BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Preventing Wear as Nuclear Power Plants Age

PSEAG members evaluate problems that have disrupted operation of a reactor circuit breaker: (from left) Bob Lofaro, Mike Villaran, Bill Gunther, Ralph Fullwoood and Ed MacDougall. Not present is Kenneth Sullivan.

Face lifts and color rinses can do wonders to camouflage some obvious aging effects in humans. But in dealing with long-term wear and tear in nuclear reactors, camouflage is not enough.

So, for the past five years, the Department of Nuclear Energy's Plant Systems and Equipment Analysis Group (PSEAG) of the Engineering Technology Division has been digging into the root causes of hardware and systems failures in nuclear power reactors — and they have been coming up with valuable ideas on how to stave off material degradation that's due to time and long-term usage.

The PSEAG's expertise is put to use by the Institute of Electrical and Electronic Engineers (IEEE), to establish recommended practices for detecting and mitigating age degradation in electrical equipment.

IEEE Standard No. 650, "Qualification of Battery Chargers and Inverters," is just one example of PSEAG's work in action. The group's investigations of specific systems and motor control centers in nuclear power plants have also resulted in their contributing to other nuclear power industry standards.

"We, and groups at five other national laboratories, also resolve questions for the Nuclear Regulatory Commission, which is committed to the strongest possible program of reactor plant safety and continuing operation," said John Taylor, who heads the PSEAG.

Data Buildup

To collect the wealth of data needed as the basis for their decisions, PSEAG first uses the results of their own

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Town Meeting Lists RHIC as 'Top Priority' Project

The highest priority was assigned to BNL's proposed Relativistic Heavy Ion Collider by over 100 nuclear physicists from around the country, who participated in a town meeting on high-energy heavy-ion physics held at Oak Ridge National Laboratory, April 24-25.

According to the white paper written at the town meeting, "The Relativistic Heavy Ion Collider (RHIC) was unanimously endorsed as the field's top priority item for construction. The machine should be constructed expeditiously to make its opportunities available and provide a logical focus for the present programs at lower energy machines."

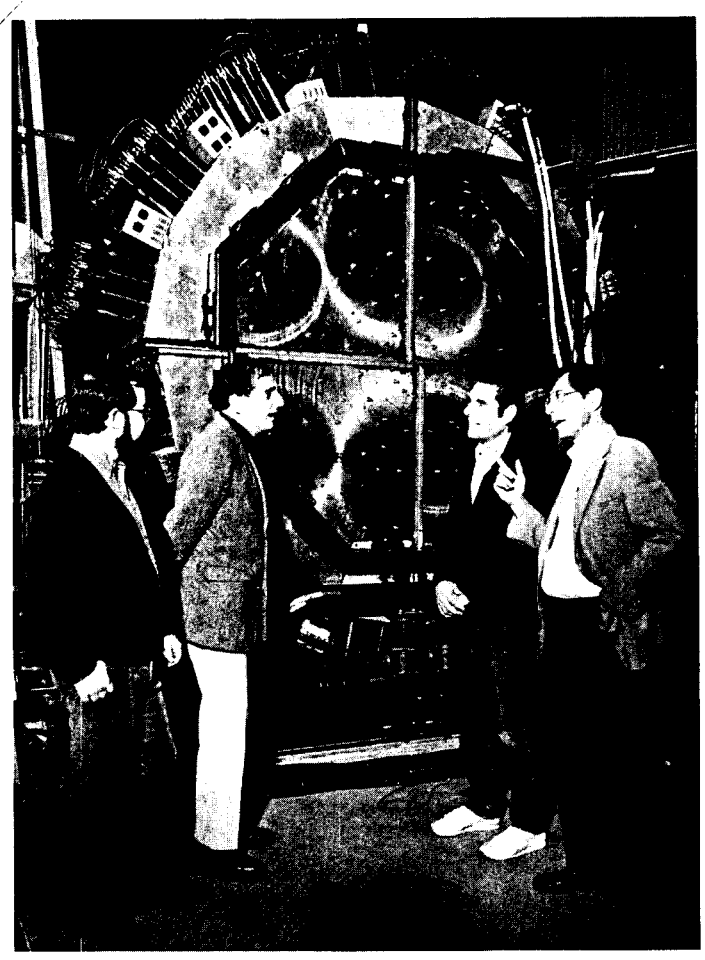
"The demand for this facility transcends individual research interests, as the consensus is that it will be good for nuclear physics in general," reports RHIC Task Force Head Thomas Ludlam, Physics Department, one of the ten BNL'ers who attended the town meeting.

This town meeting was the fourth in a series of six meetings sponsored by the Nuclear Physics Division of the American Physical Society. They are being held to allow the nuclear physics community to have a voice in a long-range plan being formulated by the Nuclear Science Advisory Committee (NSAC).

Established by the U.S. Department of Energy and the National Science Foundation, NSAC advises these agencies on the future of nuclear physics and the need for funding new facilities and experiments. BNL's NSAC representative is Carl Dover, Physics.

To come up with the plan, however, NSAC, which normally has 18 members, has called upon an additional 35 physicists to participate in the deliberations. The addition includes BNL's Richard Casten, Physics, and Ludlam. The NSAC planning group will meet in Boulder, Colorado, in August to write the plan, using input from the town meetings.

(From right) Thomas Ludlam and David Lissauer describe one of the state-of-the-art detectors for heavy ion experiment E814 at the AGS to Michael Tannenbaum and Ramiro Debbe. The four are some of the BNL'ers who attended the town meeting on high-energy heavy-ion physics. Other BNL physicists at the meeting were Peter Bond, Mirek Fatyga, Kenneth Foley, Edward O'Brien, Harvey Wegner and Klaus Werner.



Photos in this issue by Roger Stoutenburgh.

For the purpose of the town meeting on heavy ion physics, high energy was defined as 20 million electron volts per nucleon. At that energy and above, machines for probing the atomic nucleus using heavy ions include BNL's Alternating Gradient Synchrotron (AGS), using the Tandem Van de Graaff as the heavy ion injector and reaching an energy of 14.5 billion electron volts (GeV) per nucleon.

BNL's proposed RHIC would have an energy of 100 GeV per nucleon in each of the two colliding beams — which is equivalent to 20,000 GeV per nucleon in an accelerator with a single beam hitting a fixed target.

During high-energy, head-on collisions of heavy ion beams in RHIC, the energy density is expected to be at least ten times higher than in ordinary nuclear matter — high enough to produce a plasma of quarks and gluons not seen since the Big Bang.

The need and rationale for RHIC has been supported over the past two years by results from experiments at the AGS, with ion beams as heavy as silicon, which has 28 nucleons per ion, and at CERN's 200-GeV-per-nucleon SPS collider, with ion beams as heavy as sulfur, 32 nucleons per ion.

"To continue the line of reasoning of this research, first, we need to go to heavier nuclei — which the AGS Booster [now under construction] will allow us to do — and then we need to go to higher energy — with RHIC," comments Ludlam.

One of the hopes that the nuclear physics community is attaching to RHIC is that it will attract more Ph.D. students into the field.

"At the meeting, students testified that they found their participation in high-energy collaborations like E802 and E814 — two AGS experiments studying heavy-ion collisions — exciting and fulfilling, and that they thought that RHIC would provide a good environment in which to train

(Continued on page 2)

Optics: The View From Japan

Japan's Technology Transfer Institute periodically puts together groups of experts in one field to share ideas on a given topic with their American counterparts. On Monday, May 1, BNL hosted the latest such group: the Study Mission on Ultra-Precision Engineering of Aspheric Lens.

The speakers, who came from Japan's Chubu University, SONY Corporation, Kuroda Precision Industries, Toyota Machine Works, Mitsubishi Electric Corporation, Hitachi Seiko, Orimbus Optical Company and Brother Industries, gave a total of eleven talks on various aspects of optics. On the receiving end of this technology transfer opportunity were over 20 representatives from small Long Island businesses, as well as the Grumman Corporation.

"The Long Island industrial people came to learn what the Japanese are doing in optics," said Seymour Baron (second from right), BNL's Associate Director for Applied Programs, who directed the idea exchange coordinated by Dorry Tooker (right) for the Lab's Office of Research and Technology Applications. "They also said that they had learned just how far behind the Japanese they are and had made contacts for doing future business with Japan."

Happy Birthday, Edward Lear!

There was an old man with a beard,
Who said, "It is just as I feared! —"
Two Owls and a Hen,
Four Larks and a Wren,
Have all built their nests in my beard!"

What does this limerick have to do with BNL? Absolutely nothing because, when its author, the British poet Edward Lear, was born 177 years ago, on May 12, 1812, the science and sights of BNL were unheard of.

But their fates were eventually to intertwine: Lear grew up to be a master of the limerick form. About one hundred years later, BNL grew into a master of the scientific world. And in the past few weeks, nearly 20 BNL'ers — with Lear as their inspiration and with the unlikely subjects of BNL sights and science as their focus — produced almost 70 limericks "with a bite" — and Edward Lear would be proud!

As the limericks poured in, they fell into two categories: Those that had a scientific bent and those of a more general nature. So we decided to name two lucky first-place winners, each to receive a bouquet of five balloons from the BERA Sales Office.

In the scientific category, congratulations and the balloons go to Fern Simes, Physics Department, and in the general area, the prize was taken by Barry Arbeit, Computing & Communications Division (CCD). The winners should stop by the Bulletin office, Bldg. 134, to pick up the certificates for their prizes.

Though we did choose two winners, it wasn't easy, so we're also running this week those limericks that made the decision the toughest — the honorable mentions. In the science category, these are two limericks by Martin Howard, Physics Department. In the general group, these limericks were written by Arbeit, Simes and Keith Power, Accelerator Development Department (ADD).

Since most of the rest of the field were also wonderful, they have been named runners up. We don't have space to run them this week, but they'll appear in future Bulletins as space permits.

Be on the lookout for limericks by: Anthony Baltz, Physics; Lamar Gardner, Supply & Materiel Division; Michael Goldman, Alternating Gradient Synchrotron Department; Bill Gunther, Department of Nuclear Energy (DNE); James Higgins, DNE; Harriet Martin, Technical Information Division; Edward Meier, National Synchrotron Light Source Department; Cindy Morgan, Plant Engineering Division; Ulysses Othon, ADD; Susan Pepper, DNE; Aditya Sambamurti, Physics; Liz Seubert, Public Affairs; Morris Strongson, CCD; and Alice Trubisz, retired from the Fiscal Division as well as Howard, Power, Simes — and Anonymous!

BNL Scientific Limericks

First Place

There are protons and neutrons and pi's
And some not yet found, we surmise.
At the Lab we explore,
Kaons, muons and more,
With an eye on that fair Nobel Prize.
— Fern Simes

Honorable Mention

A BNL kaon, lucky critter,
Wed a proton and promptly did split'er.
They soon had five particles,
Which were cute little articles,
With pi zero the runt of the litter.
— Martin Howard

RHIC will incorporate provisions,
For very heavy particle collisions,
So ions and protons
And pions and photons
May undergo new subdivisions.
— Martin Howard

BNL General Limericks

First Place

Our founders, though usually lenient,
Squared off over one small ingredient,
But they settled that fight
By selecting a site
That was mutually most inconvenient.
— Barry Arbeit

Honorable Mention

There's a place on the Island some say
People work in the future each day.
The place that's the maven
Is here at Brookhaven
Where the deer and the scientist play.
— Keith Power

There was a young fellow named Mel
Who worked here at old BNL
Though he toiled all day,
In the evenings he'd play,
"Praise to BERA," you'd oft hear him yell!
— Fern Simes

Coming Up

Tonight, Brookhaven's research on cold fusion will be featured in a segment of the *20/20* television broadcast on ABC, channels 7 and 8, at 10 p.m.

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The annual National Synchrotron Light Source Users' Meeting will be held Thursday and Friday, May 18-19, in Berkner Hall. For information about the agenda or registration, call User Administrator Susan White-DePace, Ext. 7114.

•

Physicist James W. Davenport, Physics Department, will deliver the next Brookhaven Lecture on Wednesday, May 24, at 4 p.m. in Berkner Hall. The topic of his lecture will be "Electronic Structure Since Dirac."

Note to Employees:
Attendance at lectures, meetings and other special programs held during normal working hours is subject to supervisory concurrence.

Town Meeting (cont'd)

future students," states Ludlam.

He concludes, "The field is getting impatient waiting for RHIC funding because it was in the last NSAC long-range plan five years ago — and the fear is that nuclear physics will suffer if the start of the RHIC project is delayed any longer."

— Marsha Belford

Need a referral for reliable child care? Call:

*The Child-Care Referral Service provided by Creative Child Care Services (CCCS) is free to BNL employees.

Nuclear Plants (cont'd)

Preparing slides for a PSEAG presentation on nuclear plant aging research to the Nuclear Regulatory Commission are (standing, from left) John Taylor, Mano Subudhi and (at computer) Ann Fort.

investigative tests. To add to their own program, they research the latest reports in the literature, in individual plants' data bases and the national data base, where each utility enters data on failures.

"The data include facts about maintenance timetables and how often components are tested," said Taylor. "Whenever possible, we take data firsthand, visiting people in the field who use the components we test. We also add comparable data from non-nuclear power plants that use the same parts, such as circuit breakers."

One of the PSEAG's recent investigations involved inverters, which convert one kind of electric current to another and are used to supply power to safety-related equipment in nuclear power plants. Most plants need at least two inverters so that electric power is available even if the rest of the station is blacked out.

"The NRC wanted a full assessment of aging effects on inverters, and practical monitoring and maintenance recommendations," said Taylor. "We got an inverter from the now retired Shippingport Atomic Power Station in Pennsylvania. After reviewing and analyzing all available information on how they operate, we started testing."

Testing, 1, 2

The first step was to examine the inverter "as received," by checking the condition of insulation around the wires and how well switches operated, for example. "We looked for signs of overheating, corrosion or ventilation blockage," explained Bill Gunther, also of the PSEAG. "But other than a thin film of accumulated dirt, everything seemed in order."

Next, the group tested the inverter under various operating conditions to see whether it met design specifications. "When we compared these results with the results recorded when the machine was new, we got a good idea of potential areas of degradation," said Gunther.

The assessment revealed that a major contributor to premature failure of the inverter was overheating in the internal cabinet.

"So, we emphasized testing that monitored performance under conditions of restricted ventilation," said Mano Subudhi, PSEAG's principal investigator for the aging program. "We found, for example, that just a small decrease in operating temperature significantly increases the life of the electrolytic capacitors in the inverter."

These test results, as well as electrical measurements, were entered into the PSEAG data program. Whenever possible, the exact point when deterioration had set in was noted, as was the rate at which it worsened according to different sets of circumstances.

When Delay Is a Plus

From such information, a picture emerges of the contributing factors that can cause failure of a part. The PSEAG team can predict how quickly failure from age and long service can be expected, then recommend practical ways to monitor and repair components so that the effects of age can be detected well before failure occurs.

"We have a two-part formula to manage aging," said Subudhi. "First understand it, then provide ways to manage it, which covers monitoring, inspecting, testing — and maintenance."

"The emphasis being laid on conserving the country's reactors is understandable," concluded Taylor, "because no new plants are being built. So, the key to the upcoming relicensing of many aging plants is close surveillance and excellent maintenance practices." — Liz Seubert

Food for Thought

Eleven hundred, plus twenty, pounds
Were last month in the food buckets found.
We will beat that in May
If you recall Monday
That the week of the food drive's come round!

If you'd like to contribute to BNL's food drive but don't have the time to shop, let a food-drive helper shop for you. Just send a donation to Food Drive Chair Carole Kerr, Bldg. 460, Ext. 7100. When the shopping is done, you'll get a receipt.

If you'd like to contribute to BNL's food drive, but your budget's tight, veteran donors have a few suggestions:

• **Cash in your cans** — If you have beverage cans and bottles lying around, redeem them and use the returned deposit to buy food for Brookhaven Town's needy.

• **Cash in your coupons** — Instead of passing up a coupon because it's something you don't need, cash it in for a discount on something that someone else can use.

• **Check out your cupboards** — Is there an extra can of soup? A brand of peanut butter your finicky kids will never touch? Someone else's kids would love a lunch of a bowl of soup and a peanut butter sandwich — no matter what the brand!

If there's no food-drive container in your area, why not start one, then call Kerr when you're ready for a pickup?

Help those food drive totals to keep rising in May.

Pounds Collected:

November	1,680	February	860
December	1,306	March	800
January	740	April	1,120

The Upton Nursery School Presents: Music for the Whole Family

Children's entertainer Viki Diamond will perform at BNL on Sunday, May 21, in a concert sponsored by the Upton Nursery School. Diamond, who first delighted audiences at the Lab over ten years ago, provides entertainment for the entire family. Her songs and stories, accompanied by guitar, autoharp or hammer dulcimer, will begin at 2 p.m., in the Recreation Building.

The concert is open to the public. A donation of $5 per family is suggested.

Those attending the performance can be introduced to the teaching staff of the Upton Nursery School, a cooperative nursery school open to children of BNL employees and BNL visitors. At the concert, applications will be distributed for September enrollment in the school's classes for three-and four-year-old children.

Lucy Liu (Liu Siyu)

THE BERA ART COMMITTEE
presents

three Aspects of Art

Elinor Kahana

Berkner Hall
Rooms B and C

OPENING: Monday, May 22
12:30 p.m. to 2:00 p.m.
and
5:00 p.m. to 7:00 p.m.
—Refreshments—

Tuesday, May 23
through
Wednesday, May 24
11:30 a.m. to 1:30 p.m. daily

Brenda Watson

Brookhaven National Laboratory, Upton, New York

Golf Tournament

The BGA will sponsor its third golf tournament of 1989 on Monday, May 22, at the Hampton Hills Golf and Country Club. The tournament will have a shotgun start beginning at 12:30 p.m. Golfers must be at the course 20 minutes early to receive hole assignments.

Reservations can be obtained by calling Mike Losquadro, Ext. 7594, by May 18. Preference will go to foursomes with a minimum of three BGA members. Callers are encouraged to have completed foursomes.

Greens fees, to be paid in the Pro Shop, are $25. The entry fee, to be collected by the starter, is $1 for BGA members, $2 for nonmembers. Riding carts will be available for $30 per cart. In the event of rain, direct questions to the Pro Shop, 727-6862.

To reach the golf course, take County Road 111 south at Exit 70 on the LIE, then go east on County Road 51 to the course.

ANS Meeting

Pierre Grand, who heads the Neutral Beam Division in the Department of Nuclear Energy, will be the guest speaker at the next meeting of the Long Island Section of the American Nuclear Society (ANS). His talk on "Accelerator Production of Tritium," will begin at 8 p.m. on Tuesday, May 16, following cocktails at 6 p.m. and a buffet dinner at 7 p.m., at the Bavarian Inn, in Lake Ronkonkoma. For dinner reservations, contact Lydia Ryan, Ext. 2380, by May 12.

Arrivals & Departures

Arrivals

Eugene Barrow ..... Plant Eng.
Nicholas B. Brooks ..... Physics
Yuh-Ru Chen ..... Biology
Harold L. Green ..... NSLS
Francis X. Hartmann ..... Chemistry
Alan R. MacIntyre ..... Sfgrds. & Sec.
Peter L. Maier ..... Personnel
Thomas P. McEvaddy ..... Plant Eng.
William J. Simmons ..... Physics
Dingwei Yu ..... Chemistry

Departures

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

Henry J. Henck ..... Central Shops
Nancy L. Johnson ..... DNE
Marc D. Pfeffer ..... Instrum.

BROOKHAVEN BULLETIN

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Microcomputer Club

The BNL Microcomputer Club will present a lecture on Thursday, May 18, by Dave Stampf, Computing & Communications Division. He will discuss the concept of object-oriented programming, and how it promises to transform our world of programming and computers.

The talk will attempt to describe this important movement to the layman as well as to the experienced programmer. A few examples from Object Pascal, SmallTalk, and C++ will be examined and demonstrated.

The presentation will take place at noon in the main conference room, Bldg. 475. All those interested in this exciting topic are invited to attend. For more information contact Frank Salzano, Ext. 4458.

Bowling

Red/Green League

R. Mulderig had a 253/246/214/713 scratch, T. Prach 242/225/655 scratch, W. Kristiansen 213, A. Warkentien 211, J. Connelly 203, C. Flood 203, E. Sperry IV 203, E. Carter 202.

Pink League

Sandy Asselta had a 188 and converted the 6-7 split, Rene Rosati 186, Lynette Finlay converted the 5-7 split.

White League

J. Ferrante had a 213. Hook or Crook took first place, and Four of a Kind took second.

Purple League

M. Belligan had a 183. Looney Tunes took first place and Purrhaps took second.

Cafeteria Menu

Week of May 15

Monday, May 15		
Soup: Tomato bouillon w/rice	(cup)	.75
	(bowl)	.95
Honey-dipped fried chicken w/potatoes or veg.		3.10
Spanish meat loaf w/potatoes or veg.		3.10
Lite-line: Broiled chicken w/veg.		3.10
Hot deli: BBQ ham hero		2.85
Tuesday, May 16		
Soup: Dutch potato	(cup)	.75
	(bowl)	.95
London broil w/mushroom gravy		3.10
Chicken teriyaki over rice		3.10
Lite-line: Sliced beef au jus		3.10
Hot deli: Pastrami		2.85
Wednesday, May 17		
Soup: Old-fashioned cabbage	(cup)	.75
	(bowl)	.95
BBQ beef over egg noodles		3.10
Baked manicotti w/garlic bread		3.10
Lite-line: Antipasto salad		2.50
Hot deli: Tuna or chicken melt croissant		2.85
Thursday, May 18		
Soup: Oxtail	(cup)	.75
	(bowl)	.95
Batter-dipped white fish à l'orange w/potatoes or veg.		3.10
Shepherd's pie		3.10
Lite-line: Broiled fish Key West		3.10
Hot deli: Grilled cheese w/bacon & tomato		2.85
Friday, May 19		
Soup: Seafood bisque	(cup)	.75
	(bowl)	.95
Turkey piccato w/potatoes or veg.		3.10
Cod Provencal w/potatoes or veg.		3.10
Lite-line: Oriental seafood salad plate		2.50
Hot deli: Corned beef		2.85

Social Club

Among the trips now available through the Social Club are:

- Acapulco or Cancun — reservations available for the months of May, June and September, each at $389.
- Great Adventure package — $21.55 a person for Saturday, June 17.
- Two cruise options from New York to Bermuda — July 23 or August 13, five nights, prices start at $565 per person/two per room; July 2 or September 3, six nights, prices start at $427 per person/two per room; for both options, children under 12 are free, one child for each full-fare adult reservation.

For more information, call Doris Terry, Ext. 7610.

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 and/or appropriate bargaining unit, 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 Employment Manager, Ext. 2882.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

4038. AUTOMOTIVE OFFICE CLERK - (temporary - 8/14/89) - Performs diverse office duties, which include heavy telephone work, computations, preparation and maintenance of purchase requisitions and service reports. Must be proficient with typing and data entry. Staff Services Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

4039. PLUMBER B - (temporary) Under general supervision, constructs or installs, repairs and maintains water and gas distribution systems, related facilities and auxiliary equipment, and equipment utilizing water, gas and heat distribution services. Requires previous experience in the trade. Plant Engineering Division.

4040. METAL WORKER MAINTENANCE B - (temporary) - Under general supervision, constructs and installs a variety of metal equipment, such as sinks, gutters, ventilating hoods, stands, etc. Operates brazing, welding and silver soldering incidental to the job. Requires previous experience in the trade. Plant Engineering Division.

4041. ELECTRICIAN B - (temporary) - Under general supervision, constructs, installs, maintains, repairs and operates electrical systems, equipment, controls and related devices. Requires previous experience in the trade. Plant Engineering Division.

4042. CABINETMAKER B - (temporary) - Under general supervision, constructs, modifies and maintains furniture, laboratory equipment, and buildings and component parts. Works with wood, wood substitutes and combination materials, and flooring, roofing and wall materials, Uses hand, portable and fixed tools common to building-construction and cabinetmaking trade. Requires previous experience in the trade. Plant Engineering Division.

4043. SCIENTIFIC ASSOCIATE POSITION -Requires BS degree in biology, chemistry, physics, nuclear medical technology or the equivalent. Qualified candidates must be registered by the American Association of Radiologic Technologists (AART) or the Nuclear Medicine Technician Certifying Board (NMTCB) or, at a minimum, be registry eligible. Experience should include 3-5 years' clinical imaging experience, including single proton emission computer tomography (SPECT). Research and experience working with animals is highly desirable. Medical Department.

4044. TECHNICAL POSITION - Requires AAS in electronic technology or the equivalent experience. Must have experience in fabrication, assembly and testing of complex electronic printed circuits and electromechanical equipment. Instrumentation Division.

4045. STEAMFITTER A - Under minimum supervision, lays out, constructs, or installs, repairs and maintains heat, steam and water distribution systems, related facilities and auxiliary equipment and piping, and equipment utilizing head, steam and water distribution devices. Plant Engineering Division.

Motor Vehicles & Supplies

86 MAZDA B-2000LX PICKUP - bed liner & cover, charcoal gray, 50k mi., $4,000 neg. 744-2848.

86 OLDS CALAIS - 5-spd., a/c, p/s, p/b, 52k mi., clean, 1 owner, $7,000. Ed, 358-7734 after 4 p.m.

85 HONDA CIVIC - 4-dr., a/t, am/fm stereo cass., 4-spkrs., new Goodyear tires, under warranty, 44.5k mi., white, excel., $4,500. Jane, Ext. 5406.

85 FORD BRONCO XLT - 39k mi., a/c, p/w, p/d, p/l, cloth captains' chairs, $12,500. George, Ext. 2023.

84 ESCORT - h/b, 4-spd., a/c, 4-dr., am/fm, 70k mi., runs well, some body work, $1,200 neg. Anne-Marie, Ext. 5028 or 345-5047.

84 PONTIAC FIERO SE - red, fully loaded, low mi., immaculate cond., asking $4,500. Ext. 4313 or 722-4094 after 6 p.m.

84 YAMAHA RZ350 - red/white, light, clean, fast, tank-pack, good cond., $1,500. Scott, Ext. 4167.

84 DODGE ARIES - good shape, am/fm, a/c, clean in & out, many new parts, $2,500. Wick, Ext. 7527.

83 CHEVY CHEVETTE - a/c, am/fm cass., 4-spd., alloy wheels, 86k mi., excel. cond., $1,300. 473-8582.

83 VW JETTA - a/t, a/c, p/b, fuel injected, am/fm cass. stereo, 64k orig. mi., mint cond., $4,000. 654-4661 eves.

83 BUICK CENTURY - a/c, am/fm, 4-dr., cloth int., good cond., asking $3,500 neg. Charles, Ext. 5211.

83 RENAULT FUEGO - convertible, 5-spd., p/s, a/c, stereo, mint cond., $1,600. Mike, Ext. 7584.

82 KAWASAKI SPECTRE - 750cc, shaft drive, garaged, 8k+ mi., new rear conti., mint cond., asking $1,100. Henry, Ext. 4547 or 727-7227.

82 CHAMP - front-end damaged, many new parts, best offer; Sears Diehard w/warranty, $25; spare tire, cheap. Joyce, 563-2889.

82 SENTRA - some body damage, $300. Dick, Ext. 7185.

81 BUICK SKYLARK - 6-cyl., 4-dr., gray, a/c, p/s, p/b, 80k mi., $1,900. Ramesh, Ext. 4410.

81 HONDA CIVIC - 4-dr. sedan, 80k mi., a/c, 5-spd., runs well, $1,100. Lin, Ext. 3137 or 4480.

81 PLYMOUTH TC3 - 4-spd., good cond., $1,200 neg. Phil, 286-1348.

80 CHEVY MONZA - 4-cyl., std. shift, $250. 821-1042.

79 FORD LTD - 2-dr., 8-cyl., 81k mi., a/t, p/s, p/b, a/c, clean in/out, $1,200. Lee, Ext. 3579 or 3104 eves.

78 CHEVY NOVA - 4-dr., a/t, p/s, r/h, good cond., orig. owner, $990. Sandy, Ext. 3369 or 286-1022.

78 DATSUN 280Z - new exhaust, clutch, carpet, paint, very clean, $3,250. 543-7065.

78 NOVA RALLY SPORT - V-8, a/t, a/c, tilt, buckets, am/fm cass. $1,650. Glenn, 821-5165.

78 DATSUN 280Z 2+2 - new air-flow box, good tires, T-top, not running, parting out, make offer. Ext. 2345 or 929-3910.

77 KZ1000 - runs, needs work, many extras, asking $600. Jim, Ext. 4986 or 475-5469.

77 CHRYSLER LEBARON - 8-cyl., a/t, a/c, p/s, p/b, $350. 654-4661 eves.

76 DODGE VAN - lots of seats & space, needs timing chain, must see. 399-6390 after 5 p.m.

75 BMW R-90 MOTORCYCLE - 900cc, good cond., $1,800. Roger, Ext. 7518 or 878-8847.

75 DATSUN B210 - good station car, asking $150. Dave, 286-0429.

74 BRAVO POP-UP CAMPER - sleeps 8, double dinette, tandem axle, gas stove, portapotty, 3-way refrig., good cond., $1,200. Nolan, Ext. 3541.

73 JEEP MAIL TRUCK - L.H.D., 6-cyl., a/t, runs well, $250 neg. John, Ext. 2172 or 744-4386.

73 VOLKSWAGEN - a/t, tow it away & it's yours. Rich, Ext. 3386.

71 CHEVY VAN MINI MOTOR HOME - 350, V-8, a/t, p/b, over 100k mi., sleeps 6, complete, asking $3,800. Ron, Ext. 2467 or 924-8644.

69 HONDA MOTORCYCLE - 90cc, 2,100 mi., needs battery, excel. cond., $150. Mike, Ext. 2052.

67 CHEVY ENGINE - 4-bolt main, 30 oversize. 475-9452 after 5:30 p.m.

CAR TOP RACKS - H.D., like new, $20. 924-2726.

YAMAHA VIRAGO MOTORCYCLE - 750cc, black, garaged, low mi., extras, mint cond., asking $1,900 neg. Charles, Ext. 5211.

RIMS - Sport Rally-style, complete set, 15"x6.5" for Chevy-Astro/GMC-Safari vans, $250. E. Edwards, Ext. 4308.

TIRE - new 721 Firestone, 235/75R15, Eldo rim, $65. Ernie, 588-4987.

TIRES - 4 Goodyear G-Metric, 165SR15, for VW Bug, computer balanced, road hazard warranty, 200 mi., $200. Lieping, Ext. 3867.

PONTIAC GRAND AM - m/t, 17k mi., a/c, p/s, p/b, cass., excel. cond., $6,900. 665-4499 after 4:30 p.m.

TIRES - Firestone 721, S/B radials, two, 205x75x15, w/w, good cond., $15 ea. Harry, Ext. 4504.

86 KX125 - purchased new 5/88, good cond., $1,200; bike, full equipment, $400. Ken, 473-7460.

89 HONDA ACCORD LXI - sedan, for sale at the right price. Jerry, Ext. 4487 or 363-6908.

88 MITSUBISHI VAN - excel. cond., a/c, a/t, 12k mi. Bawa, Ext. 3357 or 366-2682.

86 HONDA CIVIC SI - h/b, 5-spd., 55k mi., excel. cond., $4,800. Chris, Ext. 2022 or 395-6112.

86 CHEVY CAMARO - 8-cyl., T-tops, new tires, a/c, p/s, p/b, am/fm cass., excel. cond., $7,900 neg. Dave, Ext. 4037.

86 CHEVY SPRINT - silver, a/c, 50 mpg, excel. cond., $3,400 neg. Bill 821-1459.

84 RENAULT ENCORE - 45k mi., 4 drs., dark red, looks new, trans. needs work, new brakes, new muffler, new clutch, $1700. Wei, Ext. 4213.

84 TOYOTA 3/4-TON LONG BED - liner, 2wd, a/c, 5-spd., good work truck, 43k mi., $2,500. 878-6274.

83 YAMAHA VIRAGO MOTORCYCLE - 750cc, black, mint cond., garaged, low mileage, extras, $1,900 neg. Charles, Ext. 5211.

83 NISSAN SENTRA - h/b, light blue, clean, 5-spd., 35 mpg, am/fm stereo cass., asking $1,800. Sharon, Ext. 3995.

82 SUBARU GL - 4-dr., silver, sunroof, 5-spd., 102k mi., runs very well, and kept well, $1,500. Joann, 472-6742.

82 OLDS CUTLASS SUPREME - 2-dr., a/c, p/s, p/b, new tires, stereo, $4,500. 366-0021.

82 MUSTANG GT - 19k miles left on warranty, many new parts, outstanding buy, $3,950 or best offer. Ed, Ext. 4188.

81 BUICK REGAL - p/s, p/b, a/t, a/c, V-6, 69k mi., no rust, new battery, very clean in/out, $2,950. 654-1216.

81 RENAULT 18i - am/fm, tape deck, needs trans. work, $500. Peter, Ext. 3535.

81 FORD ESCORT - high mileage, runs well, 4-spd., $700. 929-5911.

80 DATSUN 310 - excel. running cond., $1,500. Wendy, Ext. 3206.

80 PONTIAC J2000 - a/t, a/c, good cond., $2,500. 286-3875 after 5:30 p.m.

79 CHEVY LUV MOTOR HOME - sleeps five, 12V, 110, gas, fully self-contained, 4-spd., 4-cyl., clean in/out, asking $6,000. Paul, 273-6796.

79 VOLVO 242DL - 2-dr., p/s, p/b, a/t, am/fm, climate control a/c, security system, orig. owner, mint cond., $3,400. Ext. 7713.

Boats & Marine Supplies

31' CORVETTE SLOOP - classic keel/CB, fully equipped, excel. cond., $18,000. Ext. 2053 or 363-2796.

30' CATALINA - diesel, fully equipped, in water, ready to go, excel. cond., $28,000. Ext. 4221 or 765-3818 after 6 p.m.

25' MORGAN SAILBOAT - keel, centerboard, new sails & outboard, ready for launch, $7,000. 821-0686.

25' GRAN BATEAU CRUISER, 1978, 255 Volvo, loaded, lots of extras. 366-0021.

25' CHRIS CRAFT - 1975, sleeps 4, Loran V.H.F., swim platform, $7,500 or best offer. 475-8162 eves.

23' COLUMBIA SAILBOAT - 1976, 1986 Yamaha 6 h.p., very clean, must see. 924-2016 after 6 p.m.

22' CATALINA SAILBOAT - 3 sails, trailer & motor, good cond., asking, $4,800. 929-8912.

21' LUND - 1974, fiberglass, Merc. I/O 302 motor, needs work, $500. John, 589-0507.

20' BAYLINER CC - 1983, 125 Volvo & trailer, $6,500; 3-man raft w/motor, $400. Mike, Ext. 2372 or 758-3361.

19' FLYING SCOT - sails, spinnaker, trailer, excel. cond. Perlman, 472-1174 eves.

19' BOWRIDER CRUISER - 1972, w/1976 115 h.p. Johnson, Coast Guard pkg. w/trailer, $3,500. Frank, 567-5131.

19' BAYLINER BOWRIDER - 1984, & trailer, 125 h.p. Volvo I/O, many options, rarely used, must be seen, $6,500. Don, Ext. 2981.

18' SOL-CAT CATAMARAN - w/trailer, beach wheels, harness, other, excel. cond., $2,000. 821-0686.

18' STEIGERCRAFT - 1984, center console, 1986 90 h.p. Merc., VHF, c.b., depth finder, 1987 trailer, $8,500. 286-2274.

17' ARISTOCRAFT - 1965, fiberglass, rebuilt 60 h.p. Merc. I/O, very economical, excel. cond., w/trailer, ready to go, $1,700. Mark, Ext. 2599.

12' ALUMINUM BOAT - MFG, w/6 h.p. Evinrude, like new, many extras, $550 firm. John, 821-3739 after 6 p.m.

9' SAILING DINGHY - fiberglass, w/2½ h.p. Evinrude, $350. 734-5343.

RV/MARINE BATTERY - 12 V., deep cycle, #9650, $12. Ext. 4597 or 924-8213.

OUTBOARD MOTOR - 1976, 25 h.p. Evinrude, long shaft, manual start, recent overhaul, $275. Brian, Ext. 2799 or 757-1581.

MOTOR - 1988, 15 h.p. Evinrude, short shaft w/tank, used 4 times, mint coind., $1,050. Jim, Ext. 7971 or 286-1358.

Furnishings & Appliances

DINING ROOM SET - contemporary, walnut, 6 ladder back chairs, 2 leaves, best offer; upright commerical freezer, excel., Bobbie, Ext. 2456.

TOUCH LAMPS - 2, good cond., $25/pair. Jim, Ext. 4986 or 475-5469.

SOFA - 54", contemporary, beige w/orange floral print, good cond., $50; 30"w/range, hood, almond, 2-speed, like new, $25. Phil, 363-2070 eves.

COUCH - 7', natural rattan, navy, mauve & white loose cushions; 2 chairs, mushroom cushions, asking $900. 369-9146 after 5 p.m.

DRESSER - mahogany, w/mirror, very good cond., $100. 689-7326.

SOFA & LOVE SEAT - early American, good cond., must sell, $125. Vita, 277-0464 or Frank, Ext. 7519.

COUCH - good cond., new cover, $25. JoAnn, Ext. 4120.

DOUBLE BED - w/bookcase-type headboard, gray, $25; double spring & mattress, $25. 325-1537 after 6 p.m.

PRINCESS DRESSER - antique, oak, 2-drawer, great cond., orig. oval mirror, $500. Henry, Ext. 4547 or 727-7227.

VERTICAL BLINDS - for 6' sliding door, plastic, beige, brand new, still in box, $25. Mike, Ext. 2052.

LAMPS - tables, fish tanks, other household items. Kathy, 744-2203.

FREEZER - Westinghouse, 19.6 cu. ft., upright, excel. cond., $400. Richard, Ext. 7519 or 696-2258.

REFRIGERATOR - & freezer, side-by-side doors. 369-8683.

BATHTUB - antique, cast iron, claw foot, price neg. if you remove. Wells, 878-4214.

AIR CONDITIONER - Westinghouse, 5k Btu, $125. Ext. 7918 or 744-3068.

LEATHER FURNITURE - Brazil contemp., dark brown w/rosewood frame, very good cond., make offer, Ext. 2799 or 757-1581.

DINETTE TABLE - & 4 chairs, $40; handcrafted wood room divider, $270. 751-4539.

COUCH & LOVESEAT - white & gold velvet, crescent shape, 2 sets custom slipcovers, $200. 734-5343 eves.

DEACON'S BENCH - pine, excel. cond., $65; maple tea wagon, w/2 leaves, excel. cond., $125; maple rocking chair, excel. cond., $35. 584-7970.

Tools, House & Garden

TUNE-UP CENTER - Snap-on, 3 meters, asking $250; brake bleeder, asking $125; 20-ton air assisted hydraulic jack, $200. 474-5715.

MOWER - Lawnboy, $50; riding lawn mower, runs well, $100. 727-0082 after 6 p.m.

POOL EQUIPMENT - 1 h.p. pump, vacuum hose head & pole, s/s ladder, 35 lb. dio. earth, dio. earth filter, etc. Raka, Ext. 4727.

LAWN MOWERS - Murray, 22" cut, 3½ h.p., self-drive, w/bag, $125; Sears, 21", rear bag, $100, many more. Dan, 698-7322 or Ext. 4987 eves.

STORM WINDOWS - 3, brown, 36"x42¾", $20 ea.; storm doors, brown, 32⅜"x79½" & 30¼"x79½", $25 ea. Bill, 472-4684 after 6 p.m.

TRACTOR - Gravely, excel. cond., $325 firm. Hank, Ext. 7828.

STORM & SCREEN DOOR - combination, white, aluminum, fits 24" door, new, $150. Tony, Ext. 2462.

TABLE SAW - 10", table, extensions, blades, $250. 727-7515.

GENERATOR - 4k watt, $350; Zodiac coal stove, $300; tires, X2 235-15, $75. Mike, Ext. 2372.

WATER PUMP - multistage jet, new motor, w/pressure tank, used 3 yrs., good cond. 821-3925.

GENERATOR - output 4k, volt 120/240, Generac Corp., never used or removed from carton, $400. 744-3792.

ANNUALS - $11 per flat; azaleas, $5; rhodos, $12.50; junipers, $5; many more. Ken, 744-0722.

Sports, Hobbies & Pets

PIANO - Lester Betsy Ross spinet, light wood, includes bench, good cond., $700. Tony, Ext. 3658/3637 or 929-4903.

VIOLIN - size ½ w/bow & case, made in Germany, $150. Kim, Ext. 4339 or 345-5264.

BICYCLE - Motobecane, 25" frame, 12-spd. racing, fully equipped, toe clips, bag, fenders, bottle, almost new, asking $150. Viorel, Ext. 7049.

DRYSUIT - Poseidon, man's large, like new, asking $500. 474-5715.

DRUMS - chrome, Pearls, 8-pcs., D.B. Tama cymbal boom, stands, 3 zildjian cymbals, 1 paiste zildjian, high hat, more, $1,000 neg. Pat, 698-4882.

BASS GUITAR - Hondo, used once, in orig. box, $60. Mark, Ext. 2599.

BOY'S BIKE - like new. Kim, Ext. 4339 or 345-5264.

Audio, Video & Computers

RADIO - am/fm, tape & record player, tape needs work, $20. Judy, Ext. 2590.

COMPUTER - PC Jr., 640k, two floppy drives, mouse, w/joystick, modem, misc. programs & ref. books. Chris, Ext. 7189.

PORTABLE CASSETTE PLAYER - auto reverse, plus dubbing. 363-7032.

TELEVISIONS - two, 13" black & white, $30/each. Ext. 7918 or 744-3068.

TV - Zenith, 19", color, not cable ready, no remote, excel. cond., $150 firm. 654-4661 eves.

COPIER - Sharp SF-741, full-size, 4 years old, excel. cond., must sell, orig. $1,300, asking $500. Al, Ext. 4669 or 266-1828.

TELEVISIONS - two, RCA, black & white, 12", $30/each; Sanyo stereo, am/fm, turntable, 8-track, excel. cond., $30. 744-9812 after 5 p.m.

COMPUTER - Commodore 64, w/1041 disk drive, Sakata color monitor, Koala pad joysticks, loads of software, $350. 744-4611 after 6 p.m.

TRANSMITTER & RECEIVER - Heathkit, like new, AEA PK232 controller, 545 scope. Don, Ext. 4576 or 281-3093.

COMPUTER - Radio Shack 102, lap top w/extra memory, portable printer, $200; Televideo 9220 terminal, DEC VT 220 clone, $225. 929-6646.

SPEAKERS - pair of 2-way high fidelity shelf speakers, good for home, auto or surround-sound, brand-new cond., $60. Ext. 4153 or 732-5829.

ENTERTAINMENT UNIT - Charleswood model 551, $40 or best offer. Sharon, Ext. 3995.

TV - Hitachi, 18", $100; 4 wicker bar stools, $75; king-size bed & sheets, $150. 345-2115.

CASSETTE TAPES - new, $5 ea.; Steely Dan, Aretha Franklin, Kansas, Silver Rings, $5 ea. 744-2203.

Miscellaneous

TICKETS - Gateway, Bellport, Sun., May 28, 8:30 p.m., *Mystery of Edwin Drood*, center seats, cost $17, make offer. Frances, Ext. 4382.

TICKET - one-way, American, MacArthur, Cedar Rapids, Iowa via Chicago, 5/23/89, 12:25 p.m. arriving Chicago 1:52 p.m., $100 neg. 924-3236.

TICKETS - R/T Islip-Ft. Lauderdale, 11/6-14, American, $375 pr. Toni, Ext. 5257 or 821-0379 eves.

Real Estate

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

For Rent

BROOKHAVEN - furn. 3-bdrm. house, eik, l/r, d/r, den, 2½ baths, screened porch, one-acre lot, avail. mid-Aug. for 1 year, $1,000/mo. + 1 mo. sec., refs. 286-0263 eves.

CALVERTON - 2-bdrm. condo, 5 appl., c/ac, w/w, f/p, fenced patio, upper deck, avail. 7/1. 878-0874 after 5 p.m.

E. SETAUKET - 4-bdrm. Colonial, 2½ baths, eik, l/r, d/r, fam. rm., f/p, screened porch, finished bsmt., 2-car gar., GHWH, 8/1/89 occupancy, 2 mo. sec. Shiue, Ext. 4395/3372 or 751-8224.

NORTH GREAT RIVER - 3-rm. apt., bath, fully carpeted, screened terrace on 2nd floor, private home, separate entrance, utilities incl., $575 mo. Ext. 7116, 581-8317 after 5:30 p.m.

RIDGE - furnished room, kitchen privileges, share bath, non-smoker, $75/week, one mo. sec. 929-4910 after 6 p.m.

SELDEN - 3-bdrm. apt., l/r, d/r, eik, w/d, refrig., full attic space, use of back yard, kids OK, no pets. 732-0774 or 737-2711.

STONY BROOK - share house w/professionals, $339 + util. For appointment, Jim, Ext. 2183 or 689-8284.

PORT JEFFERSON - Harbor Hills, furn. 3-bdrm. house, private beach, Sept. 89-Sept. 90, nonsmokers only, security required. M. LeVine, Ext. 4575.

CATSKILLS - 3-bdrm. chalet w/sleeping loft, fully furnished, great for summer fun, swimming, golfing, hiking, fishing, rafting, etc. Bea, Ext. 3642 or Kay, Ext. 4501.

CAROLINA BEACH, NC - ocean vacation, 1-bdrm. condo w/terrace, furn., sleeps 4, pool, w/d, cable, weekly or monthly. Joe, Ext. 2836 or 289-1831.

HILTON HEAD, SC - 3-bdrm. condo, 2 baths, sleeps 8, 6 tennis courts, indoor & outdoor pools, jacuzzi, steam room, ocean & golf view. 929-8912.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, beach, pool, tennis, golf, $425/wk. Guy, Ext. 3147 or 585-9149.

For Sale

CALVERTON - ranch, eik, d/r area, partly furn., 24x24 garage & deck, ½ acre, fenced, Exit 71, LIE, 20 min. to Lab, $122,500. 727-7515.

CORAM - 9-rm. Colonial, cul-de-sac, 4-bdrm., 2½ baths, fam. rm., f/p, eik, d/r, l/r, mud rm., in-ground pool & lawn sprinkler, 2-car garage, extras, $195,000. Ext. 2303 or 732-3902 after 5 p.m.

EAST SETAUKET - 4-bdrm. Colonial, l/r, d/r., family room w/fp, eik, 1½ baths, full bsmt., 2-car garage, a/g pool, 0.42 acre, 3-V school district, $192,000. Cheng, Ext. 2958 or 473-6429.

EAST SETAUKET - 4-bdrm. Colonial, 2½ baths, eik, l/r, d/r, fam. rm., f/p, wood floors, screened porch, fin. bsmt., 2-car gar., 0.52 acre, GHWH, vinyl siding. Shiue, Ext. 4395/3372 or 751-8224.

MANOR PARK - 4-5 bdrm. high ranch, 1½ bath, l/r, d/r, fam. rm., partially finished bsmt., garage, ½ acre, South Manor SD, 5 min. from Lab, $155,000. Roger, Ext. 3578 or 395-1969.

MIDDLE ISLAND - 2-bdrm., l/r, d/r, kitchen, w/d, a/c, gas heat, wood deck, pool, tennis court, Lake Point, $81,000. Bob, 924-7316 after 6 p.m.

RIDGE - custom-built 5-bdrm. Cape, 2 baths, 2-car gar., coal/wood stove, country kitchen, priv. ¾ acre, porch, deck, poss. M/D, 5 min. to lab, $140,000. 924-4749.

ROCKY POINT - 3-bdrm. ranch, 100'x100' lot, eik w/skylight, Andersen windows, half bsmt., large fenced yard, SCWA water, under 5 yrs. old, mint cond., all appli., beach rights. 821-3925.

ROCKY POINT - 3-bdrm. high-ranch, l/r w/fp, d/r, large eik, ca/c, deck, 2-car garage w/remote op. doors, bsmt., more, ⅓ acre, moving, must sell, $164,000. Kochman, 744-1057.

ROCKY POINT - 2-story, alum. siding, ¼ acre, 2/3 bdrm., eik & den, 12'x18' l/r, 1½ baths, new kitchen cabinets, fully carpeted, drapes, w/d, cable, city water, low taxes, walk to all, $120,900. 744-3792.

ROCKY POINT - Cape, ¼ acre, 4 bdrms., eik, d/r w/Fr. doors, lg. l/r, Andersen win., all appl., bsmt., 2 ent., deck, patio, city water, walk beach, stores, low taxes, 6 mi. to Lab, $140,900. 744-3792.

SHOREHAM - Soundview Acres, 3 bdrm. contemp. ranch, 2 baths, brick fireplace, large windows onto deck, bsmt., 2-car garage, priv. beach, $249,000. 744-9746 eves.

STONY BROOK - near to University & beach, mint cond., 4-bdrms., 3½ baths, l/r, d/r, large den, 2 f/p, 2/3 acre, 3VSD, priced to sell. 751-2860 eves.

MADERIA BEACH, FL - 1 week time share Commodore Beach Club, Gulf view, sleeps 4 adults, pool, jacuzzi, asking $5,000. 474-5715.

HOLIDAY, FL - Sandpiper, 3-bdrm., 2 baths, 1½ car gar., cathedral ceilings, corner lot, sprinklers, club house facilities, w/1 week time share, $75,900 firm. 474-5715.

NORTH MIAMI, FL - 2-bdrm., one bath, d/r, l/r, sprinklers, fenced-in yard, $47,000. 345-3142.

PALM COAST, FL - ¼-acre lot, 80'x125', 5 mi. to Atlantic Ocean, 24 mi. N. of Daytona Beach, water, drainage & sewage util. in, $11,995 or $1,995 and assume. Thomas Nolan, Ext. 5265.

Lost & Found

LOST - watch, BNL 25-year man's watch, left in locker rm. of Bldg. 703, Reactor Division, on 4/27/89. Ed, Ext. 4188.

Free

CAT - Maine Coon, beautiful, altered male, 2 yrs. old, playful & very affectionate. Janet, Ext. 4049.

DOG - Shepherd mix, playful, needs good home w/room to run. Frank or Carol, 399-3446.

GUINEA PIGS - 3 wks. old. Joe, Ext. 2621 or 286-9390.

Yard & Garage Sales

BROOKHAVEN - yard & Mother's Day plants sale, Old Southaven Church, May 13, 9 a.m. - 2 p.m., Beaverdam & South Country Roads. Ext. 2314.

MANOR PARK - multifamily, bed, baby swing, seats, starter piano, much more, May 13, 14, 118 Keller. Roger, Ext. 3578 or 395-1969.

Car Pools

BOHEMIA-OAKDALE-SAYVILLE - need 2 more drivers for car pool, also can meet at Exit 59 LI Expressway. Frank, Ext. 2314.

ELWOOD-E. NORTHPORT-COMMACK - driver needed for on time car pool, 8:30 a.m. - 5:00 p.m. Tony, Ext. 2050.

Wanted

LAWN MOWERS - old, complete. Dan, 698-7322 or Ext. 4987 eves.

APARTMENT - small Manhattan studio for college student, will consider rental or purchase. John, Ext. 7671 or 765-1299.

HOUSE TO RENT - non-smoking family of four, SWR School Dist., 1 July. Per, Ext. 3322 or 744-9351.

HOUSE TO RENT - 2-3 bdrm. house, in Shoreham, Rocky Point or Miller Place, must have oil/hot-water heating system. Ext. 2256 or 924-7383.

ROCK CLIMBING PARTNER for 2-3 trips a year to Gunks, 5.8-5.9 climber prefers experienced climber but will train beginner. Jim, Ext. 7775.

RABBIT HUTCH - Ext. 7192 or 924-5541.

HOUSE TO RENT - Rocky Point, 2/3 bdrms., w/d hookup, mature father & son (quiet). 744-7487.

WATER PUMP - for garden use, shallow well. 878-4214.

ITEMS FOR YARD SALE - John, Ext. 4631 or 924-3492.

COCKATIEL - senior citizen who needs hobby wishes to adopt, promises TLC. 744-3069.

EXERCISE EQUIPMENT - exercise bicycle or treadmill. 689-7326.

HOUSEMATE - to share house in Coram, all appliances, sundeck, 20 min. to Lab, $300/mo. + ⅓ util., avail 6/1. 928-8379.

PROJECTOR - super 8, used, good cond., and editor if poss. Janet, Ext. 2345.

BABYSITTER - on site, 8:30-5:00 p.m., salary neg. Paul, Ext. 4212, 732-0981.

OLD DOLLS - bears or doll accessories. 475-4199.

SUNFISH SAILBOAT - in good cond. George, 878-1178.

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