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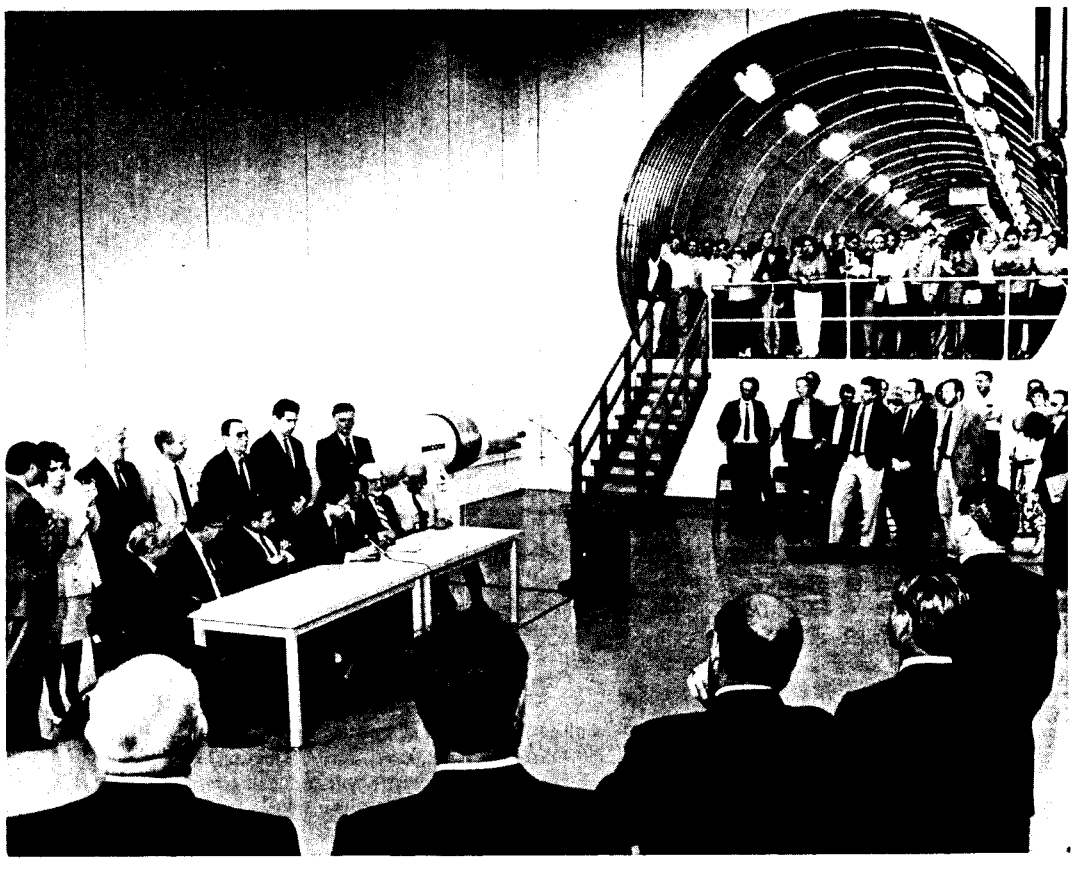
BROOKHAVEN NATIONAL LABORATORY

BNL Awards $42.7-Million Contract to Grumman To Build Superconducting Dipole Magnets for RHIC

On Tuesday, June 23, BNL signed a $42.7-million contract with Grumman Aerospace Corporation's Electronics Systems Division, to buy 373 superconducting dipole magnets for the Relativistic Heavy Ion Collider (RHIC).

This is the single largest procurement for the RHIC project, which is being funded by the U.S. Department of Energy (DOE). RHIC has a total project budget of $509 million, including research and development, construction and start-up costs.

At the contract signing, held in the RHIC tunnel with an imposing superconducting dipole magnet as a backdrop, RHIC Project Head Satoshi Ozaki said, "We are pleased to have Grumman join us in our endeavor to build this world-class Relativistic Heavy Ion Collider. Grumman's outstanding reputation in high-tech manufacturing bodes well for success." Ozaki also applauded the commitment exhibited by Grumman's management and the production team.



The dipole-magnet contract signing took place in the RHIC tunnel, on the floor of the eight o'clock experimental hall. At the signing table were: (seated, from left) Albert Verderosa, President, Grumman Space and Electronics Group; John Harrison, President, Grumman Electronics Systems Division; Renso Caporali, Chairman of the Board and Chief Executive Office of Grumman; BNL Director Nicholas Samios; RHIC Project Head Satoshi Ozaki; AUI Vice President Jerome Hudis; and BNL Associate Director Parke Rohrer.

Photos in this issue by Roger Stoutenburgh

Shaking hands on the new laboratory-industry partnership are BNL's Satoshi Ozaki (left) and Grumman's John Harrison, shown here in the RHIC tunnel.

John Harrison, President of Grumman's Electronics Systems Division, spoke of how their magnet work will fit into the corporation's strategies in such areas as transportation and lithography.

The contract signing ceremony came to a close with BNL Director Nicholas Samios observing that, with these magnets in place, "In 1997, during BNL's 50th anniversary year, we will have colliding beams in RHIC!"

When RHIC is completed in 1997, it will be the world's foremost facility for nuclear physics research. RHIC will collide subatomic particles called heavy ions at high energies to recreate the hot, dense plasma of quarks and gluons believed to have existed in the early universe immediately after the Big Bang.

The dipole magnets to be built by Grumman will have the job of guiding the heavy ions as they circulate in opposite directions around two intersecting rings built in a tunnel 3.8 kilometers (2.5 miles) in circumference. Traveling at nearly the speed of light, two beams of heavy ions will collide head-on at extremely high energy, thus creating a plasma of quarks and gluons.

A total of 1,700 superconducting magnets will be needed for RHIC, 1,200 of them to be built by industry and the rest by the Lab. Four types of magnets will be used: dipoles, quadrupoles, sextupoles and assorted special magnets.

Masters of the Art

According to Ozaki, RHIC magnets are the fruit of BNL's long-standing research and development work on superconducting magnets. He said, "We have mastered the art of building superconducting magnets, as demonstrated by our success in designing and building magnets for RHIC, as well as for the Superconducting Super Collider."

He said that extensive electrical

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Brookhaven's Expertise in Risk Analysis Pays Off for NREL

In the late spring of 1991, the National Renewable Energy Laboratory (NREL) in Golden, Colorado, was faced with a formidable task: preparing a Safety Analysis Review (SAR) that would allow the laboratory to resume research activities in which toxic or pyrophoric gases were used. NREL had suspended operations in these areas in response to an internal environmental audit.

NREL conducts research, development and demonstration programs for virtually all U.S. renewable energy technologies. One area of speciality is photovoltaics, solid state devices that convert sunlight directly into electricity.

In order to restart the closed facilities, the U.S. Department of Energy (DOE) had asked NREL to prepare an SAR to ensure that all potential hazards would be identified, with measures established to eliminate, ontrol or mitigate them.

But NREL's focus is on technology, rather than health and safety hazards — an integral part of an SAR. So, for detailed knowledge in this area, NREL turned to BNL's Paul Moskowitz and Vasilis Fthenakis. These Department of Applied Science researchers, with support from the DOE Photovoltaic Energy Technology Division, have been providing environmental, health and safety assistance regarding the preparation of photovoltaics for over ten years.

BNL's Paul Moskowitz (left) and Vasilis Fthenakis plan a talk on the results of the Safety Analysis Review that they worked on for the National Renewable Energy Laboratory.

Moskowitz and Fthenakis teamed with Richard Crandall and Brent Nelson of NREL to prepare the SAR. By March of this year, J. Michael Davis, DOE Assistant Secretary for Conservation and Renewable Energy had approved the SAR, commending the authors for their "thoughtful and detailed critical review."

Later that month, NREL Director Duane Sundeman wrote to Moskowitz and Fthenakis, thanking them for their contribution to the effort that had allowed NREL to reopen its research facilities.

"Your contribution is even more impressive," noted Sunderman, "since you are not a member of the research staff that was directly affected by the suspended operations. Your thoughtfulness, thoroughness and creativity helped make the completion of this project possible."

"The process of working with NREL to prepare this SAR drew together many of the skills and research findings developed by BNL over the past decade," commented Moskowitz. "In making photovoltaic modules, many different hazardous materials and processing options may be used. Complying with DOE's environmental, health and safety concerns in the SAR required exploring the possible hazards and risks very systematically."

Fthenakis explained that the BNL-NREL team began by identifying the materials and processes that could endanger health, and then researching the regulations and controls established to reduce the risks of these hazards.

"For example," he said, "In addition to the U.S. Environmental Protection Agency and Occupational Safety & Health Administration regulations, we needed to pay close attention to the codes adopted by the local building and fire districts."

Using this information, the team next estimated the risk to life and property from 30 different possible accidents, using the methods presented in BNL's Internal Safety Standards Nos. 1.3.3 and 1.3.4. This required estimating both the probability that an accident would occur and the extent of damage to life or property given its occurrence. The results were then combined to measure the risk of the accident.

At NREL, possible accidents esti-

(continued on page 2)

Remember: Precertify Hospital Stays

All active employees who have Connecticut General Medical Insurance coverage are reminded that they must obtain a hospital precertification from Intracorp in order to avoid a reduction of up to $500 in hospital insurance benefits.

For hospital preadmission certification, the employee or a member of the family must call Intracorp at (800) 772-3261 before being admitted to the hospital or within 48 hours of an emergency admission. Expectant mothers should call Intracorp before the end of their first trimester to precertify their maternity hospital admission.

If an employee fails in properly notifying Intracorp regarding precertification or emergency hospital admission, medical insurance benefits will be reduced to cover 50 percent of hospital expenses, with a maximum penalty of $500.

To obtain a medical insurance ID card, which lists the Intracorp telephone number, or for more information, call Ext. 2877.

Be Ready to Stop For Pedestrians

In addition to employees who work in the Medical Department or go to the Occupational Medicine Clinic, Bldg. 490 is the destination of people who are seeking treatment at the Radiation Therapy Facility or are participating in outpatient studies at the Clinical Research Center. Some of these people are physically impaired, and most of them park their cars in the parking lot across the street. So, if you're driving down Bell Avenue, please be on the lookout for anyone who may wish to cross to or from Bldg. 490. And do as the law and the sign say: Stop for pedestrians in crosswalks!

Arrivals & Departures

Arrivals

Yong Joon Chang.....Chemistry

Departures

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

David A. Rathjen.....Accel. Dev.

New CREF Account: Global Equities

A new Global Equities account will be offered by CREF beginning July 1. It will be available as an investment option for BNL employees for both the AUI Retirement Plan and the 403(b) voluntary tax-deferred retirement program.

The CREF Global Equities Account is expected to invest at least half its assets in foreign stocks. By maintaining a portfolio of foreign and domestic stocks, the account will seek to reap the benefits of overseas investing while minimizing the risks.

The Global Equities Account can be used both to accumulate and to pay out retirement income. It will offer the same transfer and settlement options as the other CREF accounts.

For further information regarding this account, contact TIAA-CREF directly, (800) 842-2776.

Holiday Notes

The Lab will be closed for the Independence Day holiday on Thursday and Friday, July 2 and 3. The following schedules will be in effect:

- **Brookhaven Bulletin** — There will be no Bulletin next week. The classified ad deadline for the Brookhaven Bulletin of Friday, July 10, is 4:30 p.m., on Wednesday, July 1.
- **Credit Union** — The Teachers Federal Credit Union will be open on a normal schedule on Thursday and Friday, and the automatic teller machine in the foyer of Berkner Hall will be open throughout the long weekend.
- **Food Services** — At the Cafeteria, snack bar service will be offered from 9 a.m. to 2 p.m., Thursday and Friday. The Brookhaven Center will be closed Thursday and Friday, and will reopen from 5 to 9 p.m. on Sunday, July 5. The vended food service in Bldg. 912 will be in operation continuously.
- **Pool & Gym** — The pool and the gymnasium will be closed all weekend, Thursday through Sunday, and resume normal hours on Monday, July 6.
- **U.S. Post Office** — The Upton Post Office will close at noon on both Thursday and Friday.

Equipment Demo

The ReadStation Scanner from Magnetic Technologies (MT) will be shown in Berkner Hall on Wednesday, July 8, from 10 a.m. to 3 p.m. MT President Michael Johnson will present this demonstration of a scanner that is completely self-contained, with no need for a dedicated personal computer, large hard-disk drive, special software or full-time trained operator.

CDC May Expand to Kindergarten

If there is enough interest, BNL's Child Development Center (CDC) may expand to include a kindergarten class in fall 1992.

To be located in a separate building, the class is intended for children who would normally be starting kindergarten in their local school systems. A certified kindergarten teacher and two assistants will provide a full-year's structured program, including a day camp next summer.

Should there be sufficient interest, the kindergarten will begin right after Labor Day and is expected to cost about $525 per month. A minimum of 12 children must enroll for the class to become a reality, but a maximum of 18 will be accepted.

To enroll a child or obtain more information, call CDC Director Debra O'Neill, Ext. 7416.

Parents Offer Input On Child Care

Last September, BNL opened its new Child Development Center (CDC) to the children of Lab employees. The center now provides appropriate activities in many areas, including art, computers, housekeeping and manipulatives such as puzzles for four age groups, from 8 weeks to 5 years. Each age group is overseen by a New York State-certified teacher in elementary education.

Additionally, the CDC has a council of eight parents, two per age group, that alternates membership every six months. This committee meets once a month to make suggestions and discuss concerns regarding the center.

Pictured below with some CDC staff at the center's playground are past and current members (CM) of the parent council: (top, from left) CDC staffers Theresa Dalton and Danielle Carter, Joey and Patricia Bender; (bottom, from left) Carol Archer (CM) and Daniel, Christine and Michelle Cummings (CM), Kathleen Hygom with Lauren and Ryan, Pat Giacalone and Lindsay, Nancy Sobrito-Melnekoff (CM) and David Melnekoff, Karen Savino (CM) and Christopher, BNL-CDC liason Sue Foster, CDC Director Deborah O'Neill, CDC staffer Pam McNulty, Bill Bockelmann (CM) with Ryan and Kieran, and Tom Boucher with Tommy, Taryn, and Caitrian. Not shown: current members Mark Rhoades-Brown, Mei Bai Yang and Leili Andrews; alternate Biays Bowerman; and Steve Gordon and Steve Held of Cam-Held Enterprises, the contractor that runs the CDC. — Lorraine Madigan

Course on C-Shell

An introduction to the C-shell command language will be offered by the Computing & Communications Division (CCD), in three 1½-hour sessions, to be held in the CCD seminar room, Bldg. 515, from 10 to 11:30 a.m., on Monday, Wednesday and Friday, July 6, 8 and 10.

At the conclusion of the course, to be led by CCD's John Bennett, attendees should be able to construct and execute basic C-shell scripts using keyboard input and output, pass arguments to scripts; redirect input, output and error messages; and use output from one command as input to another through the use of pipes.

Participation requires a working knowledge of a UNIX operating system, such as SunOS or ULTRIX. The text is available in the CCD manual library. Space is limited, so register early by calling Ron Wittlock, Ext. 4112, or E-mail, wittlock@bnl.gov.

Magnet Contract (cont'd)

and mechanical engineering work for RHIC magnets has been carried out over the years. Credit is also due designers as well as scientific staff, under Erich Willen, Head of the Magnet Division, and Gene Kelly, his deputy. Parke Rohrer, Associate Director for Management and Physical Plant, was instrumental in formulating the procurement strategy and interacting with DOE.

Procurement Process

The contract signing this week was the culmination of a nearly two-year procurement process that was handled by the RHIC contracts office of the Division of Contracts and Procurement.

In the fall of 1990, BNL held a conference attended by representatives of close to 50 companies from all over the world — companies that either manufacture or have the capability to manufacture superconducting magnets.

In the spring of 1991, with DOE approval, BNL issued a formal request for proposals from industry to build RHIC dipole magnets. Five companies responded with detailed proposals.

Then came an exhaustive review by a team of technical and scientific experts from BNL and outside institutions. After the field was narrowed, site visits were made to the companies in final consideration. BNL refined its requirements and then issued a request for the best and final offer from each of those companies.

The companies responded with refined proposals, and the evaluation board reconvened to review the final offers and make a recommendation to Ozaki. Upon his review and acceptance of the recommendation, the final contract was drafted and submitted to DOE for approval. That approval came on June 16, leading to the contract signing this week.

Technology Transfer in Action

The contract with Grumman is technology transfer in action.

Starting this fall, Grumman personnel will work side-by-side with BNL staff to build two RHIC dipole magnets. During this first phase of the contract, Grumman, with BNL guidance, will also develop the tooling needed to build production magnets at the company's manufacturing facilities in Bethpage. Because this step is so critical, Grumman is first expected to build 30 magnets to BNL standards using the new tooling to prove their method of manufacturing.

The next phase of the contract calls for the production of 282 magnets of 9.7 meters (40 feet) in length, and the last phase will be spent on dipoles of varying lengths. The contract requires all manufacturing to be completed by December 1995.

The Grumman dipole magnets will be built with superconducting cables of niobium-titanium alloy filaments, a special material that loses electrical resistance at temperatures close to absolute zero.

These cables are being produced by Oxford Superconducting Technology, a New Jersey-based company. Oxford signed a $6.5-million contract with BNL in September last year to supply the Lab with 1.8 million feet of cable, the production of which is proceeding well, according to Ozaki. — Mona S. Rowe

Risk Analysis (cont'd)

mated to present moderate or high risks were deemed unacceptable. In these cases, either the activities were eliminated, or controls redesigned, with changes ranging from equipment modifications to increased operator training.

The final portion of the SAR included an Operational Readiness Review (ORR). Prepared by an independent auditing team, an ORR ensures all changes have been made and research activities comply fully with the established requirements.

Following the approval of the SAR and the completion of an ORR, one of the NREL laboratories has recently restarted its research. "We all put a large amount of effort into this work, and it is satisfying to know that it was successful," said Moskowitz.

Furthermore, as noted by Assistant Secretary Davis, ". . . the concepts and details outlined in this SAR should also be of broader interest to other Federal and private organizations engaged in the handling of toxic and hazardous gases and liquids." — Liz Seubert

Pool Reopens, New Season Starts

The new, three-month pool season will begin on Wednesday, July 1, and end on Wednesday, September 30.

Tickets can be purchased at the pool during open hours. Hours and fees will be follows:

Monday through Friday

11 a.m.-1:30 p.m.	employees only
1:30 p.m.-2 p.m.	reserved for speed swimming and training
3:45 p.m.-9 p.m.	employees, families and guests*

Saturday and Sunday

1 p.m.-5 p.m.	employees, families and guests*

Daily Admissions

Employee or family member	$2.00
Guest	$3.00

Season Tickets (fees not prorated)

Individual membership	$40.00
Family membership	$50.00

**Guest ruling for all recreation facilities: One guest per employee permitted. Advance arrangements for additional guests, a maximum of five at any one time, must be made at the Recreation Office, Personnel Division, Bldg. 185. Guests must be accompanied by the employee.*

Gospel Choir

The BNL Gospel Choir will perform in concert at the Friendship Baptist Church, Anchor Street, Riverhead, on Saturday, June 27, beginning at 7 p.m. Admission is free, and all are invited to attend.

Film badges will be changed tomorrow. Please place your badge in its assigned rack space before leaving work today.

Software Demo

The Aldus Corporation will demonstrate a number of its Windows products on Tuesday, July 7, at 2 p.m., in the Computing & Communications Division seminar room, Bldg. 515. Software to be demonstrated includes:

- **Aldus Pagemaker,** the desktop publishing package that integrates text and graphics.
- **Aldus Persuasion,** the tools for rapidly producing presentations.
- **Aldus Freehand,** a tool for designing and drawing both black and white, and color graphics.
- **Aldus PhotoStyler,** a color image-processing program.

Softball Standings

League I (6/17)		League 2 (6/18)	
Blue Jays	6-1	Titans	6-1
Cool 'n Gang	4-3	Cocoon	5-2
Phoubars	4-3	Dirty Sox	4-3
Ravens	4-3	Phase Out	4-3
Magnuts	3-4	Scram	4-3
Up & Atom	3-4	Antiques	2-5
Revised Edition	2-5	Lights Out	2-5
Six Pax	2-5	Lunaticks	1-6
League 4 (6/19)		**League 5 (6/12)**	
Snakebites	6-1	What's on 2nd	5-1
Personnelities	5-1	Ha Ha's	4-1
Sting Rays	5-2	Good Timers	3-1
Roustabouts	4-3	Lead Bottoms	2-2
Simply Awesome	4-3	Molson Express	1-3
Just 4 Fun	2-5	Snafu	1-4
Source	1-5	Jerry's Kids	0-4
Park Ave.	0-7		

League 3 standings not available.

Note: All rosters final; no additions permitted.

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Nursery School Holds Graduation

Graduation day at the Upton Nursery School was last Friday, June 19. On the stage in Berkner Hall, this year's class of four-year-olds accepted their certificates, and sang for family and friends who had come to wish them well. Shown here with the graduates are nursery school teacher Anne Marie Kropek (back left) and teaching assistant Lisa Farland (back right).

A nonprofit, parent-run cooperative school, the Upton Nursery School offers a quality preschool experience for children related to BNL employees, visitors and concessionaires. For more information or to register a child for the fall, call Susie Joyce, 929-5914.

Atlantic City Trip

The next BERA-sponsored, one-day trip will be to Trump Castle Hotel & Casino on the Marina in Atlantic City, on Saturday, July 18. The initial cost will be $20, but the hotel-casino will give a $7.50 coin return, a choice of either $5 towards food or an additional $2.50 in coins, and a $5 deferred-return voucher.

Tickets are on sale now at the BERA Sales Office in Berkner Hall, weekdays from 9 a.m. to 2 p.m. The bus will leave the Brookhaven Center promptly at 9 a.m., with an extra pick-up at LIE Exit 63, if necessary. Return will be about 11:45 p.m.

For information, call Carolann Zebrowski, Ext. 3347; Rosalie Piccione, Ext. 3160; or Kay Dellimore, Ext. 2873.

Aerobic Dance Summer Program

The Aerobic Dance Club will hold a ten-week summer program: Monday stretch, and Tuesday and Thursday aerobic dance classes.

Both sets of classes will run from 5:15 to 6:15 p.m. A mat is suggested for floor exercises.

The fee for each ten-week session is $30, payable at registration, which will precede the first class, to be held in the Recreation Building as follows:

- **Stretch** — Monday, July 6
- **Aerobic Dance** — Tuesday, July 7, and Thursday, July 9

For more information, call Pat Flood, Ext. 4853 (a.m.) or Ext. 5070 (p.m.); or Janet Sillas, Ext. 2345.

Summer T-Shirts Now on Sale

The Science Education Center's "Motivation in Science Education — Turning Young Minds Into EINSTEINS" is the theme of this summer's T-shirts, now on sale to all employees, students and visitors.

At $8 each, tax included, these 100% preshrunk cotton T-shirts are available in jade or fuschia in two adult unisex sizes: large and extra large.

Shirts must be ordered by August 14 and each order must be accompanied by cash or money order. No personal checks, please. Mail orders and payments to T-shirts, c/o Renée Flack, Bldg. 438, or bring to the Science Education Center, Bldg. 438, from 11:30 a.m. to 1:30 p.m. on

Monday, Wednesday and Friday only. Allow two weeks for delivery.

Golf Tournament

The fourth BGA golf tournament of 1992 will be held on Thursday, July 16, at the Swan Lake golf club. The tournament, which will be played under stroke-play rules, will begin at 11 a.m. Call Joe Mayeski, Ext. 2575, to register for the tournament. Tournament fees of $26 for members and $27 for nonmembers must be paid in advance by check, payable to the BERA Golf Association. Send all checks — no cash and one check per group, if possible — to Bob Mills, Bldg. 901A. The deadline for paid sign-up is Monday, July 13.

If it rains, call the pro shop, 369-1313, regarding tournament status.

Results of the two-person scramble held at West Sayville on June 8 were: Flight A — Steve Heald, Bob Mills; B — Barry Karlin and Ron Webster (first), Tony Baltz and Brant Johnson (runners-up); C — Bill Cahill, George Cornish; D — Ralph Brown, Ed Dale; E — Bob Colichio, Mark Linsley; F — Ron Yuhas, Roy Marlow.

Service Awards

The following employees celebrated BNL service anniversaries during the month of June 1992:

Thirty-Five Years

Robert E. Chrien.....Physics

Thirty Years

Martin Blume.....Dir. Off.
David P. Dayton.....AGS
Russell N. Dietz.....App. Science
John J. Gabusi.....AGS
John H. Guthy.....Physics
Lewis A. Jacobson.....Plant Eng.
Stephen A. Kochis.....AGS
Richard L. Lane.....AGS
Donald W. Marrs.....Cent. Shops

Twenty-Five Years

John E. Barry.....Chemistry
Charles I. Goldstein.....App. Science
Phillip Thomason.....Plant Eng.

Twenty Years

Nancy R. Harris.....Cont. & Proc.
Mary J. Glynn.....Staff Serv.

Ten Years

Gasper M. Giarratano.....Plant Eng.
George Risien.....AGS
Ronald N. Tallon.....Plant Eng.

Cafeteria Menu

Monday, June 29	
Soup: Navy bean	.80/1.10
Entree: Fried chicken quarter	3.20
Entree: Linguine Alfredo	3.20
Fitness: Chef's choice	3.20
Carvery: Hot pastrami sandwich	2.95
Grill: Monte Crisco	2.95
Tuesday, June 30	
Soup: Clam chowder	.80/1.10
Entree: Lemon baked fish	3.45
Entree: Cornish hen	3.65
Fitness: Chef's choice	3.20
Carvery: Hot roast beef sandwich	2.95
Grill: Chicken tenders on croissant	2.95
Deli: Seafood salad croissant sandwich	2.00
Wednesday, July 1	
Soup: Cream of broccoli	.80/1.10
Entree: Roast pork tenderloin	3.85
Entree: Ravioli w/red sauce	3.20
Fitness: Chef's choice	3.20
Carvery: Hot baked ham sandwich	2.95
Grill: Barbecued pork on bun	2.95

Thursday & Friday, June 2 & 3
Snackbar Service — 9 a.m. to 2 p.m.

Classified Advertisements

Placement Notices

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

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

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

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

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

NS 8079. OCEANOGRAPHY ASSOCIATE POSITION - Requires BS in chemistry or physics, experience in gas chromatography and analysis of seawater for inorganic carbon. Chemical sampling experience on oceanographic cruises, and familiarity with computer-based chromatography data systems and instrument electronics are desirable. Must be willing to spend 2-3 months per year on research cruises. Department of Applied Science.

DD 8142. ENGINEERING POSITION - Requires BS in health physics (MS preferred) or equivalent and significant health physics experience. Will lead and supervise Division support to a scientific department. Responsibilities include audit and oversight, radiation exposure-control practice, radiation monitoring, industrial hygiene monitoring, safety and supervision of professional and technical staff. ABHP certification desirable. Safety and Environmental Protection Division.

DD 1043. TECHNICAL POSITIONS - (term appointments) Requires AAS in electronic technology or equivalent, and experience in the fabrication and testing of integrated and discrete semiconductor circuits. The ability to work from electronic schematics, verbal instructions and rough sketches also required. Demonstrated mechanical ability and design skills (CAD) desired. Accelerator Development Department.

LF 0165. BIOLOGY ASSOCIATE POSITION - biochemistry, molecular biology, chemistry or related discipline with course work in biochemistry and molecular biology. Lab experience with gel electrophoresis of proteins and nucleic acids, and DNA sequencing is desired. Responsibilities will include investigation of plant lipid metabolism, gene regulation, and protein turnover. The desire to learn new and varied techniques is essential. Will be expected to work irregular hours as required by the project. Biology Department.

LF 0166. BIOLOGY ASSOCIATE POSITION - Requires BS or MS in the biological sciences. Experience in preparation, sequencing and DNA sequence analysis is desirable. The ability to work with minimal supervision is highly desirable. Responsibilities include all stages of DNA sequencing. Biology Department.

LF 0172. HEAVY EQUIPMENT MECHANIC OPERATOR - Will maintain, operate and repair all material-handling, earth-moving, road and ground-maintenance and similar equipment, including complete repair and maintenance of

(continued on page 4)

Classified Ads (cont'd)

gasoline and diesel engines and the use of required machine tools. Experience in crane operation is desirable. Plant Engineering Division.

LF 8145. PROCEDURES COORDINATOR - Requires BS in health-related sciences or equivalent, health physics training, and good writing skills. Responsibilities include assisting in determining what procedures are needed, writing and reviewing procedures, and organizing the building safety services procedures manual. Safety and Environmental Protection Division.

Motor Vehicles & Supplies

87 HIPOINT TRAILER - 21', all f/g, fully encl., rear ramp, side door, extras, ask. $3,500. Lois, Ext. 4904 or 929-4753 eves.

91 PROBE - a/t, a/c, am/fm/tape, 3-yr. warranty, like new, 9k mi. Alan, Ext. 2928 or 929-0461.

89 MUSTANG - black, 5-spd., 17k mi., adult-driven Sunday car, cruise, CD, ac, flowmasters, custom rims, Calif. cover, $10,500. Roy, 286-5962.

89 GEO METRO - red, 4-dr., 5-spd., a/c, am/fm, $2,995. Joe, Ext. 2898 or pager 0925.

88 FORD TEMPO - all-wheel-dr., a/c, cruise, tilt, elec. seats, am/fm cass., $4,400. Harris, 475-8504.

85 LE BARON - convertible, air, low mi., full power, excel., $3,800 neg. 281-7935 eves.

85 FORD ESCORT - white, a/t, p/s, p/b, 4-dr., hb, 80k mi., new parts, $1,000 or best offer. Vishwas, Ext. 3087.

85 VW GOLF - m/t, a/c, removable radio, $1,800. Sheila, 744-8901 eves.

85 SUBARU XT COUPE - sun roof, am/fm cass., 95k mi., $2,500. 757-1973.

85 PONTIAC GRAND AM - 2-dr., gray, hi mi., all highway, a/t, a/c, p/s, orig. owner, good cond. Gary, Ext. 3473.

85 HOLIDAY XL - 31' camper trailer, double bed, gaucho awning, rear bed, mid bath, refrig., many extras. 924-3291.

84 CHEVROLET MONTE CARLO - V6, p/s, p/b, p/w, two-tone blue, good cond., new tires, best offer. Denise, 724-0036 eves.

83 OLDS CUTLASS SUPREME - 4-dr., lt. blue, no rust, good running cond., uses oil, $1,500. Frank, Ext. 5105 or 473-3364.

83 FORD LTD WAGON - 94k, v.g. cond., $1,200. Roy, Ext. 4843 or 727-6714.

82 PONTIAC FIREBIRD - runs well, brakes & tires good, a/c, p/s, p/b, a/t, rebuilt eng. & trans., $900 neg. Jim C., Ext. 4150.

82 VW RABBIT - 2-dr., white, blue int., 88k mi., a/t, am/fm, ask. $1,200; 66 Dodge van, A-100 slant 6, auto, runs but needs work. Fran, Ext. 2092.

81 HONDA CVCC - 5-spd., 97k mi., runs well, ask. $600. Ext. 4945 or 821-1953.

80 VOLVO 240 - 4-spd., runs well, minor body work, new exhaust, $2,000. Rick, Ext. 3069 or 821-4188.

78 CHEVY BLAZER - 4x4, a/t, p/s, p/b, runs well, ask. $700. Kelly, Ext. 2950.

76 MERCURY MONARCH - 78k orig. mi., good cond., no rust, $500 or best offer. John, 563-6596.

74 LAYTON TRAVEL TRAILER - air, full bath, new tires, pump, batt., extras, 23', $3,000 or best offer. Joel, Ext. 5988 or 744-1628.

72 F-100 - w/cap, 8 cyl., runs, $500; 63 F-100, 6 cyl., runs clean, ask. $1,500. A. Jones, Ext. 3277.

67 PONTIAC LEMANS - bg. block Chevy, 450 h.p., everything new, many extras, never driven. 744-3284 after 6 p.m.

66 DODGE VAN - A-100 slant 6, auto, runs but needs work, make offer. Fran, Ext. 2092.

31 CHRYSLER - 2-dr., rumble seat, all orig., excel., ask. $8,000. Rosalie, Ext. 3160 or 289-5704.

ENGINE - 351 Cleveland, 4V, $400. Frank, Ext. 4489 or 736-2575.

RADAR DETECTOR - Bel 959 Plus, detects X, K, Ka bands, vol. cont. mute/dimmer, distinct audio/band, more, $150. Chris, Ext. 4216/2426.

RUNNING BOARDS - Dee-Zee, aluminum, never used, fits Jeep Cherokee, 67" long, $100. Chris, Ext. 2022 or 395-6112.

TIRE - brand-new on four-lug rim, 165R13, $25. Joe, Ext. 4826 or 821-3762.

TIRES - 2 Sears Perelli Response, P215/60R14 blackwall tires w/Pontiac Sunbird, 5-bolt, alum. rims, $75. Ext. 7136.

TIRES & RIMS - for F250, 16", good cond., 2 yr. old, very low mi., make offer. Joe Mead, Ext. 2148.

TRUCK CAP - w/light for 6 ft. bed, $125. Pete, 924-0277.

Boats & Marine Supplies

28' WINNER - f/g, f/b, twin 225 Chryslers, fwc, h/c water, shower, electronics, sleps six, $14,000. Ben, 698-6436.

25' MORGAN SAILBOAT - in water, free use of mooring, recent OB & sails, $4,500. Steve, Ext. 4008 or 821-0686.

18' CATAMARAN SOL-CAT - similar to Hobie Cat w/trailer & beach wheels, $1,375. 821-0686.

16' FIBERGLASS - 65 h.p. Evinrude, galv. trailer, $1,100. Jim, Ext. 3372 or 821-0250.

16' GLASPAR - V-hull, f/g, Evinrude, 35 h.p., tilt, trailer, using weekends fishing, $650 neg. Tony, 281-2513.

VHF/FM RADIO TELEPHONE - Sea Ranger 7800 w/8' antenna, $100. Mike, Ext. 7518.

CHRIS CRAFT LANCER - new power, V8, outdrive, good cond., many items new. Ron, Ext. 4715 or 298-5625.

SAILING RIG - for canoe, purchased from Old Town, used once, $200. Bob, Ext. 4044.

Furnishings & Appliances

AIR CONDITIONER - 5,000 Btu, only used for 3 mos., $120 neg. Wenwen, Ext. 1093.

BEDROOM SET - king-size headboard, triple dresser w/mirror, single dresser, $250; 2 dry sinks, $50/ea. Ext. 4519.

CABINET - Colonial maple, am/fm radio, will fit TV, record player, $150. Saxon, 929-4701.

CHAIRS - 4 captain's, unpainted, 1" thick, $65. Rosemary, 929-4792.

COUCH - convertible, 2-tone tan, $200 neg. 281-6263.

COUCH, LOVESEAT & CHAIR - excel. cond., make offer. John, 563-6596 or 563-9223.

DINING ROOM SET - table, 3 leaves, 2 arm & 4 side chairs, china cabinet, buffet, all solid wood. Tony, 281-0350.

DINING ROOM - pine table w/leaves, 6 chairs, china, buffet, server, china dishes, etc., excel. cond., Jim, 924-5422.

DINETTE SET - on wheels, vinyl upholstered, beige & brown, swivel chairs, best offer. 281-3515.

DINING TABLE - teak, 53" x 35½", 2 leaves, v.g. cond., $200. Ext. 4932 or 928-8993.

DISHWASHER - Maytag, copper tone, make offer. Fred Kuehl, Ext. 7947 or 588-2268.

ELEC. RANGE - 30", dishwasher, copper tone, reasonable. Tony, 281-0350.

ATTIC FAN - never used, $25; elec. typewriter, excel. cond., $50. Bob, Ext. 7785.

FREEZER - $100; microwave, $100; washer/dryer, $250; bedroom set, $300; hutch, $250; queen bed, $250; stereo, $50. Dave, 286-1074.

KITCHEN TABLE - light wood, 4 matching swivel metal chairs, $50; corner, two-tier table, 29"x29", $25. Waligura, 744-7172.

REFRIGERATOR - Whirlpool, self-def., 20 cu. ft., white, pick up by 6/28, best offer over $400; tables: kit., end, 2 cocktail, game. Irving, Ext. 2827.

REFRIGERATOR - Kenmore, small, 9 cu. ft., white, good cond., $75. Wegmer, 286-8639.

REFRIGERATOR - apt. size, you pick-up, works well, $100. Nick, Ext. 2000.

SHOWER BASE - 38" corner, white, f/g, new, never installed, orig. $200, now $100. Sue, Ext. 3492 or 289-6844.

SOFA BED - bone white, loveseat, glass & brass tables, modern lamps, $900. Doug, Ext. 4661 or 434-7812.

SOFA BED - w/matching recliner, gold & brown tweed, oak front, $150. Ext. 5873.

VACUUM - $45; metal flower holder on wheels, $20; wicker shadow box, $20; bath scale, $10; gas BBQ, $35. Kathy, 744-2203.

Tools, House & Garden

AIR COMPRESSOR - Black Max, 3 h.p., like new, $250 or best offer. 744-3502.

CAR RAMPS - pair, cood cond., $20. Victor, Ext. 2395.

FIREWOOD - seasoned oak, 2½ cord, $175 or best offer. Rob, 928-6368.

LATHE - Rivett Toolroom on steel cabinet stand, 9"x24", excel. cond., $500. 475-8971 after 6 p.m.

LAWN MOWERS - Sears lawn tractor, 11 h.p., 36" cut, $300; Caldor, 22, $60; Murray, 20", $65. Dan, Ext. 4987 or 698-7322.

LAWN MOWER - 22", rear catcher, 3½-h.p. Briggs & Stratton, $30. Mark, 281-5060.

RIDING TRACTOR - Sears, 12 h.p., 4' deck; snow blower, battery start; tow trailor, excel. cond. Mauro, 265-6542 after 7 p.m.

VAPOR DEGREASER - $100; elec. hoist, ½ ton, w/trolley, $125; Sears arc welder, $75. Ext. 2092.

Sports, Hobbies & Pets

BIKES - two men's, 1 woman's, $20/ea. Ext. 2259.

BICYCLE - Colnago Master, 56cm, Dura Ace headset, BB, time pedals, Scott aero bars, seat post; *Rock Shock* mag 20, $295. Oscar, Ext. 3499.

BIKE - Huffy Vortex, 20", like new, $65. Leroy, Ext. 4581 or 286-1615.

DOG CRATE - used for one puppy, good cond., $30. George, Ext. 4843 or 472-1479.

DOG PEN - 2 yrs. old, 12'x12'x5'h, easy to assemble, orig. $500, asking $325. Guy, Ext. 3147 after 3:30 p.m.

GO KART - 5 h.p., seat belt, knobby tires, $300. Dan, Ext. 4987 or 698-7322.

GUITAR AMP - GK250RL, wireless system, Nady201, $225. Doug, Ext. 4661 or 434-7812.

GUITAR - Ibenz, w/case, Crate 112 amp, asking $200. Scott, 929-8243.

KNEE BOARD - O'Brien Black Magic, new cond. Richie, Ext. 2175 or 734-7342.

RC TRANSMITTER - Futaba, 5 channel w/case, Sig Kidet w/.40 K&B engine, extra model, many extras, $125. Mark, 281-5060.

TROMBONE - Bundy, w/mouthpieces, good cond., $85. Lou Pergola, Ext. 3499 or 732-1028.

Audio, Video & Computer

TURNTABLE - 33⅓ rpm, acoustic research AR77XB, like new, $50; Panasonic KXP1091i, printer, $50. Roger, Ext. 4222.

TV - 13", color, works well, $40. 744-3502.

TV - color, RCA XL100, 19", stereo, remote, cable ready, 99 channels, excel. cond., $170. Ken, 744-1869 or email KYEE@BNLCL1.

TV - 5", w/am/fm radio, portable, needs work, $5. Victor, Ext. 2395.

Miscellaneous

AIRLINE TICKET - Islip-San Diego, 1-way, $75, round-trip, $150, before 9/13. Shen, Ext. 3836.

BABY'S CHANGING TABLE - ash wood, w/pad, excel., orig. $150, now $75. Denice, Ext. 2349.

CONCERT TICKETS - Springsteen, Meadowlands, 6 for 7/28, 2 for 7/30. Jeff, 475-5206.

FUR COAT - rabbit, boot length, size medium, $150. Ext. 4519.

INFANT'S CAR SEAT - $10; Graco stroller, $25; 2 wall lamps, $35. Bene, 474-5939.

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

MAGAZINES - *National Geographic*, late 1960s-1980s. Frank, Ext. 3120.

MOVING SALE - contents of house. Ext. 4519 or 924-6051.

OLYMPICS TICKETS - 2, July 26-29, half price, $233/ea., basketball, gymnastics, baseball, wrestling, handball, 7 events. Jerry, 363-6908.

WEDDING GOWN - sweetheart neck, Anselan lace bodice, size 10. Barbara, Ext. 3496 or 929-8912.

Free

KITTENS - 5, various colors, 3 wk. old, ready in 2-3 weeks. Rick, Ext. 3069 or 821-4188.

STOVE - oven, gas 30", needs $95 part, you pick up. Shane, Ext. 7145.

Yard & Garage Sales

CENTEREACH - 6/26-28, 60 S. Washington Ave.

RIVERHEAD - 6/27-28, 9 a.m., Fishel Ave. extension off Elton St. Jennifer, 727-3863.

ROCKY POINT - 6/27-28, 10 a.m.-4 p.m., 62 Patchogue Drive, N. of Tall Tree Golf Course.

Lost & Found

FOUND - marcasite pin, call and describe. Bob, Ext. 5404.

FOUND - black model rocket, 20", Brookhaven Ave. & 1st St., 6/17. Chris, Ext. 2818.

FOUND - green parakeet, outside NSLS, on 6/23. Rene, Ext. 5720.

Car Pools

QUEENS - willing to meet anywhere along LIE. John, Beeper 0293.

GLEN COVE, SMITHTOWN, PORT JEFF, MT. SINAI - for students in BNL's Community Summer Science Program, daily, 7/6-8/14. Science Education Center, Ext. 4503.

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 HAMLET - 1-bdrm. apt., l/r, kit., fully tiled bath, furn. or unfurn., cable TV, priv. ent., immaculate, no pets, mature single only, $575/all. Fred, Ext. 4798 or 289-4798.

BELLPORT - 1-bdrm. apt., kit., priv. ent., lovely yard, right off So. Country near golf course, 1 person, $650/mo. incl. util. 286-8554.

BELLPORT VILLAGE - 3 bdrm., l/r, d/r w/fp, 2½ baths, oak floors, fin. bsmt., 6 yr. old, igs, ⅙ acre, walk to schools, shops, avail. 9/92, $1,050/mo. + util. Ajit, 286-5579, or Mimmi, 821-1435.

E. PATCHOGUE - 2-bdrm. house, lg. eik, d/r, l/r w/fp, w/d, 2-car gar., landscaped yard, $1,000/mo. furn. or unfurn. A. Worthington. 363-5283.

EAST SETAUKET - 3-bdrm. house, l/r, d/r, den, 2 full baths, bsmt., 7/19-8/30 flexible. Ext. 5012 or 331-3790 eves.

MIDDLE ISLAND - 1-bdrm. cottage, l/r, k/d area, den overlooks golf course, reasonable, 1 mo. sec. + util., close to Lab. 924-3761.

MIDDLE ISLAND - share condo, master bdrm., walk-in closet, furn., pool, tennis, cable, $430/all. Ext. 3160 or 289-5704 after 5 p.m.

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

PORT JEFFERSON - large furn. room, non-smoker, clean/quiet, $100/wk. 473-6432.

PORT JEFFERSON STATION - 1-bdrm. apt., ground floor, sep. ent., quiet & private, $500/mo. incl. util. 757-1973.

ROCKY POINT - 2-bdrm. ground floor apt., modern, for low-key tenant, working person preferred, quiet, priv. refs., 12 min. to Lab, $650/mo. pays all. Joel, Ext. 5988 or 744-1628.

ROCKY POINT - studio apt., own kit., bath, ent., $500/mo. Harry, Ext. 7749 or 744-2715.

ROCKY POINT - 1-bdrm. cottage, 2 blocks to beach, 10 min. to Lab, oil heat, $650/mo. + util. Mike, 922-2024.

RONKONKOMA — Nob Hill condo, 1 bdrm., w/d, dw, w/w, a/c, tennis, pool, $720/mo. + 1 mo. sec. Marty, 979-7851.

SELDEN - unfurn. studio apt., kit., bath, l/r-bdrm. combo, priv. ent., walk to shops, $550/mo., sec. & refs. 689-1539.

SHIRLEY - bdrm., $85/wk.; also 2½ rm. apt., priv. ent., drive, 10 min. to Lab, avail. 7/1, $450/mo.; for employed nonsmokers. 281-6263.

SMITHTOWN - lg. bdrm. in spacious new house, share kit., d/r, l/r, bath, very priv. ¾ acre, ideal location for Stony Brook/BNL commuters, w/w, w/d, $400/mo. Jim, 979-0632.

SOUND BEACH - 1-bdrm. apt., bath, kit.-l/r combo, cable, priv. ent., $600/mo. all; also 2-bdrm. apt., bath, l/r, kit., close to shops, beach, $650/mo. + elec. Ext. 2671 or 744-3284 after 4 p.m.

STONY BROOK - 4 bdrm., completely furn., newly renovated, ac, fp, 1 mi. to SUNY, for 1 year, starting late August, ask. $1,600/mo. 751-1291.

CORAL SPRINGS, FL - 3 bdrm., 2½ baths, l/r, kit., din, patio, gar., great area. 924-3761.

ST. MAARTEN, NETHERLANDS, ANTILLES - week of Oct. 10-17, condo, sleeps 4, kit., l/r, bdrm. 2 baths, balcony overlooks town & harbor, pool, beach, restaurants, casino. John, 924-4262.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, fully furn., 2 baths, pool, beach, golf nearby, April-Sept., $450/wk. Guy, Ext. 3147 or 689-5378.

For Sale

BELLPORT - 3-bdrm. ranch, l/r w/fp, d/r, bath, full bsmt., 20'x16' deck, det. 3-car gar., shy ½ acre, SCSD, city water, garb. pickup, nr. village & dock, ask. $145,000. Maryann, Ext. 5241 or 286-3377.

CENTER MORICHES - 4-bdrm. Col., oversize l/r, d/r, eik, TV, laun., deck, att. gar., 10 min. to Lab, walk rr, schools, bay, dock, shops, 100'x100', full bsmt., $185,000 neg. Marilyn, Ext. 2259.

CENTER MORICHES - 3-bdrm. ranch, full bsmt., 1-car gar., ⅓ acre, all new kit. & bath, excel. loc., min. from village, churches & rr station, $117,000. 878-4825.

E. SETAUKET - 3-bdrm. ranch, 2 baths, fin. bsmt., new roof & siding, Andersens, gas heat, igs, auto gar. opener, ⅓ + acre, treed, fence, pvt. deck, patio, landscaped, $149,000. Linda, 878-9239.

E. SETAUKET - 3VSD, 4-bdrm. hi-ranch, 1½ baths, gar., fenced yard, patio, deck, w/w, new roof, dw, refrig., 100'x150', $129,900. 286-8814.

E. YAPHANK - mint, 3-bdrm. ranch, custom Euro kit., w/w, fin. oak floors in master bdrm., Andersen bay window in l/r, agp w/deck, full bsmt., part. fin., $115,000. 395-3485.

LAKE GROVE - 3-bdrm. hi-ranch, l/r, d/r, new eik, den, 1½ baths, 2-car gar., new carpets, remodeled bath, Andersen windows, vinyl siding, covered patio, igs, $156,500. 588-6417.

MIDDLE ISLAND N. - mint 2-3 bdrm. ranch, 1½ baths, fdr, gar., bsmt., deck, laundry rm., 5 appl., many extras, close to Lab, $114,900. 924-2839.

MIDDLE ISLAND - lakefront 2-bdrm. co-op, upper unit, clean, bright, newly painted, l/r, d/r, kit., all appl., cac, gas heat, w/w, pool, tennis, clubhouse, 10 min. to Lab. 924-5282, leave message.

MIDDLE ISLAND - Coventry Manor, 3-bdrm. townhouse, 2 baths, kit., l/r, d/r, laun. rm., cac, 5 appl., encl. patio, pool, new carpets, ask. $95,000. Rosalie, Ext. 3160 or 289-5704 after 5 p.m.

MT. SINAI - 2-bdrm. ranch, ¾+ acre, 1 full bath, l/r, kit., dinette, bsmt., oversized gar., $120,000. 473-6432.

N. PATCHOGUE - 2 bdrm., l/r, d/r, kit., full bsmt., det. gar., vinyl siding, new roof, $109,000. 928-6541.

N. SHOREHAM - 3-bdrm. L-shaped ranch, d/r, sunken l/r, eik, oak floors, fin. bsmt., work rm., 2-car gar., parklike ½ acre, igs, deeded beach rights, $179,900. Mike, Ext. 5972 or 744-4579.

PORT JEFFERSON - 3-bdrm. split, 2 baths, l/r, d/r, eik, den, part. fin. bsmt., lg. screened sunrm., gar., 0.4 acre, walk to harbor, great location, 3VSD, low taxes, $169,000. 331-7143.

PORT JEFFERSON VILLAGE - 4-bdrm. ranch, Harbor Hills sec., eik, d/r, l/r w/fp, den, 2 baths, cul-de-sac, secl. yard, beach, coun. club, other amenities, low tax, $180,000. Frank, 928-0516.

RIDGE - 3-bdrm. ranch, country kit., 2½ baths, laundry/mud rm., fenced yard on ⅓ acre, ideal M/D, 3 mi. from Lab, $127,000. Carol, Ext. 2673 or 744-8632.

RIDGE - 4-yr.-old 3-brm. ranch, 2 baths, cac, 5 min. to Lab, ¾ wooded acre, $139,000. 821-1455.

RIDGE - 5-bdrm. Cape, 2 new kit., 3 baths, fp, cac, 5 new appl., $126,000. 821-6234.

RIDGE - Leisure Village, 2 bdrm., screened porch, completely redone, new appl., new w/w, carpeting, newly painted, 24-hr. security, clubhouse, pool, $75,000. 821-3035.

RIVERHEAD - 12'x65' mobile home, 2 bdrm., new kit., bath, wood siding, Andersen windows, lg l/r, d/r, 8'x10' shed, cooperative park, w/d, $32,900. Beth, Ext. 4986 or 369-4295.

S. SETAUKET - 4-bdrm., 2½ baths, needs work if you're handy, 2-car gar., lg. lot, 3VSD. 331-4768.

SPEONK/WESTHAMPTON - 2-bdrm. Liberty mobile home, eik, w/d, d/w, family park, owner holds mortg., $35,000. Dave, Ext. 5460.

SHIRLEY - 4 bdrm., 2 full baths, l/r, d/r, full kit., brand-new house w/tile floors, 1 mi. to Smith's Point, 15 min. to Lab, $115,000 or rent for $1,100/mo. Chris, 472-1133.

SHIRLEY - 3-bdrm. ranch, close to water, fenced yard, skylight, ask. $92,000. A. Jones, Ext. 3277.

WADING RIVER - priv. beach comm., 3-bdrm. ranch, 1½ baths, eik, all appl., fd/r, ac, treed, ½ acre, bsmt., lg. shed, deck, county water, $128,000. Saxon, 929-4701.

WADING RIVER - on beach, 10 rm. year-round house, 5 bdrm., 2 baths, d/r, l/r w/fp, decks overlook Sound, full bsmt incl. apt. w/sep. ent., incl. adj. lot, SWRSD, $275,000. Kathy, 929-8443.

YAPHANK - Colonial Woods condo, 5 min. to Lab, 2 bdrm., 1½ baths, fin. bsmt., wet bar, rec. facil., red. to $99,000. Monica, 924-3846.

YAPHANK - Whispering Pines, 3-bdrm. condo, 2½ baths, 5 appl., gar., fp, fin. bsmt., new carpets, many extras, priv. pools, tennis, 5 min. to Lab, $115,000. J. Bennett, Ext. 5406.

PALM BAY, FL - near Melbourne, 2-bdrm. condo, 2 full baths, l/r, d/r, kit., w/d, pvt. screened patio, completely furn., heated pool, $55,000, or rent long-term or monthly. 732-2588 after 5 p.m.

OCALA, FL - corner property, zoned for town-house, water & elec., close to Orlando, $18,000 neg. 929-3298.

SHAWNEE, PA - timeshare week #40, kit., d/r, sleeps 6, fp, golf, indoor pool, horseback riding, rafting, canoeing, $8,000 neg. Tom, Ext. 5350.

Wanted

APARTMENT - for eve. student, 10 min. to Lab, $450/mo. incl., begin 8//92. Mike, Ext. 7518.

APARTMENT - 2 bdrm. within 30 mi. of Lab, for the month of August. Ehsan, Ext. 2143.

BASS GUITAR - and amplifier for a beginner. Ext. 2949 or 427-2435.

BOAT TRAILER - for 16' boat, reasonable. Paul, Ext. 3848 or 821-1560 after 6 p.m.

CASSETTE - Broadway musical *Gypsy*, to borrow. Janet, Ext. 2345 or 929-3910.

CHILD CARE - in my Ridge home for 2 children, own trans., reliable, refs., start July 7. 821-1783.

DESK - old, rolltop or secretary, fair cond., small drop-leaf table w/chairs, will refinish, reasonably priced only. Beth, Ext. 4986.

EXERCISE BIKE - also Nintendo tapes for 5 yr. old. Ext. 7192.

FRENCH HORN - "B" hole or double. Ext. 3499.

HOUSE TO SIT/RENT - by former Physics Dept. emp., wife & child, 7/22-29. Ext. 2752 or 751-6571.

LAWN MOWERS - used, complete, also lawn tractors, riders. Dan, Ext. 4987 or 698-7322.

OUTBOARD MOTOR - 7-15 h.p. Bill, 878-6016.

RECORDS - 45s & LPs of late 1950s-mid 1960s, rock & roll, also polka records. Frank, Ext. 3120.

SOMEONE - to check car air conditioner and charge w/freon (if needed). Ext. 7192.

TV & VCR REPAIR PERSON - also blond wig, preferrably long. Ruth, Ext. 4173.