BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

# First Magnet in RHIC Tunnel: Collider Installation Begins

With the push of a button at 4:10 p.m. on Friday, August 5, Laboratory Director Nicholas Samios lowered the first magnet onto its stand in the tunnel of the Relativistic Heavy Ion Collider (RHIC) — thereby ceremonially beginning installation of the collider itself.

Housed within a 3.8-kilometer-in-circumference tunnel which is nearing completion, RHIC will circulate two beams of heavy ions in opposite directions at nearly the speed of light. By 1999, these collisions will occur at six intersection points where detectors will be placed, in an attempt to recreate and observe the hot, dense plasma of quarks and gluons believed to have existed in the early universe immediately after the Big Bang.

"This bare tunnel has been longing for magnets," said Samios. "It's saying, 'I've been empty for many years, and this is the start.' This is a grand occasion, and it marks great cooperation and technical ability on both sides — the Laboratory and industry."

Northrop Grumman Corporation's Electronics & System Integration Division in Bethpage is manufacturing 373 dipole magnets for RHIC, the first of which was delivered on May 2, successfully tested on May 9 and installed by Samios last Friday in the part of the tunnel located at the five o'clock position. So, the two sides to which Samios referred are the RHIC Project, responsible for dipole design and development, and RHIC's major industrial partner, Northrop Grumman.

Continued Samios, "When RHIC is complete, it will be a fantastic machine from the physics point of view — it will take us to a forefront where you can't predict the physics with any certainty, so it definitely will be an experimentalist's machine."

He concluded, "We had a dream about building this collider ten years ago — and the world is only catching up to us now."

Carson Nealy, Manager of the Brookhaven Area Office of the U.S. Department of Energy, said, "This marks an auspicious occasion — and I look forward to many more until this machine is up and running."

Representing Northrop Grumman, the contractor building RHIC's dipole magnets, was Robert Byrnes, Project Manager for dipole production. He thanked "everyone for the help you gave us to get this magnet here."

Roger Stoutenburgh

**Standing by the first superconducting magnet to be installed in the RHIC tunnel, RHIC Project Head Satoshi Ozaki (center) addresses the crowd at the installation ceremony last Friday.**

### Superconducting Magnets

Altogether, the RHIC accelerator will be made up of 1,700 superconducting electromagnets, including dipoles, quadrupoles, sextupoles and correcting magnets. Of these, industry is manufacturing 1,200, while the rest are being constructed within the Magnet Division of the RHIC Project. The dipoles will bend the heavy-ion beams, while the quadrupoles, along with sextupoles and correcting magnets, will focus them.

As RHIC Project Head Satoshi Ozaki pointed out, "This is the moment when we are going to transfer the magnet to another customer." In the same way that Northrop Grumman delivered the first dipole to the RHIC Magnet Division, headed by Horst Foelsche, for testing, the Magnet Division delivered the successfully tested magnet to the RHIC Collider Ring Division, headed by Jack Sondericker, for installation in the ring.

The actual work of building the collider — magnet by magnet — will be conducted by the Collider Installation Section, which is headed by John Koehler and is within the Collider Ring Division. Those at the ceremony who assisted Samios in installing the first collider magnet were Carl Skrezec Sr., Richard Anderson, Louis Coppa, Steven Bubka and John Romeo.

### On Schedule

So far, five of the ten dipoles delivered by Northrop Grumman to date have been tested to determine their magnetic field quality and current-carrying capacity, and all five passed inspection. In addition to the dipoles, Northrop Grumman will build 432 quadrupoles. On April 8, the company delivered the first quadrupole, which also aced its tests; so far, six quadrupoles have been delivered and five tested.

"We will be installing one more dipole next week and another within a month," said Ozaki. "They are now being delivered by Northrop Grumman at a rate of two a week, which will soon be increased to three per week until we have 30 by the end of this fiscal year and the first phase of magnet production is complete. At the peak of the second phase, magnets will roll in at a rate of one per day."

As they come through testing, the magnets will be installed in the tun-

(continued on page 2)

# OER Says Tanks — But No Tanks

By the end of this month, a large blue-and-white tent will be raised in the valley north of the former Brookhaven Graphite Research Reactor — but it won't mean that the circus is coming to BNL.

Instead of three rings, the structure will enclose a $500,000 environmental remediation effort so highly organized that it will almost resemble surgery.

And, by the time the tent comes down in December, a disappearing act will have taken place: Nine large steel tanks, each slightly contaminated by the radioactive waste they once held, will have been dismantled and their pieces packaged for safe storage and disposal off-site as low-level radioactive waste.

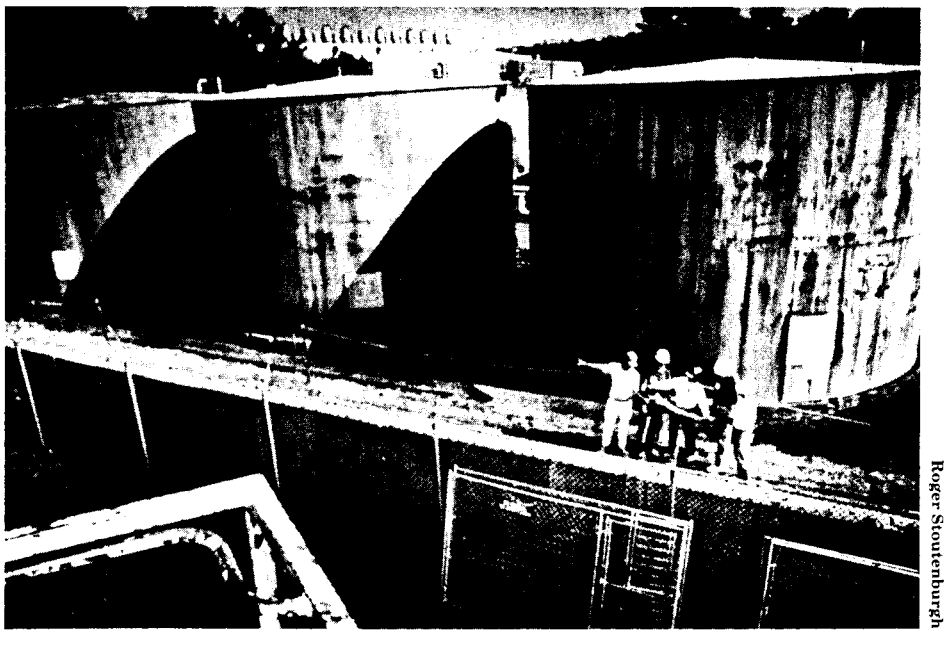
The effort is being coordinated by BNL's Office of Environmental Restoration (OER) under an initiative to investigate and clean up contaminated areas on the Lab site.

BNL was added to the National Priorities List of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as the Superfund Act, in 1989.

Superfund, passed by Congress in 1980 and reauthorized in 1986, provides for the cleanup of more than a thousand contaminated sites nationwide. The U.S. Department of Energy (DOE) assumes cleanup costs for Superfund sites within its facilities.

"In terms of action, this will be one of the first major, visible removal-action projects we've undertaken," capping months of planning and smaller operations, said OER Project Manager A.M. Topé.

OER was established within the Director's Office in 1991, to oversee such cleanups under a procedural framework set by an Interagency Agreement among DOE, the U.S. Environmental Protection Agency and the New York State Department of Environmental Conservation. ENSR Remediation and Construction, a contractor from Somerset, New Jersey, will carry out the operation.



Roger Stoutenburgh

**Dwarfed by three of the nine tanks that will be removed by ENSR Remediation and Construction are (from left): Robert Litzke, Office of Environmental Restoration (OER) field engineer; George Stofflett, ENSR; A.M. Topé, OER project manager; Daniel Carbery, ENSR; and Brian Murphy, ENSR.**

### Dismantling the D Tanks

The operation will involve nine tanks in all, including three green 380,000-liter (L) (100,000-gallon) holding tanks and two green 19,000-L (5,000-gallon) blending tanks located near Bldg. 811, the Waste Concentration Facility (WCF), on the corner of Fourth Avenue and Thomson Road.

Four tanks — two 11,400-L (3,000-gallon) and two 7,600-L (2,000-gallon) — located underground near Bldg. 650 on Cornell Avenue, will be unearthed, emptied, and transported to the tent to be cut.

Built in the early 1950s and used until 1987, the WCF-area tanks were constructed to hold low-level liquid radioactive "D" waste. D waste is radioactive waste water characterized by gross beta activity levels greater than 90 picocuries per milliliter. At BNL, such waste is generated by scientific experiments and other operations, and is condensed at the WCF by the Safety & Environmental Protection (SEP) Division for disposal off site.

Since 1987, two new tanks in the WCF area have stored the Lab's D waste. Meanwhile, the three large older tanks, each about 9 meters (m)

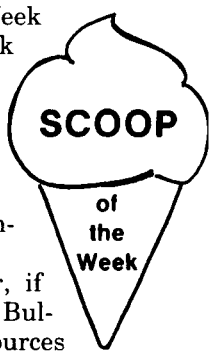
(continued on page 2)

## Contract Ratified

On August 4, the members of the International Brotherhood of Electrical Workers (IBEW) Local 2230 ratified a one-year contract with Associated Universities, Inc., effective August 1. The economic provisions of the contract call for a 3.5 percent wage increase.

At Brookhaven, IBEW represents about 560 bargaining unit employees in six divisions: Central Shops, Photography & Graphic Arts, Plant Engineering, Safety & Environmental Protection (firefighters), Staff Services, and Supply & Materiel.

## Scoop of the Week




A Scoop of the Week is awarded to Nick Gmur, National Synchrotron Light Source Department, for his tip on Trevor Sears' participation in the Empire State Games.

During summer, if you can scoop the Bulletin's informed sources with a hot tip and if the Bulletin publishes a story based on your idea, then you too may win a Scoop of the Week: an official certificate, suitable for framing or redeeming at the Cafeteria for a free frozen dessert, compliments of Service America Corporation.

To enter the contest, send your hot tips to the Brookhaven Bulletin, Bldg. 134, or call Ext. 5053.

## See the Shows With BERA

In addition to already scheduled trips to see the Broadway shows *Showboat* and *Beauty and the Beast*, BERA is now organizing a group to see the Christmas Show at Radio City Music Hall. The dates and per-person prices are as follows:

| | | |
|---|---|---|
| *Showboat* | Saturday, October 15 | $121 |
| *Beauty and the Beast* | Sunday, November 20 | $121 |
| Radio City Christmas Show | Sunday, December 11 | $99 |

For *Showboat*, weather permitting, there will be a short stop at the South Street Seaport. Dinner will be at La Maganette, a restaurant in the theater district. The *Beauty and the Beast* trip will include a stay at Rockefeller Center and the 5th Avenue area, with dinner after the show at Cafe 44. The Christmas Show will include time in the 5th Avenue area for shopping, browsing and viewing the tree at Rockefeller Center. At 4 p.m., before the 6 p.m. show, Cafe 44 will be the place for dinner.

Each trip includes orchestra or mezzanine seats, full-course dinners, round-trip motorcoach service from the Brookhaven Center, and all taxes and tips.

A $50 deposit to reserve tickets is due immediately. Make reservations at the BERA Sales Office, weekdays, 9 a.m. to 1:30 p.m. If you have questions, call Andrea Dehler, Ext. 3347, or M. Kay Dellimore, Ext. 2873.

## Call for Bowlers

Although summer is not yet over, it's time to "think bowling" again!

Applications for the Tuesday night men's league in Port Jefferson and the Thursday night mixed league in Shirley are available at the BERA Sales Office. Priority registration for existing teams is due by Friday, August 19; new team registrations are due by Friday, August 26. A captains' meeting will be held on Wednesday, August 31, at noon, in Berkner Hall, Room D.

So sign up. You do not have to be a great bowler, just a willing one! For information, contact Debbie Botts, Ext. 7218, or Maryann Reynolds, Ext. 2352.

## Arrivals & Departures

### Arrivals

**Kenneth J. Boland** ... Saf. & Env. Prot.
**Jean M. Odin** ..... Saf. & Env. Prot.

### Departures

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

**Anthony Calligeros Jr.** ..... Plant Eng.
**Kathryn E. Hornik** ..... RHIC
**Kambiz Nassiri** ..... Plant Eng.
**Peter F. Pohlig** ..... Sfgrds. & Sec.

## Astronomical Society

On Thursday, August 18, at noon, in Room D, Berkner Hall, the BNL Astronomical Society will meet to discuss the redesign of its telescope. New members are welcome. For more information, call Keith Power, Ext. 5355.

## Atlantic City Trip

A few seats remain for BERA's one-day trip to the Claridge Hotel and Casino on the Boardwalk in Atlantic City on Saturday, August 27. The initial cost will be $22, but the hotel-casino will give a $10 coin return.

The bus will leave the Brookhaven Center at 9 a.m., with an extra pickup at LIE Exit 63, if requested. Return will be by about 11:45 p.m.

Tickets are on sale now at the BERA Sales Office, Berkner Hall, weekdays from 9 a.m. - 1:30 p.m. For more information, call Andrea Dehler, Ext. 3347; Rosalie Piccione, Ext. 3160; or M. Kay Dellimore, Ext. 2873.

## UNIX Training

The next round of UNIX training to be offered by the Computing & Communications Division (CCD) includes:

- **X Window System/Motif Programming** — Five full days, Sept. 19-23; 12 experienced "C" programmers will learn to write GUI applications using X Window System and Motif toolkit libraries; fee, $500.
- **Introduction to UNIX** — Five mornings, September 26-30; fee, $250.
- **Perl Programming** — Five afternoons, September 26-30; fee, $250.

All classes will be held in the CCD seminar room, Bldg. 515. Call Maria Gatz, Ext. 5196, to reserve a place.

## Software Demo

On Thursday, August 18, at 3 p.m., in the CCD seminar room, Bldg. 515, TCP, the public-domain computer-security product, which provides logging and access restriction on a UNIX host, will be presented. For information, contact Ed McFadden, Ext. 4188.

## Retirement Counseling From TIAA-CREF

A TIAA-CREF representative will visit the Lab on Wednesday, Thursday and Friday, September 21-23, to answer BNL employees' questions regarding the TIAA-CREF Retirement Plan in one-on-one counseling sessions.

Questions might include:

- What are the differences between TIAA and CREF?
- How should I allocate my money between TIAA and CREF?
- How can I save on taxes?
- What options and flexibilities do I have for my existing dollars with TIAA-CREF?
- What are my options for the retirement years?

To arrange an appointment, call Joyce Wund, Personnel Division, Ext. 7516, by August 19.

## Equipment Demo

On Wednesday, August 17, at 2 p.m., in the CCD seminar room, Bldg. 515, IBM will present an overview of the company's Scalable PowerParallel Processor (SP2). The SP2 is based on the RS6000 processor and can scale from four to 512 nodes in a single system image. For more information, call Ken Hammer, Ext. 7311.

## Cafeteria Menu

| | |
|---|---|
| **Monday, August 15** | |
| Soup: Beef barley | .90/1.20 |
| A la Carte: Cod w/mustard beurre blanc | 3.75 |
| Fitness: Vegetable calzone | 2.95 |
| Deli: Pastrami sandwich | 3.20 |
| Grill: Reuben | 3.30 |
| **Tuesday, August 16** | |
| Soup: Chicken & rice | .90/1.20 |
| A la Carte: Veal Parmesan | 3.95 |
| Fitness: Chicken cacciatore | 3.85 |
| Deli: Virginia ham sandwich | 3.20 |
| Grill: Lamb kabobs | 3.30 |
| **Wednesday, August 17** | |
| Soup: Vegetarian vegetable | .90/1.20 |
| A la Carte: Chicken primavera | 3.85 |
| Fitness: Shepherd's pie | 3.65 |
| Deli: Roast beef | 3.20 |
| Grill: Monte Cristo | 3.30 |
| **Thursday, August 18** | |
| Soup: Black bean | .90/1.20 |
| A la Carte: Braised short ribs | 4.25 |
| Fitness: Southwestern chicken | 3.70 |
| Deli: Turkey | 3.20 |
| Grill: Philly cheesesteak | 3.30 |
| **Friday, August 19** | |
| Soup: New England clam chowder | .90/1.20 |
| Display Cooking: Pasta | |
| Fitness: Flounder w/julienne veg. | 3.75 |
| Deli: Corned beef | 3.20 |
| Grill: Tuna melt | 3.30 |

## Parking Note

**While the tent to enclose the D tank remediation project is erected later in August, part of the parking lot near the Alternating Gradient Synchrotron and Bldg. 811 will be occupied and unavailable for parking.**

BROOKHAVEN BULLETIN

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**ANITA COHEN**, Editor
**MARSHA BELFORD**, Assistant Editor

Bldg. 134, P.O. Box 5000
Upton NY 11973-5000
Tel. (516) 282-2345; Fax (516) 282-3368

## 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.

**SCIENTIFIC RECRUITMENT** - Doctorate normally required. Candidates may apply directly to the department representative named.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in chemical physics or physical chemistry, to work on a research program in which high-resolution laser techniques are applied to problems in photodissociation, molecular energy transfer and laser-initiated reactions. Experimental experience in laser spectroscopy and gas-phase molecular dynamics is required. Contact: Gregory Hall, Chemistry Department.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees.

DD 2050. SYSTEMS SPECIALIST - (term appointment) Requires a BS in computer science or equivalent experience, and a thorough knowledge of system software for the UNIX operating system as implemented on modern workstations such as the SGI Iris, IBM RS/6000, HP 9000 and SUN SPARC. Familiarity with CERN software is highly desirable, as is experience with state-of-the-art disk and tape technology. Responsibilities will include implementing new software tools, installing hardware and maintaining and upgrading the system. Proficiency with scripting languages such as Perl and AWK and with C programming essential. Experience in high-energy or heavy-ion physics desirable. Physics Department.

### Motor Vehicles & Supplies

93 CUTLASS SL - red w/red int., 3.1-liter eng., ac, cruise, a/t, 4-dr., p/s, clean, 17k mi., excel. cond., $14,000. Ext. 3243.

92 PONTIAC GRAND AM - white w/red int., 24k mi., loaded, mint cond., $13,200. Bob, Ext. 7238.

89 NISSAN SENTRA XE - coupe, blue, 2-drs., 5-spd., m/t, ac, am/fm cass. stereo, 80k mi., excel. cond., $4,000. Emilio, Ext. 3734 or 928-0541.

87 NISSAN MAXIMA GXE - all power, moonroof, a/t, very clean, 85k mi., $5,500 neg. Lori, Ext. 3672.

87 PLYMOUTH VOYAGER MINI VAN - 4-cyl., a/t, ac, cruise, folding bed, new tires, battery, brakes, catalytic, etc., $3,900. Bob, Ext. 4637.

87 MITSUBISHI STARION ESI-R - black/black leather, 5-spd., turbo, alarm, ac, ABS, all power, am/fm stereo cass., very clean, ask. $3,100. Ext. 5151 or 874-4812.

87 TOYOTA SUPRA - loaded, 75k mi., mint cond., $7,000. Ext. 3695, leave message.

86 RELIANT WAGON - high mi., body clean, runs well, v.g. cond. 472-1302.

85 HONDA CR250 - new sprockets, chain, piston, cyl., etc., liquid-cooled, runs well. Patrick, 289-7807.

85 CHRYSLER LEBARON - 4-cyl., 4-dr., 36,928 mi., one owner, v.g. cond., $2,000. O. Booker, Ext. 3082 or 727-5912.

84 FORD C150 VAN - v.g. mech. cond., will pass inspection, $1,200 neg. Bill, 281-6498.

84 TOYOTA TERCEL - 5-dr., new brakes, battery, muffler, runs well, 116k mi., needs minor body work, $800. Guo, 444-8876 days or 345-3253 eves.

84 VOLVO WAGON - runs, best for parts, best offer. Roger, Ext. 2732.

84 OLDS DELTA 88 ROYALE - 4-dr., V-8, a/t, p/s, p/b, a/c, cruise, new exhaust & tires, good cond., asking $1,700. Chen, Ext. 4331.

83 LINCOLN CONTINENTAL - sunroof, recond. trans., 177k mi., $2,000. Udo, Ext. 2245 or 286-1592.

82 HONDA CIVIC - a/t, 4-dr., runs well, 140k mi., $750. Vinny, Ext. 2642.

81 LINCOLN MARK VI - Bill Blass edition, digital dash, new exhaust system, all available options, good cond., asking $1,900. Ben, Ext. 7732 or 698-0057.

81 CHEVY PICKUP - new inspection, no rust, good cond., w/bedliner, $1,750. Ext. 5400 or 878-6098.

81 CORVETTE - red/tan, 4-spd., all power, mirrored, T-top, gar., $9,500. Diana, Ext. 4262, M-W-F.

80 BUICK REGAL - ac, a/t, p/s, needs engine work, $100. 878-0898 after 8 p.m.

65 CHEVY IMPALA - 2-dr., not running, good for parts, best offer, you tow. Rich, Ext. 5284.

63 CORVETTE - '74 eng., a/t, needs body & int. work, $13,000; '35 Chevy, 4-dr. sedan, street rod, 327 cu. in., 350 T.H. Mustang front end, $13,000. 698-5762.

INSTANT GARAGE - Cover It, 22' x 24' x 10', tan, three-zipper door, clear top panel, hardly used, orig. $2,000, asking $800. Wayne, Ext. 7238.

TIRES - P225x75R14, 2, excel. cond., $40/ea. Tony, 698-9274.

92 DODGE DAKOTA MAGNUM - V-6, 4wd, ABS, a/t, tow prep. pkg., am/fm cass., dk. blue, ext. cab, bucket seats, 40k mi., $13,000 neg. Nate, Ext. 4058.

91 MAZDA NAVAJO LX - blue/gray, 4wd, 5-spd., 72k mi, excel. cond., $13,500. Pete, Ext. 4028.

91 HONDA CIVIC - h/b, driver's side door window, $15. Ext. 2509 or 878-4882.

89 VW CABRIOLET - convertible, ac, a/t, Blaupaunkt, 60k hwy. mi., excel. cond., $8,750. 821-0686.

88 HONDA PRELUDE 2.0 SI - a/t, all power, moon roof, white, v.g., $6,500. Jeff or Allison, 286-1348.

87 HYUNDAI EXCEL - 39k mi., new brakes, ac, m/t, 4-dr., seat folds for bigger trunk, mint. 281-3515.

85 DODGE DAYTONA - turbo, p/s, p/b, ac, sunroof, p/seats, m/t, h/b, runs well, high mi., $1,200. Nancy, Ext. 7976.

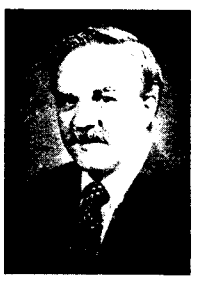
85 NISSAN SENTRA - needs engine work, body good cond., $225. Douglas, Ext. 7046.

85 BUICK REGAL - V-6, am/fm, ac, new shocks, struts, tires, exhaust, 54k mi., $2,900. Tom, Ext. 7805.

(continued on page 4)

# Inside Info

**Melvin Schwartz**



**Laurence Trueman**

**Melvin Schwartz**, who has been BNL's Associate Director for High Energy and Nuclear Physics since January 1991, will be leaving the Laboratory at the end of this month, to become I.I. Rabi Professor at Columbia University. Until his permanent replacement comes to BNL, Senior Physicist **Laurence Trueman** will serve as Acting Associate Director for High Energy and Nuclear Physics.

BNL Director **Nicholas Samios** credited Schwartz with being "critical to setting the course for the experimental program at RHIC," BNL's Relativistic Heavy Ion Collider. He also recalled the comment of the AUI Visiting Committee: "The high quality of the scientific program in place and planned for both the AGS [Alternating Gradient Synchrotron] and RHIC is a direct result of his scientific taste and his encouragement of the highest scientific standard."

Samios added, "It is always a fun and lively experience to work with Mel. While we will be losing him as a member of the BNL team, we will continue to have him as a user of our facilities."

Of Trueman's willingness to accept this assignment, Samios said, "We are fortunate to have Larry, a previous Associate Director who is familiar with all aspects of the position." Trueman was Schwartz's immediate predecessor in this associate directorship, serving from September 1988 through December 1990, when he opted to return to research.

# Reports Available

The following reports are available to Lab staff and affiliates of DOE, AUI and NRC. Others may purchase them from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. Staff members should call the designated contact.

**BNL-52417**
Contact: M. Chaloupka, Ext. 2746
Hydrodynamic Effects in Tanks Containing Layered Liquids. A. Valetsos, P. Shivakumar, K. Bandyopadhyay

**BNL-52420**
Contact: M. Chaloupka, Ext. 2746
Dynamic Response of Rigid Tanks with Inhomogeneous Liquids. P. Shivakumar, A. Valetsos, K. Bandyopadhyay

# Magnet (cont'd)

nel and welded together in the following order: a dipole; a combination magnet made up of a corrector, quadrupole and sextupole, called a CQS; another dipole; another CQS and so on.

The 300 sextupoles are being manufactured by Everson Electric Company. The Magnet Division is fabricating the correctors in Bldg. 197, assembling the CQSs in Bldg. 905, and testing the dipoles and quadrupoles in Bldg. 902.

According to Ozaki, the first 48 dipoles and 48 CQSs will be assembled into what is called the first sextant, or one-sixth of the machine. To sit between 4 and 6 o'clock in the tunnel, this sextant is scheduled to be completed early in 1996; so, by mid-1996, a test of the sextant can be undertaken using beam from the Alternating Gradient Synchrotron (AGS). With the injection line from the AGS to RHIC to be completed this fall, work on taking the beam from the AGS to RHIC will begin in mid-1995.

As Ozaki concluded, "Installing the first magnet is another major milestone and another testimony to the talent of the RHIC staff and our contractors and their dedication to making RHIC happen on schedule and within budget. We look forward to making all our milestones according to plan until RHIC comes on line."

— Marsha Belford

# At the Top of Their (Empire State) Games

Nearly 7,000 competitors representing six regions of New York State participated in the 17th Empire State Games held in Syracuse last weekend, August 3-7. And, of more than 1,000 athletes from the Long Island region, at least two work at BNL: Hakim Jones, a summer student with the Youth on Campus program run by the Office of Equal Opportunity, who has been doing clerical work in the Public Affairs Office and the National Synchrotron Light Source Department; and Trevor Sears, a chemist in the Chemistry Department. Both qualified for the games by besting the best of Long Island in intense competitions held in May.

**Hakim Jones, who will begin her senior year at Longwood High School in the fall, was one of two Long Island students to take part in the discus event in the Scholastic Division. Throwing the one-kilogram (2.2 pound) metal disc 30.9 meters (103 feet) — about three meters shy of her personal best — Jones took eighth place in this event. Though she competed at the games only in discus, Jones also throws the shot put, as she demonstrates here, and she has hurled the 4-kilogram (8.9-pound) ball as far as 11.1 meters (37 feet). Jones has been a member of Longwood's varsity team since eighth grade.**

**As part of L.I.'s men's cycling team in the Open Division, Trevor Sears participated in four races: the 10-mile time trial, 80-mile road race, 32-mile criterium and 100-kilometer team time trial. In this last event, in which two 4-man teams rode together over the lengthy course, Sears and his team came in second, taking home silver medals. Not bad for someone who says, "I just came out of retirement one and a half years ago, and I was the oldest person on the team." Sears originally started cycling some 25 years ago in his native Britain but gave it up to spend more time on his science. Since then, he says, "I've been keeping fit running, so I thought I'd try cycling again and show the younger guys how to do it!"**

**— Photos by Roger Stoutenburgh**

# Tanks (cont'd)

in diameter and 6 m tall, have stood empty, except for a 1.9-centimeter crust of residue caked on the bottom of one. The blending tanks, each 3.3 meters tall, were taken out of service in October 1993 and are also empty.

The walls and floors of the largest tanks are deteriorating, and two have had several minor leaks in the last decade, all of which were cleaned up immediately from the surrounding asphalt. Their condition, combined with the lingering presence of radioactive contamination in all five old tanks, has made the area one of the OER's priority "Areas of Concern."

The removal action is expected to begin after Labor Day, following a final Operation Readiness Review by SEP. ENSR's workers, wearing protective equipment and clothing, will enter each tank, clear out dust and debris, and paint the interior to seal in dust and rust. Then, a worker on a boom hoist will cut the tanks into large pieces with an oxyacetylene torch.

These large pieces will be transferred by a 20-ton crane to another cutting station, where they will be further reduced to 1.2 m x 1.8 m sheets that can fit into specialized steel storage containers. The containers will be stored on-site for transfer in early 1995 to DOE's Hanford Disposal Site in Hanford, Washington. ENSR will also clean and seal the concrete bases on which the tanks rest, including the asphalt pad, and perform a final radiation survey to be compared with one it conducted in May.

BNL personnel, including an OER field engineer, and Safety Representative Bill Pemberton, SEP, will monitor ENSR's operation.

A survey performed by OER in September 1993 showed radiation readings ranging from 3 millirem per hour (mR/hr) to 24 mR/hr within the magenta-and-yellow contaminated-area barrier rope one meter from the tanks. A 3-m-high chain link fence topped with barbed wire and backed up in some places by concrete shields surrounds the site.

However, Topé explained, "If there were no tent, the hazard here during the removal action for personnel outside the fenced area would be, basically, airborne contamination," by radioactive dust and rust when the tanks are cut open and cut into pieces.

But with ENSR's containment tent and its 99.9-percent-efficient air filters in place, little or no risk is expected to people on the BNL site or off. "All the engineering controls that could possibly prevent releases or detect them will be in place," Topé explained.

Despite the relatively low risk, ENSR staff will abide by strict guidelines in carrying out the removal action.

"The planning has been extensive, including preparation and review of an operations plan, a waste-minimization plan, a health and safety plan and several shop drawings," Topé said.

Added Daniel Carbery, ENSR's project manager for the BNL job, "Preplanning for emergencies is a big part — we have contingency plans for medical emergencies, fires," even 90-mile-an-hour hurricane winds.

The company's workers are highly experienced in working safely under hazardous conditions, Carbery continued. "Some of the people on this project have handled the hottest stuff this side of Chernobyl, such as fuel rod changeouts at nuclear power reactors," he said. "They understand health physics extremely well. From a hazards standpoint, this job is about dust."

To back up their extensive training and experience, each of the ten ENSR removal workers will wear "moon suits," respirators, eye and ear protection, and communications devices when inside the containment tent. Activities under the tent will be monitored with closed-circuit video.

Four ENSR health and safety personnel will coordinate with BNL staff to make sure the workers follow elaborate safety rules and regulations. Guidelines set by the federal government, DOE, BNL, Suffolk County, and the National Fire Protection Association will all be observed.

"The whole job required coordination with several departments and divisions, such as the Alternating Gradient Synchrotron, the Public Affairs Office, Plant Engineering, SEP, Contracts and Procurement, and Safeguards and Security," Topé said. "Everybody involved has been extremely cooperative and understands our mission in this job."

— Kara Villamil

# Classified Ads (cont'd)

85 TOYOTA TERCEL - 2-dr. h/b, 4-spd, 136k mi., new brakes, full-size spare, am/fm, excel. cond., $1,400. John, Ext. 7039 or 929-4450.

84 FORMULA - excel. cond., new trailer, must sell, $7,000. Ken, 473-7460.

84 PONTIAC SUNBIRD - 5-spd., 4-cyl., clean in & out, needs minor front-end work, $550. 467-1343.

84 ACCORD - 5-spd., 4-dr., ac, stereo, dependable, well maint., new tires, battery, $3,500. Susan, Ext. 2184, or John, 821-5836.

84 MERCURY MARQUIS - a/t, p/s, p/b, p/w, rebuilt engine, trans., brake, $850. Ext. 2509 or 878-4882.

81 FORD FAIRMONT - 6-cyl., a/t, runs well, $500. Phil, Ext. 2760 or 821-1839.

80 & 82 SUZUKI GS 1100 - both v.g. cond., $1,800 ea. also parts bike incl. Jim, Ext. 4843.

79 TRIUMPH BONNEVILLE - 750 cc, low mi., $3,000. Mark, Ext. 4986 or 821-3169.

78 TRAVEL TRAILER - 23½', sleeps 6, large bath, full awning, extras, $3,800; '69 Mustang conv., 6-cyl., 3-spd., teal, 85k mi. Tirre, Ext. 3288, 281-0360 eves.

78 SUZUKI GS750L - 24k mi., windshield, backrest, hard saddlebags, helmet, top shape, probably good for another +24k mi. Kimo, Ext. 7254 or 473-6322.

78 OLDS - am/fm cass., ac, p/b, p/s, p/w, runs well, must sell, $295. Ext. 1020.

73 BUICK CENTURY - 4-dr., new tires, runs, 86k orig. mi., $750 neg. 587-0707.

ROOF RACK - gutter-mount HD, v.g. cond., asking $15. Jan, 929-4522.

UTILITY TRAILER - Doolittle, 6½'x12', ramp, 3' sides, storage, heavy-duty, used 2 times, like new, $950. Bill, Ext. 4201 or 567-5631.

CAR STEREO - Sony, p/amplifier, XM-701, 2x45W, mounting hardware, cost $250, must sell $125 or best offer. Varouj, Ext. 7718.

## Boats & Marine Supplies

32' LUHRS - 1968, T-318 Chryslers, low hrs., galley, head, FB full encl., electronics, extras, great fishing boat, in water, $7,500. Bob, 878-8064.

26' CHRIS CRAFT - dinette, galley, head, full canvas, sleeps 4, many extras, a family boat. 475-3553.

23' AQUASPORT - center console, 1990 200-h.p. Mercury ob, Loran, color DF, VHF, am/fm cass., outriggers, live baitwell, trailer T/A. 395-4705.

23' PUMA SAILBOAT - all fg, sleeps 4, galley, fixed keel, mooring, dinghy, motor, sails good shape, extra sail, $2,000. Mike, Ext. 7861 or 698-3967.

22' SOUTHERN SKIMMER - center console, 48-h.p. Evinrude, trailer, fg, $6,000 neg. Ed. 325-1245.

19' BOWRIDER CRUISER - 115- h.p. Johnson, nearly new trailer w/elec. winch, $2,500. Jim, Ext. 3372 or 821-0250.

18½' STARCRAFT - alum., needs deck rebuilt, new c.c., teleflex, Morse controls, trailer, no eng., $1,000. Bill, 281-6498.

17' O'DAY - w/trailer, main & jib, 2-h.p. eng., plus access., excel. cond. Sonja, Ext. 3575 or 261-5290.

16' STARCRAFT - 35-h.p. Evinrude, Cox galvanized trailer. 325-0447 after 6 p.m.

16' JOHN DORY - good cond., $450. 286-3235.

15' AVON - inflatable, 35-h.p. Evinrude, trailer, good cond., $2,300 neg. Ext. 2095 or 286-7430.

10' POTO - w/motor mount, $250. Bill, 822-6941.

MARINE BATTERIES - 12V, in plastic cases, super crank heavy-duty 600 A, $90/both. Marty, Ext. 2214.

20' CLAM BOAT - wide-beam, fg cabin, self-bailing, asking $750. 563-6680.

19½' O'DAY MARINER - 1979 sailboat, good cond., w/trailer, $3,000. 286-1097.

19' BAYLINER - 1986, Bowrider, 125-h.p. Volvo i/o, trailer, $3,500. Joe S., Ext. 2023.

18' SHARPEE CLAM BOAT - glass-on-wood, needs glass work, $150. Erik, 758-1654.

18' DIXIE - fg, V-hull, runabout, canvas top, needs steering, seats. Doug, Ext. 4084 or 472-1830.

KAWASAKI JET SKI 300 SX - 1987, excel. cond., $1,000. Ryan, 878-1178.

## Furnishings & Appliances

BED - queen, bookshelf headboard, frame, matt., $300; exec. leather chair, $85; nightstand, $25; computer desk, $70. Hong, Ext. 3389 or 924-9435.

COFFEE TABLE - glass top, $30; stroller, $20; child's swing, $10; Dustbuster, $10. Kathy, 744-2203.

DESK - professional, detachable typewriter stand, rolling swivel chair, floor pad, like new, $50. Ext. 5265.

DINING ROOM - contemp., hutch, w/table, 6 chairs, excel. cond., $300. 286-2964.

DESK - Ethan Allen, $300; Ethan Allen stereo cabinet, $400; both cherry wood, excel. cond. Mike, Ext. 5972 or 744-4579.

DINING ROOM - table w/pedestal base, 2 leaves, 6 chairs, sliding gears, dark pine, great cond., $300. Tim, Ext. 4630 or 878-3947.

DINNERWARE - Pfalzgraff Yorktown, service for 8, many access., $125. 289-0687.

DRYER - Maytag, apt.-size, $50. 265-6542.

END TABLES - 2, pecan wood, 1 coffee table, excel. cond., $100/all. 286-2964.

HOPE CHEST - antique, excel. cond., must sell, $350. 325-8116 eves.

LOVE SEAT - Jennifer Convertible, single bed, pull-out, pillows, like new, $125. Marty, Ext. 2214.

LOVE SEAT - blue country French, crushed velour, excel. cond., orig. $800, ask. $300. Mark, Ext. 2238 or 369-7476.

MOVING SALE - TV, VCR, cassettes, microwave, new ac, playpen, exercycle, high chair, suitcase, cooler, toys, more. Israel, Ext. 4830 or 1037.

RANGE - electric, self-cleaning, good cond., $85. Jim, 744-2095.

RECLINER - brown leatherette, good cond., $100. Sandy, Ext. 3369 or 286-1022 eves.

REFRIGERATOR - compact, large-size, used 1 yr., $120. Pam, Ext. 7286 or 581-7656.

SOFA BED & LOVE SEAT - $150/both; 2 bookcases, wood, open shelves on top, cabinet on bottom, $200/both. Jeanne, 286-1290.

TABLE - dining room, white Formica, w/drop-in leaf, 6 swivel armchairs, $150. Don, Ext. 7237 or 744-2921 after 5:30 p.m.

WATER BED - Simmons Beautyrest Feelings, adjustable cylinders, frame, $350; wicker set, full-size headboard, 2 nightstands, $20/each. Nancy, Ext. 5744.

AIR CONDITIONERS - Emerson Quietkool, 7,400 Btu, 8.8 EER, $100; 5,900 Btu, 7.5 EER, $85; GE, 5,000 Btu, 7.5 EER, $75. 473-6546.

BED - high-riser, w/mattresses, hardly used, excel. cond., $50. 473-4217.

CHAIR - spindle rocker, dark wood, w/cushions, excel. cond., $30. 289-8105.

COFFEE TABLE - kidney-shaped, glass top, must see, $40 or best offer. 281-3515.

CURIO CABINET - walnut finish, $150; couch, traditional, blue/multi, $75; crib, white, $100; rowing machine, $30. Ann, Ext. 7611.

DESK - women's mahogany rolltop, $120; Sharp microwave, carousel; small refrigerator, $50; oval table, $70. 924-4927.

FREEZER - Gibson, upright, best offer. 363-7032.

MICROWAVE - Kenmore, full-size, w/cart, $50. Michael, Ext. 3571 or 341-1025.

RECLINER - orig. $450, now $100; rocking chair, w/cushions, Ethan Allen, orig. $350, now $150; stereo cabinet, pine, $50. Bob, Ext. 3509 or 289-9533.

REFRIGERATOR - Gibson, side-by-side, 19 cu. in., 32"W x 32"D x 63"H, works well, $125. Vita, 277-0464, or Frank, Ext. 5377.

STOVE TOP - Caloric, stainless steel, old, wall oven; Kenmore dryer, white, 24"; extra-large capacity washer. 654-3128.

TABLE - d/r, pine, 62"x40", 2 leaves, extends to 86", 4 chairs, excel. cond., $395. Cathy, Ext. 2541.

WASHING MACHINE - Whirlpool, 24", portable, almond color, excel. cond., $225. Regina, Ext. 2876.

WATER BED - Simmons Beautyrest, queen, water-filled cylinder style, w/frame, 4 yrs. old, $350. Nancy, Ext. 5744.

WATER BED - Somma, king-size, moving, $350 neg. Jean, 286-1290.

## Tools, House & Garden

ATTACHE TOOL CASE - Xcelite, new, model TC-100, orig. $100, sell for $55. 727-3608.

DOOR KNOB SETS - used, bdrm., bath, keyed entry, lock sets, deadbolts, $1/ea. Pete, Ext. 5105.

ELECTRIC GRILL - outdoor, Charbroil w/cover, lava rocks, like new, $100; gardenia plant, large, bush-type in clay pot, $100. Claire, 325-8116 eves.

FENCE - chain link w/gate, 5', $200; bug zapper, for ¾ acre, $20; T-Fal pots, sealed carton, $70; fireplace w/pipes, $50. Ext. 3243 or 751-7023.

LAWN MOWER - Snapper, 21" cut, 4-h.p., rear bag, 2 yrs. old, excel. cond., $175. Dan, 698-7322.

SCROLL SAW - 16", Sears, $25. 567-9025.

VANITY - 30", oak bathroom vanity, clam shell sink & faucet, never used. 289-8105.

WINDOW - double casement, excel. cond., orig. $300, sell for $150; assorted moldings, $20. John, 924-0651.

MOWER - deck for Gravely, 2-wheel. 363-7032.

RADIAL ARM SAW - Delta Deluxe, 10", w/stand, extra blade, wrenches, manuals, excel. cond., rarely used, $475. Julia, 696-6345.

TREES - Japanese maples, $10-$45+. 265-6542.

## Sports, Hobbies & Pets

BIKE - Piranha, 21", boy's, excel. cond., $280 new, ask. $50. Ext. 5316 or 289-0034.

BIKES - women's, 26", 3-spd., needs brakes, $10; boy's, 20", $15; tennis balls, like new, $3/dozen. Ext. 7505 or 689-8605.

BIKES - women's, 10-spd., $10; girl's, 14", $10; boy's, 12", $5. John, 924-0651.

BIKES - 2, his & hers, 3-spd. Eng. racer, need repair, $50/both or best offer. Nick, Ext. 3205 or 653-8251.

CIRCUIT TRAINER - Body by Jake, great cond., half price, $75. Ext. 4446.

EXERCISE BIKE - Whitley, AMF, excel. cond., $35. Paul, Ext. 4156.

GERMAN SHEPHERD - pups. AKC, m/f, white, raised w/children, excel. temperaments, 6 wks. old. Joe, Ext. 2314 or 924-6324.

SKIS - Olin, 180cm w/Salomon 444 bindings & runaway straps, $20. Don, Ext. 7237 or 744-2921 after 5:30 p.m.

SKIS - Dynamic Edition, 2 yrs. old, w/Salomon bindings, $130; ski boots, Salomon FPex, size 11, $60. Emmanual, Ext. 3202.

STAIR CLIMBER - Bruce Jenner Plus, like new, w/videotape, $40. 325-8116 eves.

TRUMPET - student, Yamaha, fair cond., $150 or best offer. James, Ext. 5318.

WORKOUT GYM - Weider, curls, leg press, sit-ups, more, $50; rower, $15; all excel cond. 472-3254.

BIKES - 2, girls' w/training wheels. Vera, Ext. 7702.

BICYCLE - Schwinn, men's, 27", 10-spd., red, excel. cond., $100. Joe, Ext. 7528.

BIKE - mountain, 20", 2 months old, GT All Terra, brand-new, $200. Danny, 758-3215.

BIKE - girls', 20", pink, $20; Panasonic stereo, turntable, radio, $15. Tom, 744-4555.

BIKES - Fuji BMX, $15; Ross Mt. Washington, $70; RC car, Jr. T, w/remote charger, $100. Ext. 7225.

EXERCISE BIKE - Tunturi Executive ergometer, like new, $150. 473-7667.

GOLF CLUBS - Master metal woods, 1,3 & 5, true temper gold shafts, mid flex, frequently tuned, Golf Pride Victory grips, $150 or best offer. Ext. 4446.

HOME GYM - Huffy Exo-flex 1900, adjustable bands, padded bench, foam-covered bars, new cond., orig. $130, asking $95. Linda, Ext. 2733 or 878-8491.

RABBIT HUTCH - 3 compartments, wire cage, $15. Tom, Ext. 4563.

WEIGHT BENCH - Ajax octi-bench, w/weights, $85; cross-country ski machine, $50; exercise bike, $25. 929-8105.

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

RC CAR & TRUCK - 4wd, w/radios, batteries, charger, spare parts, complete, $100. Dave, 924-4927.

STAIR STEPPER - Sears Lifecycle 2000, w/digital readout, used once, orig. $280, asking $125. Maureen, 698-0308.

TELESCOPE - Celestron C-8, w/heavy-duty tripod, motorized polar mount televue eyepieces, Barlo lens filters, many extras, $650. Jeff, 491-4246.

TREADMILL - non-powered, Alpine walker, new, in box, $185. 231-1359 after 6 p.m.

WET SUIT - med. size, full, w/boots, only used 4 times, orig. $300, sell for $75. 289-8105.

## Audio, Video & Computers

CAMCORDER - RCA, VHS, low hours, rechargeable batteries, $250. Ext. 5316 or 289-0034.

CAMERA - Wizard 9600 II, new, w/case, $185; Wizard modem, $65; Canon Hi-8, H660, new, in box, $485; video laser disc, $175. 929-6646.

CAMERA - Yashica FX-70 SLR, 42-75mm lens, w/CS-201 auto flash, $125; Yashica screw mount, use w/T-Adapter, Astro photo. mount, $15. 732-9118.

CAR PHONE - Audiovox CTX-3200, mint cond., many features, $40. Patrick, 289-7807.

RADIO - matched PR Kenwood VHF TK200, freq. 150.8 w/tone, batteries & charger, works well, $250. Steve, 698-5260.

TV - color, 14", Toshiba, $20. Feng, Ext. 3203.

CD CHANGER - Kenwood KDC-C200, 10-disk, car/home, mounting hardware, orig. $329, sell for $150. Varouj, Ext. 7718.

COMPUTER - IBM compact XT, 40MB hard drive, color mon., 24-pin printer, lots of software, $500. Tom, 744-4535.

COMPUTER - Commodore 64, 1541 disk drive, 1802 color mon., software, joystick, printer, $100. Tom, 434-9345.

STEREO - Pioneer, tuner, CD, dual cassette, 2 yrs. old, all remote, perfect cond., w/speakers, $450; entertainment center. Dan, 758-3215.

WOOFERS - 15", 175 watts, 350 peak, 70 oz. magnet, brand-new, asking $140/pair. 924-4927.

## Miscellaneous

BABY CLOTHES - girl's, size newborn to 2T, shoes, maternity clothes, excel. Ella, 467-3676 after 7 p.m.

BEER CANS - whole collection, almost 300, U.S. and worldwide, best offer. Tim, Ext. 4630 or 878-3947.

CAR-TOP CARRIER - Sears, used once, $75. 286-9426.

CHILD'S CAR SEAT - $5; booster seat, $1; child carrier for bicycle, $5. Ext. 4972 or 567-9025.

HIGH CHAIR - infant's, $10, swing, $10, infant's seat, $5, all Fisher Price; shower doors, $20; s/s sink, $10. Pam, 924-0341.

CAR SEAT - $20; child's bicycle, $10; tricycle, $10; stroller, $10. Michael, Ext. 3571 or 341-1025.

CHANGE MAKERS - for dollar bills, new, never used, 110 Vac, $300, $110/ea. Jan, 929-4522.

CRIB - oak crib, changing table, $200 or best offer. Tom, 744-4535.

DOLLS - India dolls, pre-1950, auth., $225/ea.; luggage, 2 carry-on, green, Samsonite, soft, American Tourister soft, $20/ea. 929-8105 after 6 p.m.

JACKET - fox, small, like new, $89. 473-7667.

RING - women's, 14 carat gold, 2-carat total diamond weight, cocktail ring, w/$3,195 appraisal, size 10, $700. Ext. 3305.

TRICYCLE - Playskool, $5; spring horse, 2-6 yrs. old, $15; walker, $10; mobile, $10; 2 strollers, $5-$90; TV, b/w, $15; everything must go. 341-1020.

TOYS - Fisher Price, desk & chair, dollhouse, w/play people, etc., books, puzzles, more. Vera, Ext. 7702.

TYPEWRITER - $20; hair dryer, $8; hand mixer, $5. Michael, Ext. 3571 or 341-1025.

WARDROBE - young men's; med./lg. Gap, Aeropostale shirts, turtlenecks, sweaters, wool sportcoat, 42, winter jackets, $100/all. 473-6546.

## Free

BACK ISSUES - magazines, guitar-player types. Fred Kuehl, Ext. 7947 or 588-2268.

DOG - med.-size female, mixed breed, short hair, about 4 mos. old, very intel., affect. Ron, Ext. 2214.

ELECTRIC KNIFE - GE. Ext. 3254.

KITTENS - 5 calico American shorthair mix, looking for caring & loving homes. Barbara, Ext. 3154.

SOFA & LOVE SEAT - and 2 end tables, good cond., you pick up. Angela, Ext. 5168 or 924-5282 eves.

23' THUNDERBIRD - f.g. hull, excel. cond., cuddy cabin, no motor or trailer, you haul away. 281-1832 eves.

## Yard & Garage Sales

E. PATCHOGUE - Sat. 8/13, 9-3 p.m., household items, tools, misc., 43 Neptune Ave., off Hospital Rd. at Fairfax.

## Car Pool

PLAINVIEW - LIE exit 43, 4th driver needed. Elliott, Ext. 2495 or Barbara, Ext. 5175.

## Real Estate

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

## For Rent

BAITING HOLLOW - beach cottage, l/r, eik, sleeps 4, full bath, deck, priv. beach, laundry, rec. hall, near farms, SplishSplash, wineries, $400/wk., avail. Aug., Sept. Mike, Ext. 7861 or 698-3967.

BELLPORT VILLAGE - 1-bdrm. apt., full bath, enjoy all village amenities, $625/mo. incl. util. & cable, single person, nonsmoker. Jim, 744-2095 after 6 p.m.

CENTER MORICHES - 1-bdrm. apt., sep. wing. of home, 2 priv. ent., lg. bright rms., walking distance to all, furn. or unfurn., $650/mo. incl. all. Ext. 4979 or 878-6760.

CENTER MORICHES - lg. 2-bdrm. apt., upstairs, view of South Bay, l/r, eik, deck, 1½ baths, w/d, close to shopping and sailing, $850/mo. Valerie, Ext. 5881.

CENTER MORICHES - 2-bdrm. apt., eik, l/r, full bsmt., near stores, transportation, use of yard, nonsmokers pref., suitable couple, 1 child, avail. 9/15, $600/mo. + util., 2 mos. sec. Lois, Ext. 3315.

HAUPPAUGE - studio above det. gar., priv. rear ent., deck, l/r, kitchenette, bath, $450/mo. + elec. 929-5641.

MANORVILLE - 2-bdrm. townhouse, 1½ baths, garden tub, gar., fp. w/d, skylights, cathedral ceiling, cac, pond view, $980/mo. + util. Eric, Ext. 5875.

MIDDLE ISLAND - Lake Pointe Village, lg. bdrm., l/r, d/r, den, 2nd floor, tennis court, pool, avail. now, 5 min. to Lab, $685/mo., if move in by Aug., $100 off per mo. Ruopan, Ext. 4393.

MIDDLE ISLAND - 1-bdrm. apt., den, lg. l/r, upper, tennis, pool, 5 min. from Lab, avail. now, $685/mo. Zhongwei, Ext. 4331 or 924-5181.

PATCHOGUE - new, lg. 1-bdrm. apt., 2nd floor, priv. ent., sunny, residential block, fenced-in yard w/igp, no pets, single prof. 289-8105.

PATCHOGUE - lg. 2-bdrm. apt., eik, l/r, d/r, swimming pools, steambath, gym, lg. terrace, La Bonne Vie II complex, 15 min. from BNL, $925/mo., avail. 11/15. Greg, Ext. 7960.

ROCKY POINT - master bdrm., guest bdrm., office rm., l/r, d/r, eik, deck, gar., walk to beach, no pets, $850/mo. + util., (718) 721-4271 weekdays or 821-6698 weekends.

SHIRLEY - new studio for 1, sep. ent. & yard, no pets or smokers, $525/mo. elec. & cable incl., 10 min. from BNL. Edwards, 395-3914.

SOUND BEACH - 1-bdrm. basement apt., full bath, eik, l/r, priv. ent. & driveway, single, nonsmoker pref., $500/mo. incl. all. Ext. 7918 or 821-1271.

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

## For Sale

AQUEBOGUE - 3-bdrm. ranch, l/r w/fp, fd/r w/hardwood floors, eik, skylights, Jacuzzi bath, cathedral ceilings, full bsmt. w/8' ceilings, gar., ⅔ acre fenced, $139,000. Sharon, Ext. 5919 or 722-3010.

BAY SHORE - 3-bdrm. ranch, corner plot, 120'x85', carport, patio, full bsmt., oak floors, city water, l/r, cathedral ceilings, 5 appl., gas heat and water, many extras, $97,000. Ed, 231-7446.

CALVERTON - 3-bdrm. ranch, l/r, d/r, eik, ½ bsmt., 1-car gar., 6'x130' yard, new roof, new well, fenced yard, $92,000. Ken, Ext. 2012 or 369-1473.

CALVERTON - 2-bdrm. condo, 5 appl., ac, patio and upper deck. Ext. 7595.

CENTER MORICHES - 4-bdrm. Cape, 2 baths, l/r, d/r, eik w/view, sunroom, full bsmt., gar., igp w/cabana on 2 park-like acres. 878-1529.

GREENPORT - cozy 2-bdrm. w/deck in historic village, walk to village & beach, $90,000. Ed, Ext. 5360 or 477-8117.

HOLBROOK - M/D, upstairs: 3 bdrms., 1 bath, l/r, d/r, kit., deck, oak floors; downstairs: 3 bdrm., 1 bath, l/r, d/r, kit., priv. ent., all appl., gar., fenced yard, must sell, $125,000 firm. Ext. 3562 or 821-1271.

MIDDLE ISLAND - 3-bdrm. ranch, mint, move-in cond., OHWH, close to Lab, no through traffic, park-like grounds, many niceties, $104,500. 924-4927.

NORTH SHIRLEY - 3-bdrm. ranch, l/r, d/r, new kit. & appl., gar., bsmt., alarm, fenced yard, dead-end st., 2 blocks to Southaven Park, assum. mortgage, ask. $110,000. Jim C., Ext. 4150 or 281-0489.

NORTH SHIRLEY - 2-story, 4-bdrm. Colonial, custom-built, l/r, fd/r, fam. rm., 1½ baths, eik, fp, ½ acre, 1-car gar., $129,000. Julian, 924-0960.

PORT JEFF. VILLAGE - custom-built 4-bdrm., 3½ baths, fin. daylight bsmt w/outside ent., bath. 331-4161.

RIDGE - 3-bdrm. Colonial, l/r, d/r, new kit., passive solar heat & oil, 1½ baths, full bsmt., gar., sun room w/spa, screened porch, fenced yard, city water, sewers, $144,900. Ext. 2168 or 744-4948.

RIDGE - 3-bdrm. townhouse, 1½ baths, lg. l/r, 5 min. to Lab, $69,900. 924-4734.

SAYVILLE WEST - 3-bdrm. Colonial, 1½ baths, fenced yard, screened Florida rm., 10½ yrs. old, ½ acre, $148,000 neg. 563-2889.

TERRYVILLE - 4-bdrm. tri-level ranch, 1½ baths, l/r, d/r, eik, fam. rm. w/bay windows & sliders, well maintained, ⅓ acre nicely landscaped w/20'x40' brick patio, shed, possible M/D, ask. $120,000. 928-7265.

WADING RIVER - custom-built ranch, near beach, solid mahogany siding, 1,600 sq. ft., modern design, income producing, must sell. Dottie, 744-8276.

WADING RIVER - 3-bdrm. Col., 2½ baths, 2-car gar., custom kit., Jennair, gazebo, shed, igs, igp, deck, steam bath, satellite dish, SWRSD, 1.1 acre, $229,000. 929-8323.

PORT CHARLOTTE - ¼-acre bldg. lot, in developed community, ready to build, $10,900. 929-8323.

EFFORT, PA - wooded 1-acre +, priv. community w/clubhouse, pool and fishing, resort area near skiing, lakes, Pocono 500, more, $21,900. 224-9146.

## Wanted

BASEBALL CARD SETS - Topps 1970s; boat, 12' aluminum, for 3 people. (718) 721-4271 weekdays or 821-6698 weekends.

CARS, TRUCKS & MOTORCYCLES - reasonable. Bill, 467-1343.

BOAT TRAILER - 14'-16', decent cond. Ed, Ext. 5529.

COMPUTER - used 486 or 386 IBM compatible w/color VGA monitor and FAX/modem. Grace, Ext. 2229 or 821-4743.

FLEXMASTER - stretching machine. Ext. 3876.

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

OUTBOARD MOTOR - 7.5-9.9 h.p., long-shaft, good cond. Chris, Ext. 2022 or 395-6112.

PIANO - baby grand, good cond., well-tuned, reasonably priced. Grace, Ext. 2229 or 821-4743.

PRESCHOOLERS - Upton Nursery School is still accepting applications for fall classes, 2½-5 yr. olds, M,Tu,Th, 8:30-11:30 a.m. Sue Ellen, 929-3732.

PUPPY - German shepherd and Doberman mix, male pref. 473-1658 after 6:30 p.m.

RIDE TO PRINCETON/NEW BRUNSWICK - weekends, will share driving, expenses. Ramesh, Ext. 4379.

## In Appreciation

Special thanks to everyone for the cards, letters and support received after the loss of my husband, Dick.
— Ellie Adams

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