 p.m.

DIAMOND RING - 1.27 carats, solitaire, worth over $4,000, sell for $3,800. Elayne, 499-0589 after 7 p.m.

POOL - 4x16x20, cover, filter, vacuum, deck, ladder, 100' cyclone fence & gate, $350. Fred, Ext. 4823.

FULL SIZE MATTRESS - and box spring. 727-0661 after 5 p.m.

PIANO - upright, $100 or best offer; photo enlarger plus access., $50. Tom, Ext. 3128 or 928-7344.

QUEEN SIZE BED - complete, $50; kitchen table & chairs (2), $25; lamp, $3; 5-drawer chest, $20. 698-5861.

STEARNS & FOSTER - bed, mattress & boxspring, $30. Ann or Joe, 475-8440.

GARRARD TURNTABLE - and Pioneer receiver; fender flares for Chevy van; Head skis; Dolomite & Heierling ski boots, cheap. 286-0745.

SHUTTERS - w/movable louvers, (8) pieces, 6"x24" (or 48" wide), $5/all; LP gas furnace, 49,000 BTU, recess in floor or free-stand, like new, $100. Susan, Ext. 7235 or 399-1736 after 5 p.m.

FREEZER - 8 cu. ft., like brand new, $190. 281-2899.

FULL SIZE BED - Sears, foam, w/frame. Tom, Ext. 7196 or 286-2505.

KING SIZE MATTRESS - Posturpedic, foam rubber, firm, w/two box springs, like new, $100. 929-6984.

CHEST FREEZER - Ward's 25 cu. ft., very good cond., $235; chaise lounge for bedroom, excel. cond., $45. 929-4522 after 5 p.m.

KONICA T3 35 MM SLR CAMERA - w/50 mm, f1.7 lens, leather case & Vivitar flash, $160. Chuck, Ext. 4483 or 567-1272 after 6 p.m.

G.E. NO-FROST REFRIGERATOR - Deluxe 19 cu. ft., avocado, perf. cond., price negotiable. Ext. 4959.

TRAVERSE DRAPERY/SHEER RODS - 3/$15; bedspread, king size, white, cotton, $15. Ext. 4695 or 744-1917.

VIOLIN - 1/16 size; GM car seat; gold brocade insulated drapes. 929-3594 after 5 p.m.

SLIDE PROJECTOR - Airequipt w/6 slide trays, $30. Ext. 2096 or 289-7658 eves.

BEDROOM SET - headboard, (2) night tables, dresser w/mirror, chest, formica finished maple, $250. Ext. 2896.

TYPEWRITER - Remington, manual, office size, $25. Joe, Ext. 4660 or 929-8982.

HOME/OFFICE COPIER - Bohn Rex Rotary 4000. 981-1332.

TENNIS RACKET - Dunlop Raleigh II, mid-size, 3L, strong w/stay-tight nylon, $40. Ext. 2671.

COLOR TV - 19", excel. cond. 281-3992 after 5 p.m.

RIDING MOWER - 7 HP B&S, Rugg grass catcher, $300; Lawn Boy edger, like new, $100. Joe, 475-8440.

FISH TANK - 55 gal., fully equipped, $200. Ext. 7187 or 981-9474.

CRAFTSMAN ROTOTILLER - 3 HP, 1 yr. old, 11" dia. tires, 11"-17" wide path, $190. Walter, Ext. 4220 or 924-0585.

FORMAL GOWN - light blue, sz. 9/10, great for prom, worn once, paid $85, you pay $50; 14 KT gold necklace w/diamonds, paid $200, you pay $150. Linda, Ext. 7745.

BATHROOM REMODELED - available, pink marble mica vanity w/pink sink & faucets, pink toilet, medicine cabinet. 878-1486.

BABY WALKER - deluxe, 3 wks. old, perf. cond., best offer. Louise, 924-0794.

STEREO - Scott 70 amp w/cabinet, $150; full size bed, excel. cond., $125; free b/w TV. Ext. 7197 or 821-9483.

FIR & SPRUCE TREES - U-dig, 20" to 40", 2/$7; Lily-of-the-Valley plants, we dig, 100/$5. 727-1617.

IRON - & cooker plus (slow cooker); hair dryer; high chair. 924-4991.

POOL LADDER - s/s 3 steps, $45; floating pool lounge, $10; (3) lamps, marble base, (2) lamps, ivory color. Jim, Ext. 4040 or 289-0876.

WRIGHT RECIPROCATING SAW - 19" bar, very good cond. but needs carb. work, orig. $319, asking $75; rototiller, 36" width, for yard tractor, like new, never used, orig. $350, now $200; ½bu. rotary spreader w/P.T.O. shaft for tractor use, used 2 hrs., $60. 929-4522.

JACKET - Mouton lamb, brown, good cond., fits sizes 14-16, $75. 475-0144 after 6 p.m.

AIRQUIPT SLIDE PROJECTOR - and carousels, projector & 3 carousels, $15; carousels, $3/ea., 3/$6.50; swimming pool filter motor, Hayward 3/4 HP, good working cond., $45. Joe, Ext. 4069 or 261-7825.

BATHROOM WASH BASIN - white porcelain, good cond., $10; (2) radiators, cast iron, 8"x 42"x25" high, $10/ea. 744-5096.

Real Estate

Real Estate advertised for sale or rent is available without regard for the race, color, creed or national origin of the applicant.

For Sale

CORAM - townhouse, 2-story, 4 yrs. old, 3 bdrms., 2 baths, l/r, d/r, eik, 2 zone oil heat, full bsmt., excel. buy. 473-6432 eves.

PATCHOGUE - high ranch, l/r, d/r, kit., 3 bdrms., 1 bath, large paneled f/r, garage, util. room, prime area, walk to schools, assumable 6% mort., low taxes, $39,000. Owner, 929-6984.

HOLBROOK/RONKONKOMA - 3 bdrm. Cape Cod, full bsmt., 2-car garage, 27' pool, 3/4 acre, $64,000. 588-5833.

WADING RIVER - 4 bdrms., 2 baths, d/r w/fireplace, ¼ acre, private beach rights, Shoreham-/Wading River schools, $70,000. Owner, 929-3594 after 5 p.m.

WADING RIVER - lovely wooded building plot, north of 25A, exclusive area, slightly under 2 acres, $24,500, no brokers. Owner, 928-0158.

MASTIC BEACH - 4 bdrm. cape, d/r, eik, large l/r, gas/hot water, 160x100 prop., low taxes, shed & full porch, near stores & bay, 8% Farmers mort., $28,000. 281-0360 after 6 p.m.

BELLPORT VILLAGE - 7 room cape, large l/r w/fireplace, sunny eik, 2 baths, bsmt., 2-car garage w/loft; excel. cond., near golf/tennis. $63,000. Owner, 286-8972.

BIRCHWOOD AT BLUE RIDGE - condominium, 15 min. from Lab, 3 bdrms., many extras, facing golf course, low 60's. 698-7213.

MIDDLE ISLAND - 2-3 bdrm., l/r, kit, bath, 1-car garage, on ½ acre (north of Jericho), $35,900. Joann, 744-2821 or 473-8760.

RIVERHEAD - mobile home, R&R Family Park, 12'x50' with 12'x15' master bdrm. extension, 3 bdrms., 2 sheds, deck, landscaped, $15,000. Dave, Ext. 7922 or 369-1792 before 8 p.m.

ROCKY POINT - 4 bdrms. colonial, 2½ baths, 2 car garage, inground pool, fenced yard, central air, fin. bsmt., alum. siding, 6% assum. mortg. by owner, $62,500 firm. 744-6929.

SHOREHAM - 3/4 acre wooded plot, will hold part mortg. Steven, Ext. 2023 or 744-0047.

For Rent

SOUTHAMPTON - summer/vacation rental, new, spacious, 3 bdrm. ranch, minutes from ocean and bays, adjacent to golf, all appl., sun deck, fireplace, rent includes use of boat. Summer season, $6,200; monthly/weekly also avail. 283-0223.

SOUND BEACH - furn. room, share 2 bdrm. apt., kit., l/r, bath, room has full size bed, phone & TV, walk to private beach, great for summer, $200/mo. incl. util., male preferred. Roy, Ext. 4664 or 744-8779.

Car Pools

RONKONKOMA - driver to join 3-person pool, LIE exits, 59, 60, 61. Victor, Ext. 2395.

Lost & Found

MISSING - silver/gray, Seruchi jacket, size 42. Anyone with knowledge of its whereabouts, please contact or return to James Benilto at Brookhaven Cafeteria.

FOUND - Poodle, Brookhaven Hamlet, 286-5879.

Wanted

SANDBLASTERS - to give an estimate for sandblasting house. Sharon, Ext. 3755/3830.

MOTORCYCLES - bent or broken, any age or cond. Kevin, 281-8031.

DOGSITTER - June 19 to Aug. 29, for friendly, spayed, Lab/Pointer, needs summer home. Bonnie, 399-2765.

ANTENNA ROTOR - TR-44 or Ham-M series, complete rotor or parts needed for rebuilding. George, Ext. 4227.

8 MM MOVIE CAMERA - in good cond. Ext. 2226 or 331-3445.

ACCESSORIES - for T199/4A home computer, hardware & software. John, Ext. 3292 or 286-1348.

PIPE VISE - bench type. Dinos, Ext. 4666.

BUNK BED - reasonable cond. and price. Steve, Ext. 2023 or 744-0047.

AMBITIOUS PERSON - $200-$300/mo., 6-8 hrs./wk. 698-5861 after 7:30 p.m.

BOY SCOUT UNIFORM SHIRT - size 12 or 14. Don, Ext. 7611.

HOMES FOR CATS/KITTENS - from local humane society. 928-9537 or 744-2821.

LAWN MOWER - Dick, Ext. 7772.

HOUSE TO BUY/RENT - South Bellport or Brookhaven, 1/1/83 or before Ext. 4388 or 286-5879.

PERSON WHO PAID FOR EVERGREENS - please call as to when taking them. 727-1617.

ROLLTOP DESK - Barbie doll collection (clothes, dolls, furniture); girl's 20" bike. Ext. 3516.

UTILITY TRAILER - complete or parts, sturdy carriage frame, full size wheels, any cond. Fred, Ext. 4823 or 588-2268.

LAWN EQUIPMENT - household tools, reasonable; wooden wardrobe, good cond. 369-2151 after 6 p.m.

CARPENTER - for small job. Ext. 4333 or 929-6984.

Services

Services are listed as a courtesy to BNL employees. They are neither screened nor recommended by the ***Bulletin****.*

ELECTRICAL WORK - reliable, reasonable. Joe, 399-0864.

HOME PET CARE - Going away? Daily pet care in your home, certified. 981-9420 or 928-8117 eves.

EXTERMINATING - licensed, all phases of pest control, termite specialist, no job too small, free estimates. 281-5445.

ROTOTILLING - for any size garden or lawn, $15/hr. Dave, Ext. 4289 or 288-3011.

HOUSESITTING - free, experienced, caring, any period after May 28. J. Allentuck, Ext. 2412.

RESUMES - prepared, typed, printed, cover letters. Bill Polvent, 821-9081.

LIMO SERVICE - luxury chauffered caddy, for proms, weddings, airport & night out. Roy, Ext. 4664 or 744-8779.

TILE SETTERS - ceramic quarry tiles, no job too small, free estimates. E. Harris, 475-6460.

ASPHALT PAVING - and sealing. Bob, 475-4382.

SPRING CLEANUP - yard work, landscaping; also light auto repairs, lowest rates possible. 289-9811.

BABYSITTING - and/or house cleaning, hours flexible, can provide refs. Cathi, 281-0360.

KAYAK LESSONS - basic and Eskimo rolls, local waters, 1½ hours, $10. Tim, 281-7873.

SPRING CLEANUP - ambitious, strong, 11 yr. old desires yard work, car washing, garage cleaning. Peter, 821-9547.

ATTENTION MOTHERS - Shoreham/Wading River/Rocky Point, responsible, loving, 13 yr. old desires babysitting/mother's helper position during summer months. Nancy, 821-9547.

CHINESE PAINTING INSTRUCTION - by experienced artist. 246-9167.

SMALL APPLIANCE REPAIRS - vacuums, all small appliances. No. Patchogue. 654-3900.

STEVE'S AUTO CLEANING - compounding & waxing. Ext. 4297 or 929-6877 after 5 p.m.

VERTICAL BLINDS - mini blinds, woven wood shades, discount prices, completely installed. Tony, 928-9241.

HOME IMPROVEMENTS - vinyl & alum. siding, alum. trim, roofing, gutters & leaders, custom carpentry, free estimate. Charlie, 744-3160.

EXPERT SMALL ENGINE REPAIRS - lawnmowers, motorcycles, etc., tuned-up & repaired, reasonable, pick-up & delivery. Mike, 924-0662 eves.

SAILING LESSONS - for adults and juniors, 9 yrs. and up. Setauket Yacht Club. Information, 751-5017 or 928-9461.

WALLPAPER HANGING - reasonable prices. Ext. 4070 or 472-3994.

BABYSITTING - reliable 18 yr. old, experienced, avail. days, nights, weekends. References supplied upon request. Jody, 924-7832.

Classified Ad Policy Deadline is 4:30 p.m. Friday for publication Friday of the next week.