

## DEE Group Aids Home Heating Program

Good. That's how development engineer Robert Hoppe, DEE, describes the response of Long Island homeowners to a pilot program which encourages them to increase the efficiency of their heating system. The program is funded by the DOE and is administered by the New York State Energy Office by the Oil Heat Institute of Long Island with the voluntary cooperation of some 50 local fuel oil suppliers. According to Hoppe, the Lab's function in the program is to provide it with technical support including monitoring the fuel savings attributed to program retrofit options.

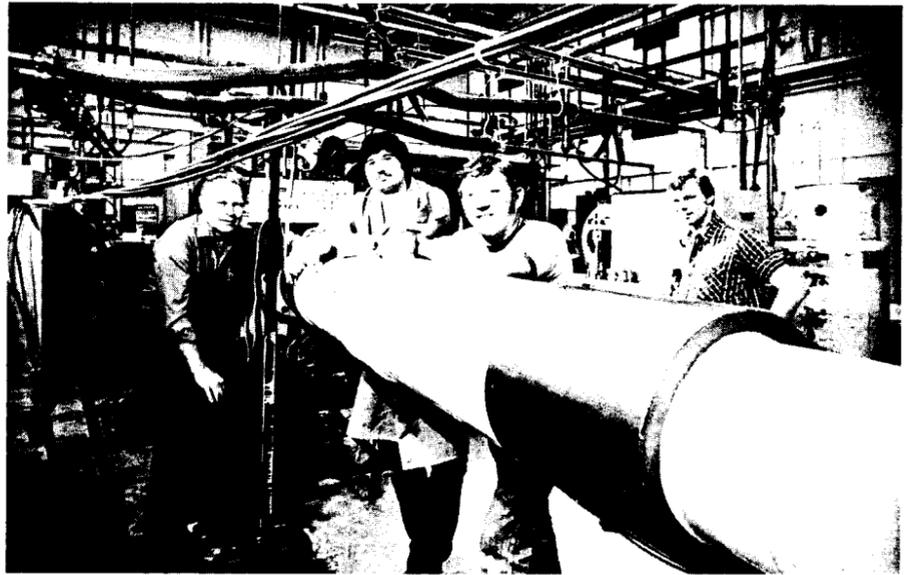
The pilot program (conducted in New York State in Nassau and Suffolk Counties only) was begun in March of this year when approximately 135,000 direct mail marketing pamphlets were sent to homeowners by their fuel suppliers. The pamphlet describes typical heating oil consumption and suggests conservation options which the homeowner may exercise.

Three such options, the High Speed

Flame Retention Head Oil Burner, the installation of a night set-back thermostat, and a high efficiency boiler in combination with a High Speed Flame Retention Head Oil Burner, have been developed by the DOE for the program.

In 1976, for example, New York and 19 other states together consumed over 420 million barrels of No. 2 heating fuel; the purpose, then, says Hoppe, of the pamphlet mailing, is to present to homeowners what action they might take to improve their heating system in an effort to reduce heating oil consumption. The marketing pamphlet contains a response card which, when filled out by the homeowner and returned to Hoppe's group, indicates the homeowner's desire to have the efficiency of his or her heating system tested. The test takes about one or two hours to complete. It is performed in the home by the oil supplier who records data on a form prepared by BNL. When completed, the form describes

(Continued on page 2)



At the lab of the Power Transmission Project are (from left) Bill Kristiansen, Dennis Farrenkopf, Ken Rogers, and Nick Houvener. They were responsible for the set-up and operation of the recent trial run of the second prototype cable.  
—photo by Humphrey

## Second Power Cable Passes Test

The second of three prototype cables for the Power Transmission Project has been put through its paces and has not been found wanting.

A 10-day test earlier this month was designed to evaluate the 12-meter cable's current-carrying performance. During one period, the cable ran continuously for 90 hours at full-rated current. Through-fault current levels as high as 30,000 amperes were simulated to determine how the cable would perform if a fault in the system, such as a short circuit, were to cause very high currents. Conductor stability after a thermal quench (in which the cable's temperature is allowed to rise above the superconducting range) was also tested.

Under the supervision of Bill Kristiansen, at the PTP lab, the cable was pulled into the pipe and cooled down to the supercritical helium regime of 6-8° K (-447° F.). Then current was supplied from the superconducting transformer that enables the cable to run at 4000 amp rating. (For comparison, only under certain conditions could conventional copper cable of the same diameter run as high as 1000 amps). Refrigerator control, temperature measurements and cable performance were monitored by an on-line minicomputer. Everything went so well that they decided to leave the refrigerator and the cable running unattended for a weekend, monitored only by a small computer. There were no problems. Assisting in the set-up and operation of the trial run were Nick Houvener, Ken Rogers and Dennis Farrenkopf.

A technical problem is the accurate measurement of temperature losses. This is difficult because not only are the losses very low and occurring at a low temperature, but, despite the insulation, they are masked by the heat coming in from the outside. As a result of tests on the first

cable, new instrumentation was used on this test to measure losses both electrically and calorimetrically and reconcile the two. "Most of it worked well," said project head Eric Forsyth. "A couple of sensors still need improving, but we are working on them." The extensive instrumentation took Stan Pollack and Jack Scrofani about a month to complete.

The flexibility of Brookhaven's tape was demonstrated at the test of the first cable in March 1978. Then, the cable was run at full current and measured, taken out into the yard, bent around a 10-foot drum, and put back in to see that there was no mechanical damage. There was no discernible change, says Forsyth. The cable has an inner conductor formed of niobium tin which is less than one thousandth of an inch thick. However, niobium tin is like glass and requires a very tricky mechanical design to make it bend. "It's like trying to bend a sheet of plate glass," says Forsyth. The superconducting tape was developed by DEE's Metallurgy Division in cooperation with industry.

The second prototype cable was made in the cable winding shop at Bldg. 820 by Tom Muller, Bob Kowalski, Kevin Stevenson, and Hank Noehren. They will start constructing the third and last prototype cable in midsummer. This will be shorter, but identical in every other way to the 100-meter superconducting power cable which will be built at the taping facility around January 1980. The larger cable will be capable of carrying 1,000 megawatts of power on a three-phase basis, and will be the culmination of this research project which was to develop a cost-effective means of transmitting large amounts of electrical power underground. The research is supported by DOE's Division of Electric Energy Systems.



Lecturer Francis Crick (left) shares lighter moment with Richard Watson (center), and Maurice Goldhaber.  
—photo by Humphrey

## Double Helix Topic Of Crick Lecture

Nobel laureate Francis Crick, co-proposer of the double helical structure of DNA and the replication scheme, lectured Wednesday evening in Berkner Hall to a capacity crowd. His talk, "Is DNA Really A Double Helix?," was one in the AUI Distinguished Lecturer series.

A highly personable speaker, Crick presented a lucid 90 minute assimilation of recent arguments which attempt to refute the double helical structure of DNA and which substitute for this structure the so-called "side-by-side" (SBS) model. Crick outlined two newly proposed variations of this model which, like the helical model, are consistent with the original crystallographic data. Employing independent experimental data and topological arguments, Crick showed that these newer models must

be dismissed. He conceded that their creators, however, challenged Crick and his associates on a somewhat weak point in the original analysis which deserved reconsideration.

In response to a question as to what biological function the double helical structure serves, Crick said that in primordial times, such a structure might have provided useful stability for a small biological molecule. Once established, he said, "evolution was stuck with it."

After explaining the new SBS models and refuting their plausibility, Crick concluded, "it would have been more fun if the double helical structure was wrong, but," he said with a smile, "it appears to be quite right."

## Users Group Formed For NSLS

About 75 prospective users of the National Synchrotron Light Source met at Brookhaven on May 21-22 to hear reports on the various aspects of the Light Source and to form a users organization. Dr. R. Deslattes of the National Bureau of Standards was elected chairman of the executive committee and Benno P. Schoenborn, BNL, secretary. At the close of the first day's session, the participants toured some NSLS laboratories. Here, they visit the lower level of Bldg. 535 which houses the vacuum assembly area, diagnostics lab and experimental beam line groups.

—photos by Humphrey



**The Vanpooling Program Is Off To A Good Start**



The TRANSVANS are on the road. Last week, Associate Director Vincent O'Leary turned over the keys of three brand-new 12-passenger vans to the drivers who were selected for the pilot project. Fred William (left), who has the longest and most scattered route, starts out from his home in Hollis, Queens, at 6:45 a.m., picks up some of his passengers at their homes and others off Exit 21 on the L.I. Expressway. And, he says, everything is going smoothly. Jack Barry (center) is transporting employees from Patchogue. He has established a route where door-to-door pickup is possible and, without rushing, he has dropped everybody off and is at his office by 8:25. Paul Mohn (right) is on the Stony Brook run. He, too, has planned a route where each passenger can be picked up at home. He hasn't had to wait a minute for anyone and, as one passenger says, "I get here in better time than I did when I drove myself." —photo by Humphrey

**More Boners**

**LONG MAY SHE WAVE**

When Emmanuel Leutze painted *Washington Crossing the Delaware*, he depicted the Stars and Stripes being carried in the boat. But the Stars and Stripes were not adopted as the American flag until June 14, 1777 — half a year after Washington's crossing.

**O'NEILL'S INCREDIBLE DIRECTIONS**

When Nobel prizewinner Eugene O'Neill wrote his play *Where the Cross Is Made*, he gave these stage directions for one scene: "His right arm had been amputated at the shoulder and the sleeve on that side hangs flabbily. Then he goes over to the table, and sits down, resting his elbows, his chin in his hands, staring somberly before him."

**OVERKILL IN THE WILDERNESS**

In his renowned oil painting *Israelites Gathering Manna in the Wilderness*, the painter Tintoretto armed Moses' men with shotguns. The earliest known gun did not appear until 1326, somewhat after the Exodus.

**LINCOLN'S MOTHER'S SONG**

In his biography *Abraham Lincoln — The Prairie Years*, Carl Sandburg wrote: "Lincoln's mother was standing at the door of their cabin singing 'Greenland's Icy Mountain.'" Quite a feat — the song was not written until 22 years after Lincoln's death.

**WHO'S ON SECOND?**

On Sept. 8, 1908, it was the last of the ninth inning in a crucial National League baseball game between the Chicago Cubs and the New York Giants, and the score was tied. The Giants got men on third and first. The hitter belted a single, driving in the man from third. The runner on first, Fred Merkle, started for second, saw the winning run score, stopped, and headed for the clubhouse. The Cub's Johnny Evers retrieved the ball and touched second, which meant Merkle had been forced out and the winning run nullified. The score was tied again, but the crowd on the field made further play impossible. Later, when the game was played off, the Giants lost it — and the pennant.

**MAD JUSTICE**

In 1863, Paul Hubert, of Bordeaux, France, was convicted of murder and sentenced to life in jail. After Hubert had served 21 years in solitary confinement, his case was reopened — and only then was it found he had been convicted of murdering himself.

**THE TWO HATTED MAN**

In one of his 3,000 portraits, Sir Joshua Reynolds painted his subject with a hat on his head — and a hat under his arm.

**THROW OUT THE GAUNTLET**

In a portrait of his patron, Charles I of England, Anthony Vandyke painted the king in full armor with two gauntlets (or medieval gloves) — both for the right hand.

**YES, WE HAVE NO BANANAS**

At the Versailles Peace Conference in 1919, Lloyd George of Great Britain advised Italy that it could make up its commercial losses by increasing the production of its banana crop. The Italians were not heartened — Italy has no banana crop.

**MORE TOPSY-TURVY ART**

The Museum of Modern Art in New York City, displayed Henri Matisse's *Le Bateau* in 1961 — and it took 47 days before someone discovered it was being shown upside down.

—From *The Book of Lists*, Copyright© 1977 by David Wallechinsky, Irving Wallace and Amy Wallace. Reprinted by permission of William Morrow & Company, Inc.

**Cafeteria Menu  
Week Ending June 1, 1979**

<b>Monday, May 28</b>	
Snack Bar service only	9 a.m. to 2:30 p.m.
<b>Tuesday, May 29</b>	
Cheese chowder	(cup) .40 (bowl) .50
Chopped steak and 1 veg.	1.25
Breaded filet and fr. fr.	1.45
Hot Deli — Knockwurst	(on bread) 1.20 (on roll) 1.30
<b>Wednesday, May 30</b>	
Minestrone soup	(cup) .40 (bowl) .50
Homemade lasagna and 1 veg.	1.35
Fried rice and pork w/Chinese noodles	1.35
Hot Deli — Italian sausage and peppers hero	1.25
<b>Thursday, May 31</b>	
Chicken rice soup	(cup) .30 (bowl) .40
Beef liver and onions and 1 veg.	1.15
Southern fried chicken w/corn fritters	1.35
Hot Deli — Barbequed beef	(on bread) 1.20 (on roll) 1.30
<b>Friday, June 1</b>	
Clam and lobster chowder	(cup) .40 (bowl) .50
Braised beef and vegetables w/mushrooms	1.45
Seafood cakes and spaghetti	1.10
Hot Deli — Pastrami	(on bread) 1.30 (on roll) 1.40

— SAGA FOODS —

**Stony Brook Events**

**Saturday, May 26**  
**Children's Theatre:** "Cinderella," Stony Brook Union Auditorium. 2 p.m., today, tomorrow and June 3; 8 p.m., June 1 and 2. Donation \$2 per child; group rates available. Contact 585-1868 or 751-7243 for ticket and other information.

**Regarding Methanol**

In the story of gasahol last week, it was mentioned that ethanol was drinkable alcohol and methanol denatured alcohol. While the gist of the article was not the drinkability of alcohol, the statement is confusing, nevertheless. It has been pointed out that to denature means to make unfit for a particular use, and ethanol is often denatured when it is to be used for something other than human consumption, thus eliminating an appreciable tax penalty. Because it is a poison to humans, methanol (or wood alcohol) is often used to denature ethanol to prevent its use as a beverage. Methanol, under any condition, is unfit for human consumption.

**When A Locust Isn't A Locust**

You've probably heard of the seven-year itch, but what do you know about the 17-year locust? These insects (which aren't locusts at all) are a kind of periodical cicada and emerge every 17 years. Homeowners may notice the insects this year in early June.

The cicada may look strange — and may be quite numerous — but they pose no danger to humans or animals and have no ability to bite or sting.

The only damage cicada produce is during egg laying which begins from seven to ten days after they have emerged from the ground. The insects split young tree twigs and insert their eggs into these slits. Serious damage has been reported on fruit trees so that spraying should only be necessary on these or on other valuable ornamental trees.

Homeowners who spot a cicada emergence may call the Suffolk County Cooperative Extension at 727-7850 who will record the location. An informative leaflet, "Periodical Cicadas," is also available in single copies by writing to them at 246 Griffing Avenue, Riverhead, NY 11901.

**Swimming Pool**

**Pool Schedule**

Monday through Friday  
11:00 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**

<b>4-month season</b>	
individual membership	\$20
family membership	\$30
<b>3-month season</b>	
individual membership	\$15
family membership	\$20

Season tickets (May through August) are on sale at the pool.

**Daily admissions**

employee/family member	\$1
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 swimming pool is closed on all Laboratory holidays.

**Public Sale of Motor Vehicles**

Thirty-nine vehicles, located at warehouse T-87, will be available for Public Sale. Inspection will be permitted from May 29th through June 5th, during the hours of 9 a.m. to 4 p.m., except Saturday and Sunday. Bids will be opened on June 7, 1979, at General Services Administration Business Service Center Bid Room, 26 Federal Plaza, New York, New York. This will be an informal competitive bidding. Bid forms may be obtained at Buildings 87 and 211. For further details, please call extension 2302 or 2977.

**Bank Holiday**

Please note that the on-site branch of the Banker's Trust Company will be closed on Wednesday, May 30 in observance of Memorial Day.

The bank will be open however on Monday, May 28, although this day is a BNL holiday.

**Arrivals & Departures**

**Arrivals**

Samuel W. Beeler, Jr.	Safety & Env. Prot.
Michael J. Nekulak	Accelerator
Thomas K. Rudolf	Accelerator
Linda J. Thompson	Tech. Info.
Timothy G. Freeman	Medical

**Departures**

Raymond F. Blomberg	Accelerator
Peter V. Bucci	Director's Ofc.
Richard G. Eggert	A.U.I.
Laurence A. Jacobs	Physics
Andrew H. Kuniyuki	Biology
John N. Pesanello	Contracts & Proc.
Gregory S. Rosche	Nuclear Energy
Robert D. Taylor	Nuclear Energy

**Home Heating (Cont'd)**

the efficiency of the existing system under steady state conditions (that is, when the system burner is operating continuously). "The bottom line of the program," Hoppe says, "is to encourage the occupant, after efficiency analysis, to take some action which will upgrade his or her system. That may be the improved burner, the boiler/burner system or the automatic night set-back thermostat."

After refitting is done, Hoppe's group monitors and quantifies the fuel-use change with respect to refit options. This is done by comparing oil consumption records maintained by the dealers for the year before and the year after the refit is completed.

Hoppe went on to explain the second and third phase of the pilot refit program. The second step, managed by the New York State Energy Office, is a grants-options phase. It is expected that this phase of the program will identify more experimental refit options. These will be installed by the participating dealer with a grant subsidy funded by the DOE. BNL will assist in developing the additional options for this program phase and will quantify their fuel savings.

The DOE has requested that the Lab manage a third phase calling for a national oil refit qualification plan to be implemented after the NYSEO grants-options stage. The objective of this final phase will be to develop a full-range of refit options which can be implemented by the public with a broad range of cost and which will return good pay-back expectations.



**Bob Hoppe**  
—photo by Humphrey

# BROOKHAVEN BULLETIN

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## Letters To The Editor

To The Editor:

A sincere thanks to Marc's and our many, many friends for their thoughtfulness and concern at a time when it was so deeply appreciated.

—Gasper, Helene and Jill Perry

## French Film At BNL

Le Cercle Francais de BNL will present the film "Au Hasard Balthazar" at Berkner Hall, on June 4 at 8 p.m. Members of the BNL community and friends are cordially invited to attend. Those who are not members of The French Group will be asked for a donation of \$1.50 (75¢ for students) to help cover the cost of film rental.

The subject of "Au Hasard Balthazar," at least on one level, is the donkey Balthazar, whose life and death provide the formal structure of the story. His story parallels those of human beings to whom the donkey belongs, who each represent a vice—greed, lust, drunkenness—from which the owner finally dies. The film was selected as one of the ten best films of 1970 by the New York Times. The dialogue is in French, with English subtitles.

Robert Bresson, the director of this film, is generally considered to be one of the great contemporary film directors. Although his output has been limited to eight feature films, each of them has been an award-winner that has gathered international critical acclaim. Bresson says of himself: "I was and I am a painter. I don't have 'themes.' I think first and reflect afterwards. That way I am surprised. As for my subjects, I don't choose them, they chose me."

## Diners Note

The Center Club will be closed Sunday, May 27th, the day preceding Memorial Day. However, it will be open on Monday evening, May 28th.

The Cafeteria will be open from 9:00 a.m. until 2:00 p.m. on Saturday, Sunday and Monday, May 26th, 27th and 28th.

The Vended Food Service in Building 912 is in operation continuously.

## Cooking Exchange

June is coming—the month for the 16th Annual International Dinner. All eligible Cooking Exchange members are invited to attend. Bring your husband or wife and a main dish or appetizers sufficient to feed 8-10 people, and plan to have a good time! A cash bar will be set up.

Please inform Wendy Green, 878-8952, Linda Humphrey, 286-0925, or Elaine Lowenstein, 286-8952, of your plans.

Remember, the Dinner is Friday, June 1 from 5:30 to 8:00 p.m. at the Brookhaven Center.

## Bowling Awards Party

**Date:** Friday, June 8, 1979

**Time:** 5:30 p.m. till ?

**Place:** Brookhaven Center

**Tickets:** \$1.00 for bowlers—  
\$5.00 for guests

Includes buffet, open bar, music. Tickets must be purchased by June 1, 1979. Contact Carol Beckner, Ext. 3483.



Less than a mile to go: a group of BERA runners on the return leg of the 5 Km race held on-site last Sunday.



Martin Blume, Physics, crosses the finish line to complete the 5 Km race in 22:52. Blume placed 55th in the race, his first for this season.  
—photos by A. Strongin

## Softball

### Mixed League

May 14 – rained out

May 17

**Diamonds 6 Who's On First 5**

Ted Erickson hit a home run. Women hit well. Good defensive play at second base.

**Source III 19 Underalls 12**

Wayne Rambo and Richard Murgatroyd hit home runs. An outstanding play at second base by Joel Goldstick.

**Nads 15 Who Cares 14**

The Nads took the game in extra innings. Supurb center fielding.

**Oh Kays 8 E-Z Riders 3**

Henrietta James pitched a strong game to help her team defeat the E-Z Riders. She got good hitting support from Kay Hunt and Leroy James.

### League I

**Blue Jays 14 Ravens 4**

**Phoubars 5 Six Pax 2**

**Strikers 26 Old Timers 11**

The Strikers scored 11 runs in the fourth inning to put away the Old Timers 26-11. Highlights of the game were Herbie Harris and Joe Hanson with home runs and 4 for 4 hitting by Walter Annand and Joe Albergo.

**Swethogs vs Source I – postponed**

### League III

**Ice Pops vs. Medical (Rainout)**

**Binary Bombers 24 Moles 12**

Homeruns by Dalal and Moore, as well as fine defensive play and all-round team hitting powered the Bombers past the Moles in the season opener.

**Nuke Powers 13 Big Sticks 9**

Smart base running and timely hitting by Weaver and Van Tuyle helped the Powers to overcome an early 7-0 deficit. Outstanding defensive plays in the outfield preserved the win for the Powers.

## Women's Softball

The BNL women were defeated by the Waltz Inn Team 15-12. Judy McKinney, Ann Meier, Sydell Lamb and Diane Grady all hit well for the short-handed BNL team.

The next game scheduled for the BNL women's team is on June 3 against "Alfra"—a Division A Brookhaven Town League team. Remember Friday practice sessions.

## Runners Compete At Annual Races

On a cloudy, cool overcast Sunday that only runners could love, over 200 of them gathered at the Lab for the running of last Sunday's Annual Spring Races. The first BERA runner to finish the 5 Km run was Chris Lister, Physics, with a time of 20:17 or about 5 minutes behind the first place time. Susan Gill, daughter of Ed Gill, Accelerator, placed third among the women and was the first female BERA runner to finish the race. Her time was 24:12.

About 30 BERA runners were among the field of 92 runners in the 15 Km race. Of these, Dan Strongin in 54:30 was the first BERA runner to finish and placed third among the men. He is the son of Myron Strongin, Physics. Terry Frei, wife of Haskell Frei, Reactor, placed second among the female entrants and was the first BERA woman runner to compete the 15 Km run. Her time was 1:10:24. Complete race results and certificates will be sent to all finishers.

The Roadrunners want to thank the 40 or so BNL volunteers who assisted in organizing and directing the race. Thanks also to the BNL Security Group and to the members of the Radio Club for their assistance.

## Aviation Club

Bob Larson, President of the BNL R/C Model Aircraft Club, was guest speaker at the May 9 Aviation Club Meeting. Bob described the construction and flying of radio controlled aircraft and brought along with him two engine powers, a sail plane and miscellaneous engines and transmitters. Fuel for these planes cost \$8 per gallon, but enthusiasts say they get "HOP/G" (hours of pleasure per gallon).

The Aviation Club will have a Block Island "Fly In" on June 6. All pilots should have reserved a plane by today (May 25). Passengers are asked to send a \$5 deposit to Ron Dobert, Bldg. 490, Ext. 4082, or Ed Schwaner, Bldg. 911B, Ext. 4346. Pilots and passengers will share the aircraft expense.

The Annual Experimental Aircraft Association Club Air Show at Brookhaven Airport is scheduled for June 23 and 24. This is a fun family affair featuring many displays and demonstrations of R/C aircraft, home-built planes, soaring hang gliders, sky diving, antique planes, etc. Volunteers are needed to assist in setting up the exhibits and in other duties. Because there will be many aircraft in the area, only students or private pilots will be accepted. If you can be of assistance, call Lou Addressi, Bldg. 911, Ext. 4758.

The next meeting of the Club will be at noon in the Snyder Seminar Room in Bldg. 911, on Wednesday, June 13. There will be a brief business meeting followed by two FAA films, "Eagle Eyed Pilot" and "Stalling for Safety."

## 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.

**1004. DEPUTY BUDGET OFFICER** - Requires a BBA degree, an MBA preferred, with substantial experience in budget planning and control. Extensive knowledge of Laboratory operations and BNL and DOE financial policies and practices desirable. Will assist in overall administration of the Laboratory's budget office operations. Director's Office.

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

**1005. MECHANICAL TECHNICIAN** - Requires AAS degree or equivalent in mechanical technology with experience in cryogenics, vacuum systems, helium mass, spectrometer leak testing, pipe layout and silver brazing. To work on the assembly and installation of superconducting cable systems. Accelerator Department.

**1006. ELECTRONIC TECHNICIAN** - AAS or equivalent in electronic technology with a good background in pulse circuits, analog and digital controls, and high voltage and/or high current power supplies. Should be skilled in troubleshooting of heavy electronic power supplies and associated controls. Accelerator Department.

**1007. PATROL OFFICER** - Requires AAS in police science/criminal justice or equivalent capabilities and familiarity with the operation of a security department. Must have excellent written and oral communications skills. Must be willing to work shifts. Safety and Environmental Protection Division.

**1008. WORD PROCESSING ASSISTANT** - Requires working knowledge of Daconics or similar shared logic word processing systems. Will operate all components including scanner, terminal and print out equipment. Must be willing to work Tuesday through Saturday schedule. Photography and Graphic Arts Division.

### Autos & Auto Supplies

71 FURY III - 2 dr, ps/pdb, many new parts, good cond, must sell immediately. Best offer over \$400. Ext. 4068.

73 COUPE DE VILLE - red ext/white leather int, immaculate. \$2500. 924-5437 after 6.

77 PLYMOUTH GRAN FURY WGN - 4 new 721 radials, stereo, a/c, ps/pb, excel. Sacrifice, \$4500. Joe, Ext. 7720.

73 FORD BRONCO - 4 w/d, V8, a/t, many extras, very good cond. \$3200. Ext. 2090, 698-5787 after 6.

65 DODGE CORONET - ps/pb, 2 dr, good transp. Best offer. Ext. 2970, 929-3558.

RV ICE BOX - sink & 12 gal water tank mounted on plywood to fit 8' bed on PU, \$90 or best offer; 71-73 Vega hood, \$25. 475-5834 after 6.

5 WHEELS & TIRES - 10-15, 5 lug. Asking \$225. 281-4839.

74 MGB - excel cond. 727-6613 days, 369-4705 nights.

68 BUICK RIVIERA - good cond, ps/pb, p/w, p/seats, cruise control. \$500. 727-9058.

2 SNOW TIRES - 6.40/6.50-15, also replaces 5.90-6.00-15, 4 hole rim. Best offer. Ext. 4415.

TIRES - 2 brand new E78-14, mounted on wheels, balanced. Ext. 4848, 744-2947.

CHEV 2 SPD TURBO - good for rebuilding, \$25; (2) Plymouth 318 c.i. engs, 47,000 mi on one, 100,000 on other, \$75 ea. 727-7304.

69 FORD TORINO - 302, 4 dr, a/t, rebuilt eng, good cond. \$750. 475-2075.

77 FORD F100 XLT PICKUP - camper, loaded. \$6500. 281-2186.

2 ALPINE SNOW TIRES - F78-14 tubeless, \$5 ea; 1 Firestone Deluxe Champion w/rim, 4 lug, 6.45x14 tubeless, very good cond, \$20. Ext. 4201.

USED MOTOCROSS EQUIP - leathers, boots, shoulder pads, etc. 281-6325 after 5.

73 CHEVY STA WGN - excel cond, just inspected, 68,000 mi, a/c, AM/FM. Ext. 3320, 286-0497.

77 CHEVY NOVA - p/s, std trans, low mi, good cond. \$2700. 924-7610.

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

CLASS I TRAILER HITCH - 72 Plymouth, 1 yr old, 2000 lb. \$25. Ext. 3319.

## Notice

Because of the holiday on May 28, the deadline for receipt of ads for the June 1 Bulletin is today at 4:30 p.m.

78 FORD ¾ TON PICKUP - 351, 4 spd, AM/FM cassette, p/s, excel cond, must sell. 588-4116 after 5.

64 CHRYSLER NEW YORKER - 4 dr htdp. \$325. W.S. Webster, 286-2319.

73 PLYMOUTH SATELLITE - 60,000 mi, brown, 2 dr. \$1750. 589-8867 after 5.

2 TIRES - Sears Dynasport 6.00-15L. \$10 ea. Frank, Ext. 3509.

75 CHEVY CAMARO - 2 dr, 6 cyl, a/c, excel cond. \$3500. Ext. 3654.

75 CHEVY STA WGN - 9 psgr, a/c, a/t, p/b, very good cond. \$2275. Ext. 4033, 727-5532 eves.

73 BUICK LE SABRE CUSTOM - 2 dr, red vinyl htdp, ps/pb, a/c, FM-8 trk stereo. Asking \$1500. Noreen, 281-7873.

TRAILER HITCH - for VW. \$14. Bob, Ext. 4637, 692-8659.

TIRES - mostly for spares, E70-14 (3); E78-14 (snows); 7.35-14 (snow); 7.50-14 w/rim, \$10; rest \$3-5. Rich, Ext. 4172.

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

MOTORCYCLE HELMET - Buco, blue, meets safety standards. \$20. Ext. 7951.

70 PLYMOUTH FURY - ps/pb, a/t, a/c, V8, good running cond. \$600. 928-6680 after 6.

74 DATSUN 260Z - a/t, AM/FM, a/c. \$3900. Sawang, Ext. 2115.

73 VEGA GT - mechanic's special. \$100. Fred, 924-3556.

DELCO AM CAR RADIO - from Chevette, 1 yr old, excel cond. \$25 firm. Josephine, Ext. 4144.

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

2 SNOW TIRES - Goodrich nylon 7.75-15, less than 50 mi use. \$25 ea. Frank, Ext. 3509.

67 MGB - FM stereo, new top, brakes good. \$750. 928-5031 after 5.

73 CHEVY PICKUP - 4 w/d, K-20, camper special, 350-V8, a/t, 3 gas tanks, 2 batts, AM/FM, a/c, all extras. A. Ravenhall, 653-4632.

76 CHARGER DAYTONA - loaded, low mi, radials, excel cond. 724-2687.

TIRE - (1) GR78-14 Uniroyal snow; Philco in-dash AM pushbutton radio. Chris, Ext. 3919, 929-4310 after 6.

71 GMC - 1 ton, 4 spd, 350-V8, 2 saddle tanks + extras, slide-on camper, sleeps 8. \$2650. 472-2089 after 6.

CAP - for 6 ft truck bed, good cond. \$125. Call Ron, 473-8995 after 6:30 p.m.

68 BUICK SKYLARK - 350, a/t, good car, good price. \$300. Tom, 281-3238.

73 PLYMOUTH SATELLITE - 2 dr htdp, blue. \$900. 924-6971.

69 BUICK SKYLARK - 2 dr, p/s, a/t (rebuilt), a/c, vinyl top, runs well. \$485. Stan, 286-3333.

75 FORD ELITE - dk brown, 56,000 mi, a/c, many extras, excel. \$3200. Paul, Ext. 2023, 727-1464.

69 CADDY - 4 dr, all pwr, good cond, must sell. 588-4116 after 5.

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

## Boats & Marine Supplies

25 HP EVINRUDE - 1977, never used, short shaft. \$525. Don, Ext. 3397, 289-0265.

12' SEARS SUPER GAME FISHER - 7½ hp motor, less than 20 hrs, extras. \$480. Don, Ext. 4650.

14' CLAM BOAT - w/trailer, used 1 season, rakes & handles. \$350. Peter, 286-0158.

14' FIBERGLASS - 1970, silverline, windshield & controls. \$225. 727-1588 after 5.

CABLES - remote control single lever for OMC outboard to 70 hp. B. Johnson, Ext. 3354.

OUTBOARD MOTOR PROP - for Johnson or Evinrude, 13x19 thru hub exhaust. \$10. Carl, Ext. 4711.

SAILBOAT - Mossberg Mallard 12'0" Tri-spar fiberglass foam float. \$225. Benny, Ext. 3256.

MERCURY "SAILPOWER" OUTBOARD - 4½ hp, new, never used, long shaft for sailboat, incl fuel tank. C. Davis, Ext. 4089/2838.

16' BOAT TRAILER - tilt bed, good cond. \$100. 744-5325 after 5.

TRAILER - for boat 18' or less, needs some work. \$25. Meyers, Ext. 4357, 286-8379.

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

## Yard Sales

MASTIC - 122 Riverside Ave, June 2-3, furn, misc items, china closets, tables, chairs, end tables, 9 a.m. 281-3291.

SHIRLEY - 18 Loughlin Dr, corner Family Affair, 5 family yard sale, May 26, 9-4. Ext. 3605.

## Miscellaneous

LOWERY ELEC ORGAN - 1976, excel cond. \$1000. HR3-9223 after 5.

STEREO EQUIPMENT - Tanberg TR55 rec, AR XR77 turntable, 2 Advent One speakers, 1 mo old. \$775. 727-7304.

CERAMIC KILN - Skutt, model 231-18, new; United upright freezer, 72"x34", approx 27 cu ft; accordion "Crucianelli," made in Italy. Antoinette, 821-0832.

17' REVELA TRAILER - self-cont, light wgt, very clean, new tires, extras. Asking \$2100. 689-8793.

BOY'S SNEAKERS - tan, leather trim, size 5½, worn once, \$5; blk custom made awning & hardware, 15' long, \$45. 286-3679.

AIR COND - good cond, \$80; recliner chair, beige, like new, \$75; Volvo rim, \$12. 744-6874 after 6.

SEARS MIST HAIRSETTER - \$8; Sears sun lamp, stand, bulb, \$9; good cond. 821-0662.

LIV RM CHAIRS - 2 med size, solid forest green, good cond, 2/\$25; evergreen fir & spruce trees, up to 40", 2/\$7. 727-1617.

SOFA - 4 pc sectional, good cond, lt brown. \$100. 727-0552.

20" YAZOO MOWER - 10" Sears radial saw; 7 ton Philco air cond; \$125 ea. 286-1205.

SINK - stainless w/dbl drainboards, back splash, faucet & spray, first reasonable offer. John, Ext. 3466, 751-6390 after 6.

BED - twin size, matt, box spring, frame. \$50. Dori, Ext. 2040.

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

GOLDEN RETRIEVER PUPS - AKC, Champion lines. Walt, Ext. 3006, 821-9223 after 6.

REFRIG/FREEZER - Westinghouse, gold, 16 cu ft, 1975 model, frost free, side-by-side doors. \$100. 331-2779.

CAMERA - Nikkorex 35 mm SLR zoom (43-86 mm zoom lens), lens cap, electronic flash, shoulder strap, excel. \$200 (lens alone retails at \$403). 929-8105.

YASHICA 35 MM - range finder, F1.4 lens, w/case, excel cond. Paul, Ext. 4509.

ELEC LAWNMOWER - B&D 18", \$20; Sears Roebuck 3 spd bike, \$25. 281-6191.

DISHWASHER - Coloric under-counter model, good cond. \$25. Meyers, 286-8379.

GUIAR - 1959 Gibson Melody Maker, like solid SG, coll item, super deal. \$250. 286-2271.

PHONO CARTRIDGE - top-rated Shure V15 Type IV, used less than 1 hr. List price \$150, asking \$50. 744-8011 after 6.

LAWN EDGER - elec powered Black & Decker. \$15. Jack, Ext. 4605.

17" COLOR TV - \$125; pr Sentry IV spkrs, great for PA or super stereo. \$450. Ext. 4233.

POWER MOWER - elec start, Snapper, good cond, good buy. 289-6574.

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

ELEC MOTORS - ½ - ½ hp, clean, good for making grinders, wire wheels, sanders, etc, cheap. Mike, Ext. 2364.

WEIMARAUER PUPPIES - avail June 15-25, all AKC Championship stock, show, field & pet, outstanding blood lines. 286-8496.

REFRIG - about 12-13 cu ft, garage use type, freezer door broken, needs paint, runs well. \$5. Ext. 3300, 924-6977.

PLAYPEN - safety type, 3'x3'. \$10. Steve, Ext. 3822, 929-6527.

SPORTS PERSON - Tretorn tennis trainer w/extra tether, \$5; Abercrombie & Fitch handwarmer w/1 qt Benzine fuel, \$5. Bonnie, 475-0465.

STEREO - solid state Bradford. \$75, negotiable. 736-2511.

BEDRM SET - solid oak, 5 pcs, 3 yrs old, excel. \$750, incl 2 lamps. Joe, Ext. 7961, 727-7450 eves.

SNARE DRUM - w/stand, \$20; new 20 gal aquarium set-up, \$60; elec pinball machine. \$20. 732-1298.

ELEC COOKER/FRYER - Faberware, \$14; Crockery Chef slow cooker, \$7; Mirro pizza baker, \$9; all like new. 821-0662.

BIKES - men's 26" or 27" 3 spd Huff, needs tires, tubes & some TLC, narrow tire type, \$5; Frigidaire refrig/freezer, 20 cu ft, SXS, avocado green, frost free. \$95. Ext. 3300, 924-6977.

GUIAR - blk Fender Telecaster w/new Dimarzio pickups, mint cond, hot neck. \$225. 287-2271

UPRIGHT FREEZER - Signature 16 cu ft, frostless, white, lock, immaculate cond. Asking \$175. 744-8011 after 6.

POOL LADDER - 2" dia, SS tube type, \$45; skimmer, thru-the-wall type, \$20; weighted bottom vacuum w/telescoping handle, \$10. Jim, Ext. 4040, 289-0876.

OBOE - wood body, w/case, \$250; D-flat piccolo, w/case. \$95; microscope, 80x to 1200x, 2 eyepieces, 4 objectives, wood case, access. \$25. Ext. 3835.

PR SIDE CHAIRS - antique white, cane back, w/arm rests, green striped seats. \$80/pr. Ext. 3581.

COLEMAN TENT - 8x10, excel cond, ground cover, Coleman heater & lantern, 2 cots. \$150; waterskis, bridle for boat and tow rope. \$35. Ext. 4205, 265-7528.

TYPE WRITER - Olivetti Underwood Lettera 32, just about new. \$50. Tom, Ext. 4227.

ELEC STOVE - 4 burner, 21" wide x 25" deep, like new. \$50. John, 924-6733.

LILLY OF THE VALLEY PLANTS - 100/\$5; evergreen fir & spruce trees, 20"-40" tall, you dig, 2/\$7. 727-1617.

STEREO TAPE RECORDER - reel to reel, Concord model 727. \$100. Ext. 4476.

ARM CHAIR - mod, upholstered rust tweed, loose cushions, excel cond, settling estate, \$50; ping pong table, regulation size, folding wheels, all equipment, excel cond. \$45. 289-1883.

PROWLER TRAILER - 21' self-cont, sleeps 6, dbl dinette. Best offer over \$2500. Netusil, Ext. 3679, 744-5278 after 6.

BOXER - AKC, 5 mo, flashey fawn female, cropped & docked, choice of litter. 265-1072.

B/W TV - needs some work. Free. Hans, Ext. 4581, 281-5563.

(2) 10 SPD RACERS - Austrian imported, never used. \$50 ea. 475-6772.

CONSOLE STEREO - AM/FM-8 trk, w/record player, excel cond. \$100. Joe, Ext. 7961, 727-7450 eves.

FAUCETS - 4 bathrm type, \$5; 1 kitchen type w/spray nozzle, \$10; cond. Dalal, Ext. 7790.

LAWN MOWER - ride-on, 5 hp, needs minor work. \$100. Tom, Ext. 4227.

WEBER KETTLE BAR-B-Q - lg red enamel, extra cooking grill & access, excel cond. \$35 firm. Josephine, Ext. 4144.

LAWN MOWER - push type, Pennsylvania, good cond. \$15. 289-0413.

HI FI - Scott rcvr mod 382B, \$75; Garrard record changer, \$40. Agrawal, Ext. 2618, 928-6032.

MINOX 35EL CAMERA - like new, still under warranty. \$100. Naomi, Ext. 3699.

(2) AIR CONDITIONERS - GE & Hotpoint 5500 BTU. \$50 ea. J.P. Semkus, Ext. 3352/3358.

CHILD CARRIER - fits 10-spd bikes, \$5; full crib, \$25, & other baby items; alum screen door, 32"x80" w/ storm frame, \$15; 21" lawnmower, new blade, w/bag, \$35. 289-0532 after 6.

RUGER RIFLE - .22 cal w/Weaver variable scope, 2 yrs old, \$75; .35 cal lever action Marlin rifle w/sling, 2 yrs old, \$90. 475-4258.

MOVING - appl, carpets, air cond, sprinkler system, etc. 928-4516.

TAPE DECK - Technics stereo cassette deck w/dolby, other deluxe features, perf cond. \$85. 732-5829.

MOIRE FABRIC - lt blue, great for drapes. Was \$16/ yd, now \$5.50/ yd. Betsy, Ext. 3389, 751-7096.

MAPLE CRIB - w/Baby Rest matt, excel cond, \$40; Emerson Quiet Cool air cond, excel cond, \$300; Kenmore washer, dryer, good cond. \$50 ea. 744-5801.

## 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. Ric, Ext. 2266, 689-9210 eves.

EAST PATCHOGUE - ranch, 4 bedrms, 3 baths, paneled D/R, built-in china closets, laundry rm, screened, glazed patio, back porch, gar, circular driveway, 2 lots (1¼ acres). \$60,000. 286-8309.

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

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. 727-7741 after 6.

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

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

CORAM - spacious cape, treed ½ acre, 2-car gar, appl, gas heat, 7% assumable. Low 30's. Ext. 2249, 732-6421.

ROCKLAND COUNTY - 4 bedrm colonial near Thruway, Pkways, NYC bus & RR, 2½ baths, fp, L/R, D/R, full bsmt. Don, Ext. 7612, (914) 425-8172.

CALVERTON - 3 bedrm ranch, ½ acre wooded, partially fenced, franklin stove, full bsmt, oil/baseboard heat, low taxes, assumable mtg, all appl, extras, carpeting, oak floors, 6 yrs old, non-develop area, dead end st. \$35,000. Joe, Ext. 7961, 727-7450 eves.

BELLPORT VILLAGE SOUTH - near water, recent colonial, 4 bedrms, 2½ baths, L/R, D/R, eik, fam rm w/fp, full bsmt, 2-car gar, ½ acre, usual appl. High 50's. Ext. 7730, 286-8097.

BELLPORT VILLAGE - cozy 2-story house, 4 med size bedrms, eik, comb liv/din rm, 1½ baths, laundry rm, porch, 80'x147' corner, low taxes. \$32,000. Charlie, Ext. 4201, 234-8530.

SOUTH 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.

ROCKY POINT - The Tides, 70' ranch on beautiful ½ acre, 3 bedrms, 2 full baths, L/R, D/R, den w/fp, eik, oak floors, full bsmt, 2 patios, beach, golf, assumable 6% mtg. \$45,000. Ext. 4605, 744-6482.

## For Rent

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

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

SOUTH HAVEN - beautifully furn & equipped efficiency apt, full kit, 8 mi from Lab. Ext. 3369, AT6-0608.

RIDGE TOWNHOUSE - 2 bedrms, 1½ baths, w/w, central air, 5 appl, 2½ mi from Lab. \$350/mo + util. Ext. 3541, 924-4070.

CORAM - 3 bedrm ranch, fully furn, avail from June 16 - Aug 31, reasonable rent. Ext. 2277, 928-9448.

PT JEFF STATION - 1 bedrm apt, convenient location, inexpensive. Tom, Ext. 3128.

## Wanted

HOUSE TO SIT - Lab vicinity, no charge. Jack Allentuck, Ext. 2059.

HOUSE TO RENT - 2-3 bedrms, end of May or June 1, Rocky Pt/Wading River area. Onre, Ext. 2065, 584-6058.

OARS - 6 or 6½' length, good cond, reasonable. Harry, Ext. 4504.

BIKE RIDERS - for 100 mi cycle-thon. Information & registration forms at BERA, Bldg 488. De Lise, Ext. 2350.

SHOTGUN - pref d/bl min length for motor home use, good working cond, reasonable. Charlie, Ext. 4201.

HOME - for neutered gray & white house cat who needs to be adopted, 5 yrs old, affectionate, baby allergic to cat. Ginny, 744-7675.

GAS CAN - 6 gal, for older 33 hp Johnson, in decent shape. Terry, 281-0360.

SHARE W/WORKING MOTHER - teenage daughter, home south of S. Country Rd, Bellport. 286-3575 eves.

GOOD HOME - for "Fluffy," a very lovable Samoyed, needs room to run, excel w/children, obedience trained. 929-3558 after 6.

SM DINGHY - inexpensive. Ralph, Ext. 2368, 928-6654.

LABELS - Campbell's soup or beans, V-8 & Franco-Am. Gangwer, Bldg 815.

BOY'S 16" BIKE - 928-5737 after 12:30.

TO RENT - apt or sm cottage, 2 wks in July & summer weekends, Mastic/Shirley area. Noreen, 281-7873 after 1.

PERSON TO HELP SAIL - 30' cutter from Florida to NY via Bahamas, 5 wks, departs June 9. 929-6526.

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

HOME - for white Shep pup, female, well tempered, calm. Linda, Ext. 4173/4113 after 4.

5 PERSONS - to fill a chartered bus for a trip to Reading, Pa, Sat, June 9, for 1-day shopping spree. M. Susa, Ext. 3673.

## Car Pools

BAY SHORE - join or form a car pool. Rod, Ext. 4805.

ON-TIME CAR POOL - has opening for 1 rider next 4 wks, Lab via Patchogue, E. Patchogue. Alyce, Ext. 2902.

CENTEREACH - ride from Eastwood Blvd. Kathy, Ext. 3805, 981-5993 after 6.

MILLER PL/SOUND BEACH - Rocky Pt area, wish to start or join, can drive part-time & share expenses. B. Kennedy, Ext. 3617.

STONY BROOK/SETAUKET - to Lab starting May 29. Miss Berlad, 751-8078.

WESTHAMPTON - desire to be car pooling. David, Ext. 3359, eves & weekends 288-3158.

JAMESPORT CAR POOL - Aquebogue, Laurel, need to join existing car pool, or form new one. Ben, Ext. 2674.

## Lost & Found

FOUND - Women's wristwatch outside Bldg. 184. Ext. 2345.

FOUND - small brown address book in parking lot nr purchasing on 5/22. Identify and claim. Ext. 7746.

LOST - 1 gold bamboo earring between Physics & Brookhaven Center. Bobbi, Ext. 3929.

LOST - pr eyeglasses, bifocal & case, between AGS & gas station. Bob, Ext. 2819.

## Services

LAWN THATCHING - removes dead grass, 5,000 sq ft/\$50; rototilling gardens & new lawns up to 1,000 sq ft, only \$18. Tom, 325-1033.

HOUSESITTING - vicinity of Lab, June 1 - Sept 15, any period, no charge. Ext. 2059.

HOUSE CLEANING - experienced, good references. 727-1931.

SAILING LESSONS - on 21' sloop, private. \$12/hr. Rich, Ext. 3573, 938-6251 after 6.

LAWNS MOWED - reasonable, Mastic Beach area. E. Riker, 281-5565.

THESIS & PUBLICATIONS ILLUSTRATED - med, chem, bio, electromechanical, drawings, charts, schematics, wiring diagrams, instrumentations, & lettering professionally executed, reasonable. Yani, Ext.