



Elissa Udell is a student assistant participating in a special internship program under the Department of Energy and Environment. Elissa, a graduate student in Urban and Policy Sciences, is working on a study to determine the feasibility of electric cars in fleet use. —photos by Humphrey

## Summer Students Ready To Work

The twenty-seventh annual "class" of summer internship students, a somewhat bewildered but highly enthusiastic group, arrived at Brookhaven on Sunday and Monday to begin their eleven week term of study, research, and relaxation.

"I'm really not quite sure just what I'll be doing here," was the common reply of students during their first days when asked about their summer work. Nevertheless, the students uniformly expressed great enthusiasm and high expectations for the coming months.

The program in its present form was established in 1952, explained Glenn Price, head of the Office of Academic Relations, "to provide on-the-job training in the study of science, engineering, and mathematics, and to provide practical experience in how to conduct research." In addition, the program endeavors to stimulate the student's interest in continuing research in graduate or professional school. "One of the major spinoffs of the program is to get more people involved in energy-related research," Price said.

### Students Research Wide Range of Topics

The sixty-seven students represent forty-six different colleges and universities, from as far as Berkeley and as close as Stony Brook. They will be working in every scientific department of the Laboratory.

From Akron, Ohio, Roger Preston has attended Yale University for the past three years, and will return there in the fall to complete his senior year. Roger is clearly at home with computers, and it is with computers that he will be spending most of his time. His efforts will be concentrated on hardware design projects and interface instrumentation between dec-10 and servo motors, along with computer programming. "This place is way out in the country," remarked Roger, "A huge place. . . I'm impressed with their facilities. Their equipment is very expensive." Roger is serious about his work, but that doesn't prevent him from having fun with it, too. When at his computer terminal, he was eager to demonstrate the many games he could play on his computer.

David Indyke is from Milltown, New Jersey. He has just graduated from Rutgers University with a degree in Chemical Engineering. His work at the Lab is particularly timely - separation technology in coal gassification. Specifically, David is working on the problem of separating methane from the other two main byproducts of the coal gassification process, carbon dioxide and hydrogen. David will be heading west in the fall to attend the University of California at Berkeley, where he will begin working towards his Ph.D. in Chemical Engineering.

Ryan Rohm is from Gastonia, North Carolina. Ryan attends North Carolina State University at Raleigh, where he will be a senior this fall. Ryan will be using the AGS here at Brookhaven; his work involves the analysis of data from multiparticle spectrometry studies, and assisting in the writing of computer programs. He plans to eventually go to graduate school in physics.

Genevieve Orr is originally from Philadelphia, but for the past few years, Iowa



Larry Granatelli is working under Calvin Lynn in Physics on the effects of positrons on metals at temperatures as low as 9° above absolute zero. Larry will examine the duration of the positron when it interacts with metals as a function of temperature.

has been her home, where she attended Grinnell College. Genevieve just graduated from Grinnell with a degree in Physics. No stranger to Brookhaven, this will be Genevieve's second summer at the Lab. Genevieve will continue the work she began last summer, involving the study of "odd-odd" nuclei. An odd-odd nucleus is one which contains both an odd number of protons and an odd number of neutrons, conferring unique characteristics. Genevieve will take samples of Silver<sup>107</sup> and subject them to intense neutron beams from the High Flux Beam Reactor to produce Silver<sup>108</sup>, an odd-odd nucleus. She will then examine spin and parity qualities of the silver<sup>108</sup>. Genevieve will attend the University of Wisconsin in the fall to do graduate work in physics.

(Continued on page 2)

## Lab Hosts In-Service Energy Institute For Teachers

A free In-Service Energy Institute for junior and senior high school science and math teachers will be conducted this fall at BNL. The Institute is sponsored by the National Science Foundation.

The program will consist of 30 lecture and workshop sessions which run from September, 1979 to May, 1980.

Institute sessions will focus on the fundamental concepts of energy from the perspectives of basic science and engineering. Topics to be covered include how energy is produced and consumed; the benefits and costs of adopting various alternative energy systems; and the complex mixture of scientific, technological, political, legal, social and economic factors that are involved in developing and implementing new technologies and conservation measures.

The eight-month-long series will be divided into three segments which will involve members of the Laboratory's scientific staff who are actively engaged in energy-related research.

The first segment will consist of background lectures and group discussion on basic energy concepts. The teachers will then split into small groups to study individual energy systems (such as fossil, nuclear, solar, geothermal and wind) and conservation measures. Each group will

share its findings with the others in a written report and an oral summary.

In the final segment, (which centers on comparisons and prospects of each energy alternative), the groups will be reorganized so that each focuses on one aspect of energy production.

In addition, each participant will be expected to work on an individual project which will have future use in his or her school or community.

Any junior or senior high school science or math teacher in Nassau or Suffolk County who has 12 semester hours credit in science and a working knowledge of algebra, logarithms and exponentials is eligible to apply for the Institute. Admission will be limited to approximately 35 participants. There are no fees or charges.

No academic credit will be given; however, it is estimated that the Institute is equivalent to six semester hours, for which local school districts may grant in-service credit.

Donald Metz, DEE, is Director of the In-Service Energy Institute. Employees who may know of Long Island junior and high school science and math teachers who may be interested in the Institute may obtain applications from Metz, Building 815. He may be reached at Ext. 4519. The deadline for application requests is June 22.



Alexander Papin, center, a Research Scholar in the Energy Systems Program at the International Institute for Applied Systems Analysis (IIASA) in Austria is shown with Paul Basile, left, Assistant Leader of the Program and Peter Meier, Head of DEE's Regional Studies Division, prior to a seminar given by Papin at the Lab last Friday. —photo by Rosen

## Oil Supply Topic Of Papin Talk

In an informative seminar held June 1 at the National Center for Analysis of Energy Systems, Alexander Papin, a researcher from the International Institute for Applied Systems Analysis (IIASA) described the first phase of energy studies at IIASA. The objective of these studies was to produce a comprehensive, long range (to 2030) global assessment of world energy problems resulting from the drawing down of conventional oil resources and production ceilings on oil exports from Middle Eastern nations. The seminar was entitled, "Global Oil Supply Over the Next 50 Years: The IIASA Analysis Today."

Papin presented the methods and findings of the analyses of the oil sector under two long term scenarios of world growth, and strict conservation of liquid fuels in the transportation sector. The IIASA results indicate a significant transition from conventional oil to synthetic liquids from coal beyond the year 2000 and heavy dependence on shales, tar sands and heavy crudes.

Papin noted several other key findings. For example, North America could become self sufficient in oil by the turn of the

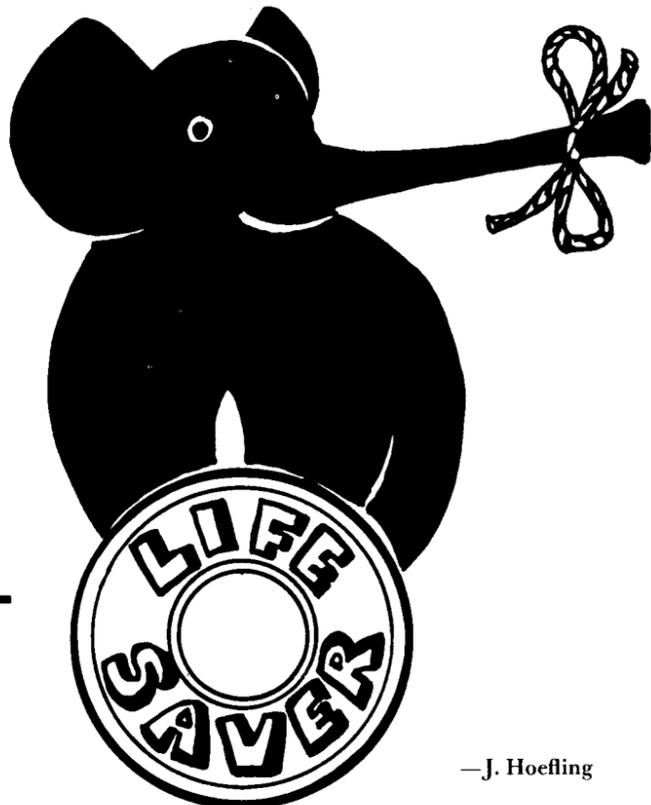
century given vigorous implementation of enhanced oil recovery techniques and aggressive conservation in the transportation sector (defined by IIASA to imply average automobile efficiency of between 30 to 35 mpg). The IIASA analysis assumes that Russia and Eastern Europe will also be self sufficient in oil (if not an exporter of it) for the foreseeable future.

Papin is a graduate of the Leningrad Polytechnic Institute, Leningrad, USSR and received his Ph.D. in Technical Sciences in 1972. As a senior researcher for the Siberian Power Institute, his work concerned the modeling of energy systems for long-term planning and forecasting. Papin's work at IIASA involves economic and technical considerations for international energy supply systems, particularly oil, in the long-term.

Housed in a 200-year old palace in Laxenburg, Austria, IIASA was established in 1972 by the US and the USSR in equal partnership. Researchers at the Institute represent 17 nations from eastern and western Europe and from Japan, Canada and the US and the USSR.

## BNL Blood Drive June 27, 28

**DONATE  
BLOOD—  
BE  
A . . .**



—J. Hoefling

Of a type more rare than the candy of the same name, blood donors are true "life-savers." Did you know, for example, that one out of every ten hospitalized patients requires a transfusion of three pints of blood or more? Blood is in continual demand for treatment of accident cases, cancer victims, hemophiliacs and for use during surgery. Due to techniques advanced in recent years, blood can now be broken down into five components so that each pint can be used to treat five different patients. And, there is no substitute for blood: the human body is its sole manufacturer.

This year, the Lab will hold its annual blood drive on Wednesday, June 27 and Thursday, June 28 from 10 a.m. to 3 p.m. each day in the gymnasium. Pledge cards and information regarding the need for blood and the blood program have been sent to all employees. Generally, those in good health, between the ages of 17 and 65 inclusive may donate blood. Those weighing less than 110 pounds and pregnant women may not donate. Completed pledge cards may be returned to Jerry Kinne, Building 460.

### Rental Cars

Available On Site

New Chrysler cars with automatic transmission and air conditioning are available for rent from the on-site Mobil Service Station. The cars may be rented by the day, week or month at the rates indicated below:

	Daily	Weekly	Monthly
Horizon	\$14.95	\$ 94.50	\$369.00
Volare	21.95	138.50	389.00
Volare Wagon	23.95	150.95	399.95
LeBaron	25.95	163.50	449.95
Cordoba	28.95	182.50	469.50

100 Miles per day - N/C  
500 Miles per week - N/C  
2,000 Miles per month - N/C  
Mileage in excess - \$.15 per mile

In order to waive \$250.00 deductible, a charge of \$3.00 per day is required. Master Charge, Visa, American Express and Carte Blanche cards are honored. Other models may be obtained by advance arrangement.

The Mobil Service Station is open from 8 a.m. until 6 p.m. Monday through Friday, and closed Saturday and Sunday. Therefore, cars can neither be obtained nor returned on Saturday or Sunday. For additional information or to rent a car, please call the Mobil Service Station at Ext. 4034.

### Weekend Tour

This weekend, June 9 and 10, the Lab will start its summer tour program. Per Dahl will give this weekend's mini-tour, an interesting, informative talk on ISABELLE at Berkner Hall.

### New York Train Trip

The Hospitality Committee is planning a group railroad trip to the City on Wednesday, June 20. Departure will be at 7:55 a.m. from the Patchogue LIRR station. Round-trip fare for adults is \$2.45, children under six years ride free.

Reserve a ticket by sending your fare through the U.S. mail to P.O. Box 322 Upton, New York 11973, no later than Thursday, June 14. Make checks payable to "Brookhaven National Laboratory." Your tickets will be given to you on the train. Refunds will be made only if cancellations are received by the Friday preceding the scheduled trip.

### Bicycle Race

The ninth annual BNL Spring Bicycle race is set for Sunday morning, June 10. Registration begins at 8:30 a.m. and the first race, a two-lap event, begins at 9:00 a.m. This is a bunch start. Medallions will be awarded for the top 3 places and for best lap time. Each lap is about 16 miles.

The response to an earlier request for opinions on changing the single lap event back to time trials was divided. The strongest plea was from a group at Stony Brook who said they would take part only in time trials; the remaining opinions were mild. The safety-minded favored time trials while those favoring excitement desired a bunch start. Since the two-lap event will be available for the latter, it was decided to make the single-lap event time trials. These will begin at 0910, with starting positions chosen randomly.

Protective head gear is required for all entrants in both events. The best protection is given by the Bell or Snellen helmets available at local bicycle shops. These have a strong plastic shell with rigid foam liner, and cost over \$30. Skateboard helmets from department or sporting goods stores are not as good because the liner is soft, but their cost is only about \$15. The traditional strap helmet is least effective.

In case of moderate or heavy rain, both events will be cancelled. If the roads are very wet, the two-lap event will be cancelled.

The race route is the same as last year, starting and ending at the North Gate on the Wm. Floyd parkway and encircling the Lab clockwise on Middle Country Road, Yaphank-Moriches Road and William Floyd Parkway. Parking is available exterior to the Lab at the North Gate.

### Seaborg Talk

"Our Energy Problem" will be the topic of a talk to be given by Nobel Laureate Glenn T. Seaborg on Wednesday, June 20 at 8 p.m. Dr. Seaborg, a world famous physicist and discoverer, will speak on that date at the Explorers Club located at 40 East 70th Street, New York City.

Since space is limited, reservations must be made before Friday, June 15. A donation of \$6 per person payable to the New York Chapter of the American-Scandinavian Foundation may be sent to Birgit F. Morse, 28 Walnut Avenue, Larchmont, NY 10538. Direct further questions to (914) 834-0097.

### Summer Student

(Cont'd)

Lawrence Granatelli is a rather unique summer student, in that he has actually been working here since last August as part of his combined Bachelors/Masters degree from Stony Brook. He attended Stony Brook for four years, and completed his fifth year of study at BNL. Now, as a summer student, Larry will continue his work in Materials Science. Despite the fact that he's been here a year, Larry is every bit as enthusiastic as the newcomers: "For research the atmosphere here is really very good. As far as facilities go, I've never worked with equipment like this. Most universities could never compete." Larry gestured to the machines immediately surrounding him. These machines alone represent about a forty- to fifty-thousand dollar investment. That's the best thing about Brookhaven - its facilities."

A native of Long Island, Michael Gingold has just graduated from Colgate University, and will attend the University of Virginia Medical School in the fall. Mike is familiar with Brookhaven summer life from his experience here two summers ago as a part-time employee. This summer, he'll be comparing the rate of turnover of intestinal epithelial cells between germ-free and conventional mice.

Mike Falco is from Richmond Hill, New York, and will be a senior in the fall at Queens College where he is working towards his Bachelor's degree in applied mathematics. Mike's summer project is connected with solar energy. He is studying

the specularly of materials for their possible use in solar collectors. His study extends beyond reflective properties, however, to include qualities such as weatherability and durability.

### Over 600 Apply to Program

Price, whose office was responsible for initial screening of students, explained that this year Brookhaven found itself competing with industrial and commercial laboratories, which are starting to develop student programs of their own. These programs are generally able to offer students more pay than Brookhaven's. Nevertheless, competition for Brookhaven summer internships was rigorous this year - some six-hundred forty-five applications were received for the sixty-seven available positions. Price lamented the lab's inability to accommodate more students: "Almost all the applicants were good students; they'd all benefit from and contribute to the program." The final selection of students was made by the individual scientists for whom they would be working.

Price mentioned that there's a lot to be learned at Brookhaven. He encouraged summer students to take advantage of both the scientific and cultural atmosphere at the Lab. He said, "My advice to students is to work hard and play hard."

—Bradley Stolzer

(A 1979 graduate of Tufts University, Brad Stolzer is the summer student assigned to the Bulletin.)

### Cafeteria Menu

#### Week Ending June 15, 1979

<b>Monday, June 11</b>	
Corn chowder	(cup) .40 (bowl) .50
Beef chop suey on rice	1.35
Scrambled eggs, sausage & fr.fr.	1.20
Hot Deli - Turkey	(on bread) 1.40 (on roll) 1.50
<b>Tuesday, June 12</b>	
Beef noodle soup	(cup) .30 (bowl) .40
Knockwurst and sauerkraut	1.25
Roast chicken and stuffing w/1 veg	1.35
Hot Deli - Veal pattie and peppers hero	1.30
<b>Wednesday, June 13</b>	
Cream of potato soup	(cup) .30 (bowl) .40
Braised meatballs à la mode w/buttered noodles	1.35
Broiled filet and fr. fr.	1.35
Hot Deli - Roast Beef	(on bread) 1.40 (on roll) 1.50
<b>Thursday, June 14</b>	
Chicken vegetable soup	(cup) .30 (bowl) .40
Cheese ravioli w/1 veg.	1.15
Sauerbraten and potato pancake	1.45
Hot Deli - Grilled Reuben	1.35
<b>Friday, June 15</b>	
Fish chowder	(cup) .40 (bowl) .50
Spaghetti and clam sauce	1.20
Breaded pork chop w/1 veg.	1.50
Hot Deli - Smoked baked ham	(on bread) 1.30- (on roll) 1.40

### Product Seminar

Amp Special Industries will conduct a product seminar concerning its high voltage connectors and filtered connectors on Wednesday, June 13. The seminar will be held in Room C, Berkner Hall from 9:30 a.m. to noon. All interested BNL personnel are invited to attend.

### Swimming Pool Notes

#### Pool Schedule

Monday through Friday  
11:00 a.m. to 1:30 p.m.  
employees only  
5:00 p.m. to 9:30 p.m.  
employees/families/guests  
Saturday and Sunday  
1:00 p.m. to 6:00 p.m.  
employees/families/guests

#### Fees

Membership tickets for the present season (May 1 through August 31, 1979) are sold at the pool during open hours.  
individual membership \$20.00  
family membership \$30.00  
**Daily Admissions**  
employee/family member \$1.00  
guest \$1.50

#### Guest Ruling:

One guest per employee is permitted at the pool. Advance arrangements for additional guests (but not more than five at any one time) may be made at the Recreation Office.

**The pool is closed on all Laboratory holidays.**

### Suffolk Council Tours Lab



Roger McDonald, DEE, explains the operation of the Oil Burner Test Facility to members of Suffolk County's Council on Environmental Quality. Council members toured the Lab on June 6.

—photo by Humphrey

# BROOKHAVEN BULLETIN

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## Rambling Around

An American scientist was astonished to see a horseshoe hanging above the office door of the Nobel prize-winning physicist Niels Bohr. The scientist exclaimed, "Dr. Bohr, surely an objective, dedicated scientist like you doesn't believe in such superstitions." Bohr laughed and said, "Of course, I don't. The idea is nonsense." But he added, "I am told that a horseshoe will bring you good luck whether you believe in it or not."

—The Ragan Report May 1979

## R/C Aircraft Club

There will be a meeting of the R/C Model Aircraft Club on Tuesday, June 12 at the Flying Field at about 5:15. Wednesday, June 13 will be the rain date. Members should bring their planes for flying before and after the meeting.

Anyone who may need help constructing a new model plane or in choosing a model should talk with the "old timers." Many beginners select beautiful scale models only to find out that they do not fly as well as they look: Don't be afraid to ask for help.

The Club has received questions from those interested in selling used equipment. Club meetings would be a good place for these people to meet with other interested parties. If there is enough interest, the Club might sponsor an auction.

Anyone who has questions about the Club and its activities should call Bob Larson, Ext. 4656 or Jim Durnan, Ext. 2485.

## Softball

### League I

#### Ravens 7 - Old Timers 4

Spider Ligon and Art Scott both pitched well for the Ravens as they held the Old Timers in check to preserve the victory. Jim Garrison had a home run to spark the Raven attack.

#### Six Pax 18 - Sweathogs 5

Good hitting by the Six Pax (26 hits). Reliable Ed Meier of the Six Pax hit for the cycle (single, double, triple and a home run).

#### Source I 23 - Strikers 13

John Flannigan (five for five and Wayne Rambo (two home runs) led Source I.

#### Phoubars 11 - Blue Jays 10

Mike Buckman and Jim Rowehl hit home runs in the bottom of the seventh to win the game.

### League Two

#### Roga 10 - Dirty Sox 5

Eric Saunders hit a three run HR for Roga. Good pitching by Bobby Jones and all around good fielding held the Sox to five runs.

#### Degenerates 10 - Source II 0

Good pitching by Joe Rabinowitz and tight defense limited the Source to only two hits. Gary Goldstein carried the winners by going four for four with three RBIs.

#### Roga 7 - Charlie Browns 4

Good defense on both teams but the sun sparkled on the Roga side.

### League Three

#### Nuke Powers vs. Medical (Rainout)

#### Moles 28 - Ice Pops 3

The Moles buried the Pops with hitting and good defense. Bob Quick (six for six and three HRs) and Paul Roman (three for five and one HR) did the hitting. Excellent defense by Steve Eiseman and Rich Conklin shut off the Pops.

## Guides Honored at Luncheon



Twenty-six Lab employees who serve as voluntary tour guides were guests at an annual luncheon held in their honor last Friday in Berkner Hall. The guides are from various departments and are called upon throughout the year to assist groups of professionals and college students who are given tours of the Lab. The Visitors Program is administered by Virginia Sayre, Dorothy Schroeder and Gail Williams. Left

to right are Marge Stoeckel, Don David, Vincent Lo Destro, Carol Roberts, Carole Kerr, Marie Brenner, Janice Lamb, Elaine Rowland, Joan Perullo, Beth Salata, Gail Waite, Janet Sillas and Rosanne Pagano. Also, Ted Erickson, Robin Maragioglio, Melody Howard, Frances Scesny, Marion Newton, Elinor Adams, Gail Bird, David Comstock, Kathy Van Noy, Diane Grady, and Doug Hof. — photo by Rosen

## Theater Group

The annual election meeting of the BERA Theater Group will be held on Tuesday, June 19th at 8:00 p.m. in Berkner Hall. The slate of officers is:

- President - Jane Love
- Vice-Pres. - Sandra Lane
- Secretary - Angela Costellano
- Advisory - Anthony Fainberg
- Program - Joseph Skelly
- Publicity - Robert Kinsey
- House - Joseph Boniface

The theater group is planning a Vaudeville night in July. Anyone wishing to participate is asked to attend the meeting on June 19th. All newcomers are welcome. For further information call Liz Russell, Ext. 3940.

### Big Sticks 27 - Binary Bombers 18

The Sticks bombed the Bombers with good fielding and the hitting of Mike Bannon (three HRs), Terry Owens (one HR) and Ken Figluizzi (one HR).

### Moles 13 - Medical 10

The big star for the Moles was Bob Quick again (four for four and two HRs). Dave Comstock (three for four with one HR) helped the Moles beat the Medics in a close one.

### Nuke Powers 13 - Binary Bombers 7

Once again, good fielding and super pitching by Connie Economos helped the Powers remain undefeated. Sparkling plays in the outfield by Weaver, Perkins and Guppy kept the Bombers out of striking distance.

### Big Sticks 10 - Ice Pops 5

Larry Arnold and Mike Bannon did the power hitting for the Sticks with one HR each. Good defense for the Sticks held the Pops to only five runs.

### Mixed League

#### Oh Kays 14 - Balls and Strikes 6

"Bootie" Woodson went 3 for 3 and scored 2 runs to help the Oh Kays to their third straight victory. Becky Sutter made some nice defensive plays at third base for the winners.

#### Diamonds 13 - Thrids 12

Chuck Carlson and Ed Meier Jr. had home runs. Jim Griffin had the game winning three run homer in the bottom of the sixth inning. Carey Miller played a good game at first base.

#### Underalls 11 - Confoozed 10

A brilliant performance by all the female players.

#### TNT 6 - Source III 5

Good all around playing by entire team led to the TNT's victory over Source III.

## Runners Corner

### "You look great, ladies. . ."

"Give yourselves a hand!" called out one Central Park spectator to the hundreds of women runners who passed him as they ran the 10,000 meters of the L'Eggs Mini Marathon, held this year on Saturday, June 2. Approximately 6,000 women entered the eighth annual AAU-sactioned event.

BNL Roadrunners were represented by veteran Mini Marathoners Elaine Landry, Debbie Lagnese and Anne Nauman, who placed second in her age category. First time entrants from the Lab were Jackie Howe, Jill Kaufman, Jean Penoyer, Lesley Roberts and Rosanne Pagano. The race was won by women's marathon record holder Grete Waitz who broke her own world's record for the 10,000 meter by finishing the course in 31:15.

### And from Europe-

The latest race results confirm Gus Prince's eighth place finish in the Greece Marathon. Gus ran the rough and windy course in 3:17.

Bohemia Track Club has invited BNL to participate in a Club Relay Race and picnic on June 30 at 9:00 a.m. at Southaven Park. Each team of six runners must be composed of two women (one under 35 and one over 35) and four men (one under 20, one under 30, one under 40 and one over 40). Teams having difficulty meeting these requirements may place runners in a younger but no older age category. Each relay leg is approximately two miles. BNL may enter as many teams as possible. Those interested in forming a team or participating on a team should sign up on the Runners Bulletin Board outside Room 37 in Building 318.

There will be a meeting of runners and volunteers on Wednesday, June 13 at 5 p.m. in the conference room of Building 318 to discuss plans for the June 16 Cross Island Marathon. Topics to be covered include water stops and meeting places.

## Cooking Exchange

The International Cooking Exchange thanks its friends and members for making last Friday's International Dinner a great success. Special thanks are extended to Wendy Green, Linda Humphrey and Julia Walenta for their efforts, and to Nancy Edwards who again supplied the flowers.

The Cooking Exchange members shared a successful year highlighted by coverage in the New York Times and the publication of its own cookbook (thanks to Wendy Green). The Exchange wishes best of luck to Wendy Green, its new chairperson, and hopes to see all its members again in September.

## Summer Rec Program

Registrations are now being accepted for the Children's Summer Recreation Program.

The program includes swimming lessons and sporting clinics for children of all BNL employees and recreation activities for children of employees living on site.

A detailed information sheet is attached to the registration application forms which may be picked up at the BERA Film Service Office or at the Personnel Recreation Office.

Questions regarding the program may be directed to Blanche Laskee, extension 2873.

## Arrivals & Departures

### Arrivals

Mark A. Andrews.....	Chemistry
William T. Banfi.....	Accelerator
Albert R. Breck.....	Physics
Frederick J.A. Cacace, Jr.....	Chemistry
Vincent J. Castillo.....	Physics
Thomas A. Carney.....	Energy & Env.
Nancy-Lee Clayton.....	Biology
Alan E. Delahoy.....	Energy & Env.
Gerald J. Di Cunzolo.....	Accelerator
John F. Di Nicola.....	Plant Engrg.
Adelaide Faljoni-Alario.....	Biology
John J. Fodera.....	Accelerator
Anthony N. Fresco.....	Accelerator
Steven Lorenzo.....	Accelerator
Gerald A. Michels.....	Physics
Gloria Ramirez.....	Physics
Marjorie H. Schnader.....	Energy & Env.
John R. Skaritka.....	Accelerator
Jan Votruba.....	Accelerator

### Departures

Joel P. Brainard.....	Energy & Env.
Peter J. Erikson.....	Physics
Scott C. Orehek.....	Nuclear Energy
Shirley Stein.....	Applied Math.

## Classified Advertisements

### Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position, with consideration given to candidates in the following order of priority: (1) present employees within the department, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside applicants.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all nonscientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment, as indicated below. Except when operational needs require otherwise, positions will remain open for one week following publication date.

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

**LABORATORY RECRUITMENT:** Opportunity for present Laboratory employees.

1012. DEPARTMENT ADMINISTRATOR - Requires a bachelor's degree (engineering or sciences) or its equivalent. MBA highly desirable. Will be responsible for the control, operation and coordination of the business functions of the department. Significant experience in the areas of budget, procurement, and sub-contract work is required. Department of Energy and Environment.

1013. FIREFIGHTER - Previous experience with fire-fighting and emergency medical technician certificate highly desirable. Must be willing to work shifts at the completion of 13-week training period. Safety and Environmental Protection Division.

**OPEN RECRUITMENT:** Opportunity for present Laboratory employees and outside applicants.

1014. PERSONNEL REPRESENTATIVE - Requires a bachelor's degree or equivalent plus strong professional background including experience in the recruitment of technical and engineering personnel. Must be available for travel. Personnel Division.

1015. COMPUTER SCIENCE ANALYST (two positions) - Requires BS or advanced degree in computer science, mathematics or related areas or equivalent experience in scientific computing applications. Experience with CDC 6600 or 7600 computer systems is highly desirable. Applied Mathematics Department.

1016. OFFICE SERVICES ASSISTANT (temporary): 4 months position. Approximately 50% of time will be spent filing and 50% operating Qalid and Xerox copying machines. Some ordering, deliveries, typing. Requires clerical and typing abilities, driver's license. Plant Engineering Division.

## Autos & Auto Supplies

68 BUICK RIVIERA - ps/pb, p/w, p/seats, a/c, a/t, cruise control, good cond. Ext. 2022, 727-9058.

TOWING HITCH FOR VW - bug or Ghia. \$20. Ed, Ext. 7943.

73 PLYMOUTH SATELLITE - 2 dr hdtip, a/c, good mpg. \$900. Ext. 7636, 924-6971.

62 FORD PICKUP - 4 w/d, needs some work, w/10½' slide-in camper. \$1200. K. Figluizzi, 399-3624 after 6.

64 CHEVY VAN - w/74 eng, body good, needs minor elec work. Ext. 4715.

64 CHRYSLER NEW YORKER - good running cond, recent tuneup, muff. \$300, make offer. W. Van Zwiene, 924-4826.

76 HONDA 400F - 4 cyl, windshield, sissy bar, luggage rack, safety bar, new tires, truck horn, cover, 55 mpg, mint. \$1050. Gail, Ext. 2904, 265-1688.

4 MUSTANG HUBCAPS - \$5; Easy Lift trailer hitch (axle) anti-sway bars, pull 5000 lbs, \$85. R. Reilly, 744-8680.

74 KAWASAKI KH 400 - new batt & voltage reg, excel cond. \$650. Ext. 2959, 751-6277 after 6.

72 CHEVY KINGSWOOD ESTATE WGN - ps/pb, a/c, 55,000 mi. \$1200. G. Paul, 928-4511 days.

77 KAWASAKI KZ400 - new cond. B.R. Comfort, Ext. 4580, 728-6462 after 6:30.

71 FORD LTD - good cond, a/c, ps/pb, AM/FM stereo. \$750. Pat, Ext. 2880.

TIRES - new, used, rims, service, free installation, balance avail, Gillette, BF Goodrich. Fred Usack, lunchtime Ext. 4798.

76 PLYMOUTH VALIANT CUSTOM - 6 cyl, a/t, a/c, low mi, excel cond. B. Devan, 744-7514.

72 AUDI 100LS - 4 dr, a/c (needs charging), sun-roof, 86,000 mi. Asking \$1500. Borg, Ext. 3623.

77 CHEVY ½ TON PICKUP - 6 cyl std, h.d. susp. 36,000 mi, excel cond. \$3600. D. Gilleam, 588-5833.

74 CAMARO - good cond, a/t, new exhaust sys, snows, reg gas. Best offer over \$2400. John, Ext. 7995, 654-2093 after 5:30.

CAR CARRIER - \$10. Palais, Ext. 2907/2913, 698-0576.

TIRES - (5) 8-19.5, (1) 7.50-17, all mounted on 8-hole rims. John, Ext. 4425.

69 KAWASAKI - 500 cc, saddle bags, windshield, excel cond, ready for road. \$650. P.F. Schirico, Sr., 399-2070 after 6.

77 PLYMOUTH - 318, 18 mpg, a/c, AM/FM stereo, wire wheels, new tires & brakes, must sell, A-1 cond. A. Cordero, 265-0540, 588-4703 after 6.

73 BUICK LE SABRE CUSTOM - 2 dr, red vinyl hdtip, ps/pb, a/c, FH-8 trk stereo, excel cond. E. Jochen, 281-7873.

TIRES - 4 Goodyear 6 ply 950x16.5. \$100. firm. 928-0397 after 5:30 p.m.

73 SUZUKI GT550 - very good cond, windshield, luggage rack, back rest. \$750. Hans, Ext. 4581, 281-5563.

75 COUGAR XR7 - excel cond, full pwr, deluxe int, must see. Asking \$2800. D. Zukowski, 286-0694.

72 BUICK LE SABRE - 4 dr, vinyl hdtip, a/c, all pwr, excel cond. Asking \$1295. D. Robbins, 581-9475.

HYDRAULIC JACK - 3-ton, self-cont, 13". \$6. Gordon, Ext. 2012.

72 CADILLAC - fully equipped. \$2000. J. Soler, 234-7225.

69 BUICK STA WGN - excel running cond, a/c. G. Wendin, Ext. 3798, 744-3744.

70 CHRYSLER 300 - low mi, excel garaged cond; MGB parts, hdtip, port hole, fiberglass, rims, shop manual. Ext. 4187.

ICE BOX, SINK - & 12 gal water tank for RV's, mounted on plywood to fit 8' bed on pickup, new. \$90 or best offer. Norton, Ext. 2050.

66 PLYMOUTH - needs eng work. \$100. D. Vail, Ext. 2046, 924-4058.

72 PLYMOUTH FURY - 4 dr sedan, new brakes, recent tuneup. \$500. Kearns, 288-9086.

77 FORD PICKUP CAMPER - XLT, cruise control, a/c, extra gas tanks, more. \$6500. W. Buchanan, 281-2186.

HOOD - for 71-73 Chevy Vega, good cond. \$25 or best offer. S. Norton, Ext. 2050.

73 YAMAHA MX250 - trail bike. Asking \$400. O.C. Jones, 821-0599.

TIRES - (4) 16.5x800, good spares. \$30. Vinny, Ext. 4285.

69 FORD LTD WGN - \$200 or best offer. Neil, Ext. 2023.

70 FORD TORINO WGN - 302 eng, good cond. Ext. 3255, 744-1156 after 5.

68 BUICK LE SABRE - good, \$250; 66 Pontiac, 6 cyl, good, \$175. Rhodus, 924-3522 after 5:30.

71 VW KARMANN GHIA - 2100 mi on new eng, good cond. Kathy, Ext. 4142, 929-4182.

65 VW - rebuilt motor (1978), new clutch, radials, fair body, excel running cond. \$500. R. Schonberg, 286-3372.

69 MUSTANG - 302 eng. Ext. 2311, 567-5131.

75 FORD ELITE - low mi, fully equipped, extra snows, excel cond, orig owner. \$3000. Ext. 4301.

75 PACER X - a/t, ps/pb, a/c, bckts, vinyl roof, sport wheels, Michelin tires, 19-22 mpg. \$2000. Ext. 4209.

2 VW TIRES & RIMS - 5 lugs, good tread. \$15 ea. R. Schonberg, 286-3372.

71 PONTIAC GTO - T-37 radials, full equip, foil deck. \$700. Ext. 2518, 744-8894.

67 TOYOTA LANDCRUISER - 4 w/d, 57,000 mi, 6 cyl, 3 spd. \$2000. M. Perrier, 288-9066.

## Boats & Marine Supplies

OUTBOARD MOTOR - 15 hp Johnson (1974), sail-boat aux eng, elec starter. H. Foelsche, Ext. 4569, 286-0047.

FISHING CHAIR - pedestal mount, white, like new. \$80. Lou, Ext. 4687.

16' FIBERGLASS BOAT - 40 Johnson, tilt trailer, all equip, excel. \$800. Rick, Ext. 4664, 475-7652.

17' CLAMBOAT - fiberglass over wood, 40 hp Evinrude, good running cond, in water. \$750. G. Bergin, 286-0866 after 5.

21' BAYLINER-LIBERTY - 1976, 170 hp Volvo I/O, full camper canvas, DF, CB, compass, fully loaded, show-rm cond. \$7900. L. Ptashnik, 698-7661.

14' ALCORT FIBERGLASS SAILFISH - compl outriggers, Dolly. \$350. G. Bergin, 286-0866 after 5.

2 FOLDING FISHING CHAIRS - w/Lees chrome plated gimballs. \$35 ea. Lou, Ext. 4615.

AMF SAILBOAT - \$400. A. Grego, 744-3289.

24' SUMNERCRAFT SKIFF - hdtip, new 135 hp Palmer, must sell. E. Fernandez, 878-1805.

20' SILVERLINE OMC - I/O 120 hp, trailer, sleeps 2. \$2500. Ray, Ext. 4479.

71 MERC - 50 hp, good cond. \$200. Bob, Ext. 3309.

72 WELLCRAFT V-20 - 165 I/O, new full canvas & seats, trailer, extras, very clean. Asking \$4795. O.C. Jones, 821-0599.

PARTS - old 75 hp Evinrude, old 40 hp Scott, old 65 hp Merc. Vinny, Ext. 4285.

OUTBOARD MOTOR - British Seagull 2½ hp, good cond. \$100. Ext. 7730, 286-8097.

16' SPEEDBOAT - mahog century inboard. Ext. 4088, 286-0204.

40 hp EVINRUDE - Mark IV selectric shift, good running cond. \$275 or best offer. Richie, Ext. 3365, 744-2504.

16' MFG - 50 hp Johnson elec start, 2 gas tanks, life cushions. Asking \$600. Bill, Ext. 4558, 325-1598.

68 EVINRUDE - 28 hp, good cond. \$200. Bob, Ext. 3309.

## Yard Sales

SAYVILLE - 458 Greene Ave, June 8-9, 10-4, estate sale, emptying house, rain/shine. G. Latham, 289-1883.

ROCKY POINT - 49 King Road, Sat June 9, 9-4, 3 families, furn, etc. J. Lynch, Ext. 4510.

PORT JEFFERSON - 11 Laurel Drive, June 9-10, 10-4, 2 families, tools, motors, sporting goods, misc items. Ext. 4474.

MIDDLE ISLAND - Woodville Rd, June 9-10, 5 families. H. Rhodus, Ext. 3284.

ST. JAMES - 233 Second Ave, June 9, 9-5, dishes, bed, dinette set & misc items. Ext. 4228.

SHIRLEY - 105 Argyle, June 9/10.

E. PATCHOGUE - 83 Lyman Rd, Sat June 9, continued from last Sunday's rain. L. Fulhaber, Ext. 3498.

## Miscellaneous

CUSTOM DRAPES - w/quilted valance & rods, blk & gold, 11'x96"L. Make offer. Joan, Ext. 2090.

WING CHAIR - mod, grey uphols, blond mahog legs, excel cond, slipcover, settling estate. \$75. 289-1883.

BIKE CAR RACK - fits onto trunk, holds 4 bikes, excel cond, never used. \$10. 744-5801.

4 ALUM SASH & FRAMES - dbl hung, for masonry walls, 37¼"wx41" h, can be adapted to wood frame structure. \$15 ea, 4/\$55. Pat, Ext. 4519.

METAL CABINET - 5 shelves, 63x30x10½, \$25; chest hardrock maple, 3 drawers, 34x32x18, \$35. Connie, 475-0465.

DBL BED FRAME - \$10; baby tour-a-bed, \$9; TV table, \$3; Super Curl styler, \$9. Sue, Ext. 4207.

FENCE - heavy duty green vinyl top rails, posts, gate, 160'. 924-3553.

FREE - mixed breed pups, 6 wks old. 473-0871.

CALCULATORS - Rem Rand 99 type, paper record type, must sell. \$30. Bob, Ext. 2819, 289-0357.

TRUMPET - King #600 w/case, excel cond. \$100. Ed or Jean, 929-4522.

MARLIN 30-30 - w/sling case, 40 rounds ammo and Lee Loader, 2½x Busnell scope. 821-1525.

GOLFERS - golf balls, Topline, reasonable. George, Ext. 4612.

BOWLING BALLS - \$4 & \$6; bed frame, dbl, \$10; Twister game, \$1.50; mandolin strings, \$.50 ea. Rich, Ext. 4172.

FRIGIDAIRE REFRIG - frost free, excel cond, \$100; Kenmore upright freezer, 19.6 cu ft, frostless, excel, \$400; woman's 3 spd bike, \$30. 744-5801.

BIKE - grand touring ladies' 10-spd Mossberg, med wgt, very good cond. \$100 firm. P. Oster, Ext. 4763.

42" ROUND TABLE - w/12" leaf, Bennington pine, excel cond. \$175. Pat, Ext. 4519.

SLATE-TOP TABLES - 1 coffee, 1 end. \$338 new, asking \$100 for pair. 281-0804 eves.

HANGING LAMPS - blk wrought iron, \$20; gold shag rug, 12'x12', \$10. Joan, Ext. 2090, 698-5787 after 6.

BICYCLE - ladies' 5 spd, good cond. \$50. Kathy, 472-3267 after 5.

TOUR-A-BED - \$9; baby bouncer, \$7; aquarium tanks, 10 & 15 gal, \$9 & \$14; TV table, \$3. Susan, Ext. 4207.

ADDING MACH - Sears, 10-key, \$45; metal side-posts for twin bed, \$4/pr; surf pole, \$35. 475-0144.

DOBERMAN PINSCHER - AKC, champion stock, blk, 11 mo old. \$150. 399-5095 after 5.

RECORD & UMBRELLA STAND - \$5 ea; bookcase, \$5; camp cooler, \$10; b/w TV, \$10; recliner, \$10; bath-inette, \$10; hair dryer, \$10 reel mower, \$25. Walt, Ext. 2907/2913, 698-0576.

GIRL'S BIKE - Raleigh, single spc, 24" wheels. \$25. Hurst, Ext. 3844, 286-0549 after 6.

A/C - 11,300 BTU, 230/208 volts, used only 2 summers. \$100. 698-6437 after 6.

SPEAKERS - Ego 12", 3-way, 125 watt, new, \$280/pr; turntable, Sanyo belt drive, Empire cart, \$75. Ext.. 4666.

WASHING MACHINE & DRYER - 1 yr old, excel cond, Sears. \$100 ea. 473-2194, 331-2052.

HOLIDAY SPA VIP CARD - his & hers lifetime membership. \$29/yr, renewal \$650. 929-6627.

MAPLE TEA WAGON - excel cond. Lucille, 286-1108.

DENSITOMETER - 20" girl's bike; child's stepstool; baby carriage. Ext. 7772.

LIV RM - avocado & lt blue couch, 3 tables, traditional style, clean. \$95. Dick, Ext. 3860.

GLASS PATIO DOORS - 8' wide, alum frame & tracks. 473-3604.

BICYCLE - brown Raleigh Sports, good cond, gears need minor adjustment. \$30. David, 286-2265 after 7.

CLOTHES DRYER - natural gas, good working order, \$25; woman's 2-pc wet suit, med. 286-0939.

SPEAKERS - 2 University 312 coax 12" spkrs, in custom enclosures, will throw in home-built 25 watt amp & pre amp free. \$50/pr. Joe, Ext. 3273.

DIN RM TABLE - burl finish, brand new, \$400, no chairs avail; little girl's peasant outfit, pink print, size 6, good cond, \$3. 281-0843.

CHILD CARRIER - fits 10-spd bikes, like new, \$7. Ronnie, Ext. 2980.

WALL MIRROR - silver scroll edge, 40"x60". \$60 or best offer. 567-6054.

PET ENCLOSURE - heavy duty steel, lg size, 60L, 35H, 27W, great for training. \$60. 475-8658.

BUFFET - Danish mod, 5'1, 36" w, walnut wood, very nice cond. \$150. Ext. 4532, 277-4091.

SNOW BLOWER - Yardman 5 hp, 1 yr young, top cond. \$200. Ext. 2487, 928-2246.

## Real Estate

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

## For Sale

SETAUKET - 3 bedrms, 2 baths, ranch, lg eik, fp, central air, full bsmt, ½ acre w/harbor view, s/s, w/w. \$75,900. Ext. 2266, 689-9210 eves.

PATCHOGUE - 2-3 bedrm fully insulated, Rapco-foamed sidewalls, dry bsmt, city water, low taxes, gar, carport, easy walk to village shopping & transp. Low 20's. 475-0465.

NORTH FORK - LI Sound, secluded, 3 bedrms, 3 baths, 2 fp, rustic ranch in heavily wooded area, lg pine kit, L/R, D/R, fam rm, beautifully landscaped w/16x32 pool. John, Ext. 3429, 727-7741 after 6.

MASTIC BEACH - long-line ranch, 2 oversized bedrms, cabinet-lined kit, formal D/R, den, full bsmt, baseboard heat, ¼ acre. \$27,000. Ext. 2547, 281-5498.

SHOREHAM - 4 bedrm custom built colonial, over 2000 sq ft living area, 2-car gar, 1 acre landscaped & fenced, s/s, w/w, many extras. \$56,000. Ext. 3040, 744-2821.

CALVERTON - 3 bedrm ranch, oil frd heat & water, s/s, fin bsmt, 1 acre prop. \$31,000. Ext. 2022, 727-9058.

S. SETAUKET - 3 Village Schools, 4 bedrm L-ranch, bsmt, den w/fp, 2-car gar, fenced, appl, eik, extras. \$46,500. Paula, Ext. 2253, 698-8950.

SETAUKET - N/25A, 4 bedrms, 2-car gar, 2 baths, L/R & fam rm ea w/fp, D/R, ¾ acre landscaped. \$70,000 firm. Ext. 2337, 751-1283.

N. SHIRLEY - 3 bedrm ranch, 3 mi from BNL, excel cond, L/R, D/R, cabinet-lined kit, 1 bath, w/w, s/s, 4 appl, drapes, shed, 2 yrs old. Assume 8½% mtg, \$3500 cash over. Ext. 3835, 399-4128.

CORAM - beautiful tudor cape, treed ½ acre, 2-car gar, appl, w/w, SD #11, gas heat, 7% assumable. Low 30's. Ext. 2249, 732-6421.

S. SHIRLEY - 3 bedrms (possible 4th), 1 full + 2 half baths, L/R, D/R, eik, den w/fp & woodburning stove, bsmt, 2-car gar, many extras, 7 mi from BNL. \$37,000/negotiable. Ext. 3827, 281-0804 eves.

SETAUKET - Nassakeag Ridge, 3 bedrm colonial, lg fam rm, ½ acre treed, walk to univ and elem school. \$65,000. 751-0637.

## For Rent

MASTIC BEACH - studio apt, priv ent, full kit, pleasant location near water. \$185/incl util. Ext. 3778, 281-7531.

VT CHALET - beautiful furn, stone fp, woodland hiking trails, swimming pond, lake, canoeing, fishing, near golf, tennis, antiques, alpine slide, rent weekly. Ext. 3448, 757-5599 after 4 & weekends.

WADING RIVER - 1 bedrm apt, walk-in pantry, wood burning stove in fp, sunroom, all util pd. \$325/mo, avail to show June 1. Ext. 2387, 929-8846.

BELLPORT VILLAGE - 3 rm apt, util, fine area, golf, tennis, ferry to Ocean, lease. 286-8850.

PT JEFF STATION - 2 rm apt, convenient location, inexpensive. Tom, Ext. 3128, 928-7344 eves.

LAKE GROVE - rm for rent in lg split-level house, June 18-Aug 18 only (possible for next yr), fp, lg eik, D/R, den, w/w, sun deck, 4 mi from SB, 13 mi from BNL, prvt, wooded area. \$90/mo + util. Ext. 7923.

CORAM - sublet mod 1 bedrm apt, 11 mo lease, a/c, 3 appl, pool, tennis courts. \$300/mo, incl heat & gas, security. Mary, Ext. 2318, 698-7403.

POCONOS - chalet in Lake Wallepaupack region, sleeps 5. \$175/wk. Ext. 4551, 289-2159.

## Wanted

FURN HOUSE TO RENT - Shoreham/Wading River, sought by visiting scientist starting September. Ext. 3126/7699.

HOMES - for spayed cats, all shots, kittens also. Ext. 3040, 744-2821.

FENCING - 2-3' high, any cond, kids need outside play area. Pete, Ext. 4612.

AM/FM-8 TRK - in-dash, & pr of spkrs, Mom needs music. Chris, Ext. 4612, 281-7379.

HOUSEMATE - share house, East Setauket. \$100/mo + util. Ext. 2372, 928-2784.

RESPONSIBLE ROOMMATE - to share lg 3 bedrm house in Pt Jeff. \$133/mo + util. Jack, Ext. 3433.

COINS - buying coins, collections, estates, accumulations, highest prices paid. Jerry Spillman, Ext. 3399.

SILVER DOLLAR COINS - Christine, Ext. 2551, 929-8450 after 6:30.

USED APPLIANCES - refrig, elec stove, washer, dryer. Aggus, 744-2688.

FURN 1-2 BEDRM - access tennis, swimming, etc, sought by sabbatical couple, July 15-Dec 15. Ext. 3118/7968.

APT - for soon-to-be newlywed professionals, 10 mi radius of Stony Brook, around \$300. J. Adams, Ext. 3516, 246-8910 eves.

TRANSMISSION - for 71 VW Super Beetle. G. Woodson, Ext. 4033, 727-5532.

EXERCISER - bicycle type, should be in good cond. Ext. 3992, 298-4172.

14" RIM FOR PONTIAC - disc brake type. Mike, 727-5527.

PARTNER - who plays at Royal Racquetball Club, eves preferred. Karen, Ext. 2456.

RENT OR BUY - car for month of July. Tom, Ext. 3535.

FIREWOOD - oak logs, any length, unsplit, delivered. W. Polvent, 744-8