

Shown above is Building 1005S, the new home of many in High Energy Facilities (HEF). Dubbed the Collider Center, Bldg. 1005S is located near the entrance to the proposed site for the Relativistic Heavy Ion Collider (RHIC). To get there, go north on Railroad Street until you encounter Ring Road at the collider site. Turn left, pull into the parking lot and take the elevator to the fourth floor. There you will find Paul Reardon, Associate Director for HEF, and Eric Forsyth, head of the Technical Projects Branch (TPB), as well as the members of the RHIC Task Force, and the staffs of TPB, the Accelerator Physics Branch, and the Management Information Systems group for HEF. Below, Administrative Assistant Ruth Ann Lutz (in office), Senior Secretary Penny LoPresti (left) and Senior Staff Assistant Stephanie Lamontagne enjoy the airy spaciousness of the reception area. If you need to call any of the new occupants of Bldg. 1005S, their phone numbers have not changed. Early next spring, other HEF groups will move to new quarters on the second floor.

—photos by Horton



Health Education for Your Welfare

An ounce of prevention is worth a pound of cure, and disease prevention often begins with education on health maintenance and healthy living. To better disseminate information on health topics, Elaine Friedman joined the Occupational Medicine Clinic in September as its part-time health promotion specialist.

According to Occupational Medical Clinic Chief Laura Sbarra, health promotion activities are an important facet of preventive health care. Over 50% of major diseases experienced by Laboratory employees may be prevented or substantially reduced, and Friedman's health promotion program was established to help reduce preventable illnesses experienced by employees.

To begin the health promotion program, Friedman has planned two talks for December. On Tuesday, December 17, at noon in Room B of Berkner Hall, the first lunchtime lecture will be "Relaxation and Stress Management." The talk will be given by Daniel Lucas, a clinical psychologist specializing in stress reduction. On Thursday, December 19, also at noon in Room B, Berkner Hall, Maria Museler, Director of the Dietetic Technician Program at Suffolk County Community College, will

speak on nutrition in a talk entitled "Low-Calorie Holiday Feasting."

"I will be organizing two types of information sessions on a variety of health topics," explains Friedman. "There will be noon-time seminars and after-work workshops." All programs are open to BNL employees (and their families if space is available), and participation is voluntary. In addition, Friedman will make health information and self-help literature available through these programs and the Medical Clinic. During the second year of the program, she would like to offer a computerized health inventory, which will inform individual employees of the specific health risks they face as a result of the way they live.

"I also want to be thought of as a resource for health information," continues Friedman. "If I don't know the answer, I will find organizations, experts and references in the field for the employee to contact. I have already assisted employees with concerns regarding stress management and home health care." All consultations with Friedman will be kept confidential.

As a result of requests, Friedman's projects for next year include bring-

(Continued on page 2)

BNI Lecture BNL and the SSC

As Associate Director for High Energy Facilities, Paul Reardon is directly concerned with the design and fabrication of large projects in this area. He will speak about one of these projects, "The SSC and BNL's Role in It," on Wednesday, December 18 at 4:30 p.m. in Berkner Hall.

As most are now aware, the proposed SSC (Superconducting Super Collider) is the largest accelerator yet envisaged — a 20-trillion-electron-volt synchrotron. It is the highest priority of the U.S. particle physics community and is expected to provide, among other things, insight into what happened directly after the creation of the universe, more commonly known as the Big Bang.

Although construction of the SSC has not yet been approved by Congress, research and development funds were allocated, principally for superconducting magnets. A Central Design Group (CDG) was established at Lawrence Berkeley Laboratory to oversee this R&D, in which Brookhaven is a major participant.

In his lecture, Reardon will describe the SSC in general, and the magnet research and construction in particular. He will talk about the SSC work of the Accelerator Development Branch's Magnet and Cryogenic Divisions, which have long experience in magnet design and are professionally set up to do accelerator R&D. Their collaboration with Fermilab and LBL led to the adoption of the Design D magnet by the CDG. Last September, six 4.5-meter-long Design D magnets were constructed and tested at BNL to demonstrate their technical feasibility. Six full-length magnets (16.7 meters) will be constructed here in 1986. Also



Paul Reardon

involved in SSC research is the Accelerator Physics Group, which is helping in the effort to define the basic SSC accelerator requirements.

Paul Reardon is one of the country's foremost experts in the design and construction of large facilities for high energy physics. He came to BNL in 1983 from Princeton's Plasma Physics Laboratory where he was project manager of the Tokamak Fusion Test Reactor and head of the Department of Technology. Until he went to Princeton in 1975, he had been at Fermilab for seven years where, among other things, he headed the booster synchrotron section, led the energy doubler section and was head of the accelerator division. Earlier in his career, he was project manager at MIT's 400-MeV Bates Linear Accelerator, was an accelerator physicist with the AEC's Division of Research and worked with the Princeton-Pennsylvania 3 GeV accelerator.

O'Leary Moves to Private Industry

After more than 28 years at the Laboratory, Vincent R. O'Leary, Associate Director for Administration, will be leaving next month to take a position as Vice-Chairman of Nassau Suffolk Lumber & Supply Corp.

"We are pleased that Vince has this splendid opportunity," said Lab Director Nicholas Samios, "but at the same time we are sorry that his strong administrative talents will be lost to us." Since his arrival in 1957, O'Leary has worked closely with three Lab Directors and has served the Laboratory through the ups and downs of budgetary and energy matters.

He was named Budget Officer in 1966 and Assistant Director for Financial Planning in 1968. He became Assistant Director for Financial Planning & Business Management in 1969 and moved to Associate Director for Administration in 1972. During O'Leary's tenure as Associate Director, the Lab has earned numerous awards for energy conservation techniques and long-range energy programs.

He has also interacted for many years with the staff of Associated Universities, Inc. (AUI), the non-profit corporation that manages Brookhaven. On learning of O'Leary's departure, AUI President Robert Hughes said, "Over the past quarter century Vince O'Leary has been a leader, an innovator and a tough proponent for major new developments at BNL. He has left an indelible mark at the Lab and we are all sorry to see him go."

In addition to his work at Brookhaven, O'Leary has always been



Mort Rosen

Vincent O'Leary

committed to community activities on Long Island. Currently he is president of St. Charles Hospital and Rehabilitation Center; treasurer of Brookhaven Town's Industrial Development Agency and chairman of its Economic Development Commission; vice-president of the Emma Clark Library and the Boy Scouts of America Suffolk County Council; trustee of the Stony Brook Community Fund; and United Way Campaign Cabinet Member.

No successor to O'Leary has yet been named. A search is being conducted and, although the new job will contain many of O'Leary's responsibilities, it will also take into account the talents of the individual named to replace him.

Alone With the Wind

To many of us, earthbound as we are, the sight of a bird soaring far overhead stirs feelings of wonder. What's it like, to skim under the clouds, to climb circles in the sky?

A handful of people at Brookhaven know. They soar among the hawks and seagulls, in sailplanes.

"Contrary to what everyone expects, though, soaring is not a serene sport," says George Taylor, who, with 20 years of soaring experience, has tutored his wife Kathy, a former BNL employee, as well as employees Tom Dickinson, Dan Clemente, Penny Byrne, and Pat Thompson, who had been introduced to the sport in California. All belong to the Long Island Soaring Association, of which Dickinson is current president.

The BNL group offers me a ride one Saturday, and I soon decide Taylor is right. Just getting off the ground is a bit bumpy, as the tow plane pulls the sailplane over a grassy strip alongside a runway at Brookhaven Airport. During the gentle climb to 3,000 feet, though, I'm lulled into thinking, "Ah, so this is soaring." But then the tow rope is released, "Clunk!", and my stomach gets left behind as the sailplane climbs sharply to the right. Taylor explains that it's protocol for the sailplane to go right and the tow plane to go left.

"Watch the needle," he says next, referring to the variometer in the instrument panel ahead. (One thing noticeable is that we don't have to shout to be heard above any engine noise.) A rising needle on the variometer indicates that the sailplane has hit a thermal, which is canceling the sink rate and lifting the sailplane. "It's just a matter of staying in that thermal, circling around as you climb," says Taylor. That seems simple; find a thermal, rise, exit, fall, repeat.

How fast does a sailplane sink? I'm told that the two-seated trainer we are in has a glide ratio of 20 to 1. That means for every 20 feet forward, it drops one foot in altitude, which translates to about a 200-foot-per-minute sink at normal speeds. A high performance sailplane can have a glide ratio of 50 to 1. Perhaps the most important lesson for a novice, says Taylor, is learning to judge how far away from the landing field one can go and still get back.

Another problem for beginners, which I quickly understand, is getting mesmerized by the view and forgetting to fly the plane. On this Saturday, fast moving dark clouds threaten to let go a downpour, not just the sprinkling that has been on and off all morning. Once in awhile, sunlight breaks through, and a patch of bright blue beckons. It's a dramatic sky, and I love watching.

On a perfect soaring day, the group tells me, a cold front is driving through, the wind is brisk, the air is dry. Then the sun comes up, heating the ground, and thermal currents rise.

I get a ride with Kathy Taylor next. "This time of the year," she says, "migrating birds are traveling across the country. If you're lucky, you make one or two turns with a hawk riding the thermals. They climb faster than sailplanes because they are so efficient."

She is the only one in the group who flies in competition. As she explains it, a contest involves going around a triangular course, taking a picture of your sailplane's wing tip at each landmark as proof of your journey. The best time wins.

Except for a contest, speed is irrelevant in soaring. As Pat Thompson says, a sailplane is for flying in good weather and having fun. "It's like the difference between a power boat and a sailboat," he notes. "The power plane is more serious. Maybe because you



From left, George Taylor, Dan Clemente, Kathy Taylor, Jennifer Dickinson and Tom Dickinson.

know it takes eight gallons an hour, you feel more of a compulsion to get somewhere and do something useful." George Taylor likes to joke that a sailplane can do everything an airplane can do except run out of gas.

Back on the ground, I give up my seat to Dickinson's 15-year-old daughter Jennifer, who is close to soloing. As she gets strapped in in front of Kathy Taylor, Dickinson remarks that people who learn to fly in sailplanes are a big step ahead when they try power planes. He, the Taylors, and Thompson have both sailplane and power plane licenses. "Soaring is pure aeronautics and requires more precision flying," says Dickinson, who has been piloting the tow plane all morning.

Adds Clemente, "In a power plane, you've got an engine that can bail you out of trouble. With a sailplane, it's all up to the pilot. Some people might think that's a bit of a gamble, but I guess I like that. And of course, I trust myself."

Within the group, Penny Byrne is newest to the sport. "Flying was never special before. The closest I ever came to it was Wonder Woman comics," she says. Byrne loves pulling the tow release and climbing sharply to the right. "It's like cutting the umbilical cord and breaking free. When I'm up there, I get a natural high that stays with me."

Byrne, who has been taking lessons for about a year, says it can take about 50 to 60 flights before one can solo. Since the group is out most weekends except in bad weather, it doesn't take long to build up enough experience. Best of all, her membership in the Long Island Soaring Association entitles her to free lessons, mostly from the Taylors.

A week later, I happen to be driving down William Floyd Parkway. It's a perfect day for soaring, I think to myself. And as I glance up to check the sky, there they are — two sailplanes riding a thermal with a flock of birds. — Mona S. Rowe



A trainer glides in for a landing.

Small Business Grants

If you have a small side business or are thinking about starting one, you may be able to get some help. The U.S. Department of Energy administers the Small Business Innovation Research (SBIR) program, through which grants are made to support high-risk research with potentially high benefits.

The program is implemented in three phases. In Phase I, the scientific or technical merit and feasibility of ideas is determined over a brief period, typically about six months, with the awards limited to \$50,000. Phase II covers the principal research or research and development efforts, and

the awards are as high as \$500,000 for work to be done over a period of up to two years. Phase III is the commercial application of the work.

Selections for awards are made on scientific and technical merit, based on detailed reports done by reviewers drawn from DOE laboratories, universities, private industry and government.

For more information and applications, contact Bill Marcuse, head of BNL's Office of Research and Technology Applications, at Ext. 2103. Marcuse also has abstracts of awards from previous years.

Friedman

(Continued)

ing Weight Watchers on site to run an eight-week diet and support group and offering several smoking cessation programs, ranging from individual do-it-yourself plans to group support sessions. "To encourage participation and to help employees who are attempting to change to healthier lifestyles, the Laboratory will share the cost of these programs. Rewards will be given to employees who reach their goals," explains Friedman.

To find out what other health topics and programs are of interest, Friedman will be sending out a questionnaire to a random sample of employees in early January. "If an employee doesn't receive the questionnaire but would like to, please call me [Ext. 2699] and ask for one." As well, Friedman welcomes informal questions, comments and suggestions; she can be found on Tuesdays and Thursdays in Room 541 of the Medical Department.

"I am not here to preach clean living and be holier than thou," says



Peter Horton

Elaine Friedman

Friedman. "My job is to make resources available to employees who want to make healthy changes in their lives and to find support systems as they attempt the changes. I have an education background, and in education we talk about the 'teachable moment,' the time when someone is ready to learn and change their behavior. I want to be available to employees with support and information at that moment when they are ready to attempt more healthy habits and activities."

Friedman specialized in education for her master's degree and is pursuing a doctorate in education at Columbia University. While not at BNL, she is the Director of Continuing Professional Education, School of Allied Health Professions, SUNY at Stony Brook, and Co-Director of a National Resource Center for Health Promotion and Disease Prevention, also at Stony Brook, funded by the Department of Health & Human Services.

— Marsha Belford

Reports Available

The following reports are now available to the Laboratory staff and to affiliates of the DOE, AUI and NRC. Others may purchase the reports from the National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Rd., Springfield, VA 22161. Staff members should call Ext. 5068.

NUREG/CR-1677
BNL-NUREG-51267
VOL. II

Piping Benchmark Problems. Dynamic Analysis Independent Support Motion Response Spectrum Methods. P. Bezler, et al

NUREG/CR-4252
BNL-NUREG-51886

Independent Assessment of TRAC-PD2/MOD1 Code with BCL ECC Bypass Test. G.C. Slovik, et al

BNL-51892

The Geometry of Chaos. Brookhaven Lecture Series No. 209. H.B. Stewart

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Equipment Demo

Thomas & Betts Corporation will be showing some new products at Berkner Hall on December 19 from 10 a.m. to 2 p.m. Among the items on display will be Fibre Optic Connectors, Electro Block Connectors, electronic components, quick disconnects for signal and communication, Flame-Safe fire stops, coatings and blankets for cable trays, programmable controller markers and Color-Keyed Connectors and installing tooling up to 1000 MCM.

Note to Drivers

If you rent cars for official or personal use and don't recognize this

A/A 242635 AVIS					A/A 242635 AVIS				
WESTERN EUROPE	AFRICA AND EAST ASIA	AMERICAS	MIDDLE EAST	CANADA	WESTERN EUROPE	AFRICA AND EAST ASIA	AMERICAS	MIDDLE EAST	CANADA
25	10	20	20	C4	25	10	20	20	C4
US WIZARD AS PER AWD#					US WIZARD AS PER AWD#				
AVIS 800-331-1212					AVIS 800-331-1212				

you are missing out. Check with the Travel Office for more information.

Arrivals & Departures

Arrivals

Eng-Kie Souw Nuclear Energy

Departures

Fred Nesbitt DAS

Cafeteria Menu

Week of December 16

Monday, December 16	
Vegetable beef soup	(cup .65) (bowl .85)
Veal scallopini over rice	2.45
Southern fried chicken w/ 1 veg.	2.45
Hot Deli: Barbequed beef on French roll	2.45
Tuesday, December 17	
Cream of broccoli soup	(cup .65) (bowl .85)
Hungarian beef noodle bake w/ 1 veg.	2.45
Batter-fried fillet of fish w/ 1 veg.	2.45
Hot Deli: Chili dogs	2.25
Wednesday, December 18	
French onion soup w. croutons	(cup .65) (bowl .85)
Baked meatloaf w/mushroom sauce and 1 veg.	2.45
Ham & broccoli roll w/ 1 veg.	2.45
Hot Deli: Barbeque chicken on onion roll	2.45
* Christmas Special *	
Prime Ribs of Beef w/ choice of mashed or baked potatoes and two vegetables.	\$3.85
Thursday, December 19	
Split green pea soup	(cup .65) (bowl .85)
Eggplant Parmesan w/spaghetti	2.45
Breaded turbot fillet w. 1 veg.	2.45
Hot Deli: Smoked turkey	(on bread) 2.35 (on roll) 2.50
Friday, December 20	
Manhattan chowder	(cup .65) (bowl .85)
Shrimp Creole on rice	2.45
Beef stew w. baking powder biscuits	2.45
Hot Deli: Meatball sandwich	2.40

It's a fact: Nassau and Suffolk have over 1,000 miles of coastline, including many bays and inlets, Long Island Sound and the Atlantic Ocean.

—BERA News—

Swim Club

The BNL Swim Club will meet for the last time this year on Thursday, December 19, at 5:15 p.m. at the BNL pool for a half mile on up graduated workout. All those who can swim at least two laps of the pool without stopping using the crawl stroke are invited. For more information, call Marsha Belford, Ext. 3327, or Mark Catan, Ext. 5060.

Cooking Exchange

The Cooking Exchange invites you to enjoy good food and company at its annual holiday party. The party will be held in the Recreation Building on Tuesday, December 17, between 5:30 and 7:30 p.m.

Guests are requested to bring a dish of their favorite hors d'oeuvres. There will be a charge of \$1.50 per person and babysitting will be provided at 50¢ per child. Call Susan Sears, 744-7831, or Sara Morse, 286-1712 for more information.

Bowling

White League

High games were bowled by Ted Erickson 225, Jim Roesler 222, Nate Carter 207/200, Mary Scheidet 216, Marge Belligan 193, Jeanne Penoyar 175/177, Joyce Mortimer 173, Denise Monteleone converted the 4/7/9 split.

Red/Green League

J. Connelly rolled a 223, J. Morris 216/200, K. Riker 215/200, K. Asselta 213, H. Marshall 211, R. Larsen 209, J. Elmore 207, T. Prach 204, J. Ferrante 201, E. Sperry 200/200.

Volleyball

First Quarter League I

	W-L
Dinkers	14-1
UpFaGrabs	11-4
Bumpers	9-6
X-Rayted	6-9
Net Results	3-12
TNT	2-13

League II

Phoubars	15-0
Fossils	11-4
Nuts & Bolts	10-5
Chungas Revenge	4-11
Cannon Balls	3-12
Upton-Ups	2-13

Open League

	W-L
Odds & Sods	16-2
Dakota	13-5
Phoenix	12-6
Court Jesters	10-8
Rowdy Radicals	7-11
Generic	4-14
Out of Control	1-17

Runners Corner

Several Brookhaven Lab Running Club members shortened their Thanksgiving travel plans to represent the Lab in the Mosely Long Island 5-Mile Corporate Championships in Dix Hills. The first BNL team, consisting of Peter Boni, Ed Gallagher, Jerry Hastings, Trevor Sears and Terry Sullivan, placed first among corporate teams. The second BNL team, composed of Lou Addressi, Don Mackenzie, Frank Marotta, Skip Medeiros and Ed Meier, placed second among corporate teams but withdrew in acknowledgement of one member's faulty start. Individual honors went to Terry Sullivan — 1st overall, Peter Boni — 3rd overall, and Trevor Sears — 4th overall in a very competitive field.

Anyone wanting information about the Running Club, future races, or training, should contact Skip Medeiros at Ext. 2665.

It Is Not Too Late to Give Blood

If you give blood at the BNL Winter Blood Drive on December 17 and 18, you:

- | | |
|--|---|
| <p>Will</p> <ul style="list-style-type: none"> • find out your blood type, if you don't know it now. • feel so good you'll want to do it again right away, but you'll have to wait 8 weeks. • help the Long Island blood supply become self-sufficient. Long Island hospitals need 700 pints of blood daily. Currently, 40% of that supply comes from Europe. • be a "quiet hero" — one of the 10% of the population that provides the blood for everyone, even though 40% are medically eligible to give. • provide the precious material for a transfusion or to make certain vaccines. Or, if your blood is separated into components: your red cells could help someone with anemia, your white cells could help treat leukemia, your plasma could help a burn victim, a patient with internal bleeding could use your platelets, and your cryoprecipitate could be welcomed by a hemophiliac. | <p>Will not</p> <ul style="list-style-type: none"> • lose much time. The whole procedure takes only about one hour. The Lab is willing to have at least 300 people leave their workplace for an hour each to keep the blood supply flowing. Why not be one of them? • have to curtail your activities. You can resume your holiday partying, shopping and baking whenever you like. Remember George Willig! He gave blood on Long Island one summer afternoon in 1977. Less than 24 hours later, he made his daring climb to the top of the World Trade Center. • have to miss a meal. And you'll even get refreshments afterwards. • contract AIDS, or anything else. All the equipment used during your donation is new and disposable. It has never been used before and will only be used for your donation. • miss the blood for long. Your normal volume of fluid — about 8 to 12 pints — will be restored within 24 hours. |
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So help BNL reach its goal of 300 pints. Send in your pledge card today to Blood Program Chairperson Susan Foster, Bldg. 185, Ext. 5126, or to your Blood Program Captain. Friends and family members are also welcome.

First Stop: BNL

It looks like the Lab has become a permanent stop on Santa's itinerary. For the third year in a row, a BNL fire truck will escort Santa (Firefighter Richie Richard) and his helper (Firefighter Chuck LaSalla) through the apartment area. If you live on site, be prepared for their arrival at noon on December 24.

Noontime Caroling

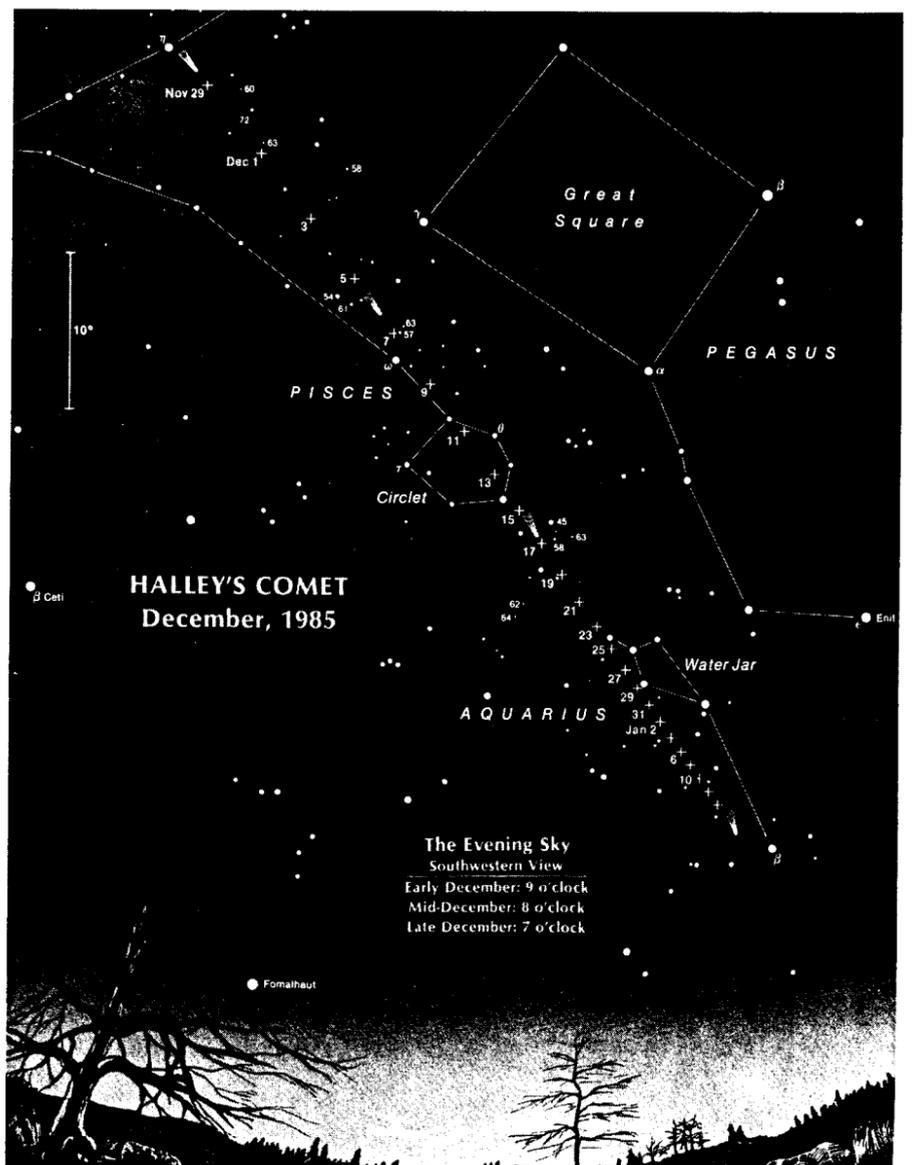
Next Wednesday, December 18, a 30-member choir will entertain the lunch crowd at the cafeteria with music of the season. Led by John Weeks, the choir will perform traditional carols in four-part harmony, a capella.

Attention PC Users

There will be a demonstration of Ashton-Tates integrated software package Framework II on Tuesday, December 17, at 10 a.m. in the AMD Seminar Room. For more information, call Kurt Fuchel, Ext. 4116.

Volunteers Needed

Males between the age of 18 and 40 years old are needed as participants in PETT (Positron Emission Transaxial Tomography) studies. Research involves state-of-the-art medical imaging of the brain. For more details, please call Ext. 4397.



The current popular journals give positional and brightness predictions of Halley's Comet. The above is reprinted from the December issue of Sky & Telescope.

Science Shop Open — Dec. 13 and 20 — 10 a.m. to 3 p.m.

Classified Advertisements

Placement Notices

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

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment.

Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Employment Manager, Ext. 2882.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

2385 SECRETARIAL POSITION - Requires AAS in secretarial science or equivalent, excellent communication skills and an overall expertise in Laboratory policies and procedures. As lead secretary, duties will include typing technical reports and correspondence on an NBI word processor, and supervision of another secretary. NNDC Division. Department of Nuclear Energy.

2386 CLERICAL POSITION - Requires excellent recordkeeping and computation skills. Will prepare and process vouchers for payment, mail vendors' checks and maintain data regarding payments. Experience with typing and use of calculator required. Fiscal Division.

2387 DRIVER - Plant Engineering Division.

2388 LABORER - Plant Engineering Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

2389 TECHNICAL POSITION - Requires AAS or equivalent experience in lasers and electro-optical systems, laser related electronics and mechanical assembly. Responsibilities will include maintaining laser systems and aiding in the construction of short pulse UV lasers. Instrumentation Division.

2390 TECHNICAL POSITION - Requires AAS in electronics technology or equivalent, plus five years experience with solid state electronic devices. Must be able to work from schematics and interact with engineers in the construction and test of systems required to sustain the effort of the Experimental Support Section. Also will be expected to maintain and repair existing equipment and safety interlock system. (Reposting of Job #2327.) National Synchrotron Light Source Department.

2391 CLERICAL POSITION - Requires AAS degree or equivalent experience, some experience in police or information security environment, and office skills which should include typing and filing. Will provide general assistance to the Personnel/Information Security Section which will include the review of pertinent DOE orders, compiling information for preparation of audit reports and the maintenance of BNL's classified document accountability and control system. Ability to obtain security clearance is mandatory. Current possession of security clearance is highly desirable. Safeguards and Security Division.

Autos & Auto Supplies

76 MERCURY - body excel., engine sound, 59k mi., \$950. 581-7841.

74 AMC HORNET - wagon, 76k mi., 4 new tires, carb., brakes, exhaust, 6 cyl., \$800. 821-2319.

75 FORD GRANADA - 81k mi., 4 dr., 6 cyl., CB, am/fm cass., a/t, p/s, p/b, a/c, 2 new Sears radials, runs well. \$1,500 neg. Bob. 281-5605.

70 NOVA - a/t, p/s, new suspension & exhaust system, reliable engine & trans. Walt, Ext. 2907 or 698-0576.

78 MERCURY - 115 hp, completely rebuilt, new rings, seals, carb., water pump. Dave, Ext. 7921.

67 FIREBIRD - 62k mi., p/s, p/b, tilt wheel, air cond., alarm system, wire locking wheels, am radio, best offer. 281-7302.

73 VW - squareback, needs minor work but runs reliably, \$500. 467-5672.

73 SUPER BEETLE - convertible, am/fm cass., extras, new paint and top, \$3,000. Al, 878-0817.

84 HONDA XR80 - dirt bike, good cond., runs well, new points, \$550 neg. 924-3946.

79 MERCURY COUGAR - XR-7, a/t, p/s, p/w, am/fm, leather int., tilt wheel. Tony, 698-9274.

TRUCK CAP - for 8' bed, good cond. Tony, Ext. 2462 or 269-9510 after 7 p.m.

80 AMC - 2 dr., ht. D/L model, 4 cyl., 4 speed, p/s, p/b, stereo, white ext., blue velour int., excel. mech., body good, \$2,400. Ext. 2492.

82 BUICK SKYLARK - a/t, a/c, p/b, p/s, am/fm stereo cass., cruise, 39k mi., excel. cond., \$5,995. Bill, Ext. 2047 or 472-4684 after 6 p.m.

78 HONDA CIVIC - 12k mi., new eng., brakes, exhaust, am/fm stereo cassette, \$1,500. Ed, Ext. 3293 or 477-2880.

78 DATSUN 510 - station wagon, 4 spd., CB, new battery and exhaust system, high mi., clean, \$1,200. 286-0336.

72 CHEVY NOVA - rust, runs well, dependable, \$490. Ext. 7148 or 588-9452.

79 MERCURY ZEPHER - 4 dr., a/t, p/s, p/b, a/c, 70k mi., \$2,900. 473-7739.

81 MUSTANG - hatchback, 4 spd., 4 cyl., new tires, sunroof, Alpine stereo, excel. cond., \$3,700, flexible. 661-3547.

74 FORD TORINO - 4 dr., 73k mi., a/t, p/s, p/b, recent tires, brakes, water pump, battery, am/fm cassette, \$1,100. 281-0360 after 6 p.m.

76 DODGE ASPEN - station wagon, 76k mi., good gas mi., am/fm, standard trans., \$700. 473-8877.

SNOW TIRES - Sears Traxionex, H78x15, w/w, on Ford rims, like new, \$50 ea. Frank, Ext. 5107 or 277-0464.

78 DATSUN 510 - hatchback, a/c, a/t, runs great, excel. cond., \$2,100. 473-1620.

FIRESTONE TIRES - (4) steel belted radials, P215/75R15 on white spoke rims, approx. 4,500 mi. Paul, 924-6478.

74 PLYMOUTH - 6 pass., V8, good rubber, brakes, runs well, \$650. Steve, Ext. 3100 or 878-4880.

85 SUZUKI DS80 - dirt bike, new cond., right size for beginner, under warranty, 4 mos. old, \$650. Richie, Ext. 2175 or 734-7342.

80 OLDS OMEGA - 4 dr. sedan, 4 cyl., p/s, a/t, 8,500 mi., \$1,500. Randy, 751-2634 after 6 p.m.

79 PINTO - 4 spd., avail. end of Jan., \$950. Elizabeth, Ext. 3419 or 3005.

TIRES - (4) radial, all season, FR-75-14, excel. cond., \$25 each. Bob, 287-1587.

73 CAMARO - needs work, \$550. Ext. 2964.

73 PINTO - am/fm, new tires, all new parts, excel. cond., must sell; (4) 13" Michelin radial tires, new, \$150; (4) new Datsun/Toyota rims, for 4x4, \$50. 226-1828 after 5 p.m.

83 THUNDERBIRD - fully equip., must sell. 654-4620 after 6 p.m.

68 NOVA - 3 spd. manual trans., good pressure and clutch plates, \$25. Frank, 722-3887.

77 PACER - a/t, 85k mi., runs well, \$700. L. Snead, Ext. 3502 or 286-8166 after 6 p.m.

74 PORSCHE 914 - 1.8 liter targa, new Alpine, new Monza exhaust, alloys, excel. cond., \$4,500. 286-0065.

83 BMW 320i - s-package, fully loaded, a/c, sunroof, BBS wheels, Blaupunkt stereo & equal., excel. cond., white/black int. 331-4828.

81 VW RABBIT - 67k mi., 2 dr., manual, good cond., \$2,200. Uli, Ext. 5508.

84 VW RABBIT GTI - black/red int., stereo, alarm, 22k mi. Walter, 486-3309.

80 OLDSSTARFIRE SX - hatchback, 4 cyl., white/saddle int., a/t, p/s, p/b, \$1,400, neg. 289-9238.

80 AMC - hatchback, D/L model, 2 dr., 4 cyl., 4 spd., p/s, p/b, stereo, white/blue velour int., excel. mech. cond., body good, \$2,400. Ext. 2492.

69 CHEVELLE MALIBU - new brakes, batt., good running cond., \$600. 473-7681.

CHEVY TRUCK PARTS - front bumpers, \$35; rear step, \$65; bumper guards, \$20 pair; st. mirrors, \$35 pair. Tony, Ext. 2462 or 269-9510.

RADIAL TIRES - (4), Michelin X, P195/75R14, used, \$50. 751-8403 after 6 p.m.

70 BUICK ELECTRA - limited, 2 dr., all power, good tires, engine, trans., good transp. Dave, 286-1290.

73 PLYMOUTH DUSTER - winterized, recent tuneup, R&H, runs well, \$975 or best offer. 589-4407 eves.

76 BUICK SKYLARK - 67k mi., manual, 6 cyl., clean, \$800. Ralph, Ext. 3649.

CAMPER - 8 ft., cap with insert, dinette, sleeps 3 adults, mint cond., \$600. 698-9642 after 6 p.m.

79 SUBARU - 4 WD wagon, 53k mi., mech. excel., some body rust, \$1,050. Ext. 2051 or 689-8685.

82 CHEVY MALIBU CLASSIC - station wagon, very good cond., \$4,700; '78 Fleetwood Brougham Cadillac, new cond., \$4,700. 475-4596.

84 PLYMOUTH RELIANT - 4 cyl., 4 dr., a/t, p/b, am/fm radio, 49k mi., excel. cond., \$4,750. Barry, Ext. 5624 or 727-5956.

75 OLD'S CUTLASS SUPREME - excel. cond., good winter car, \$800. 473-7681.

70 BUICK SKYLARK - low mi., mech. excel., \$995. 286-0237.

85 CAVALIER - 2 dr. sedan, p/s, p/b, a/t, low mi., \$7,000. Tracy, Ext. 3847 or Henry, 878-8058 eves.

TOYO SNOW TIRE - (1) steel belted radial, 185/78SR14, low mi., \$20. Al, Ext. 4397.

77 FIREBIRD - 6 cyl., red/white int., excel. cond., \$3,000. Ann, 585-3417.

79 MERCURY XR7 - a/t, p/s, p/w, am/fm, leather int., tilt wheel. Tony, 698-9274.

81 CHEVY CAPRICE - wagon, 42k mi., diesel, excel. cond., 9 pass., loaded, \$5,200. Joan Smith, 265-4811.

74 DATSUN 610 - steel radials, am/fm cass., Die-Hard batt., many new parts, \$700. Ext. 5288 or 878-8177.

76 FORD VAN - V8, a/t, p/s, p/b, show cond., flares, spoiler, sunvisor, sunroof, pop out rear windows, refig., toilet, sink, snow tires, excel. cond. Ray, Ext. 3536 or 289-7615.

VESPA BRAVO MOPED - Super Deluxe, Class B, excel. cond., used very little, \$450. Lloyd, Ext. 3381 or 286-1024.

75 PLYMOUTH VALIANT - reliable, 4 dr., a/t, a/c, rebuilt trans., new brakes, radials, \$400. Ext. 4776.

76 MERCURY - body excel., good engine sound, 59k mi., \$950. 581-7841.

74 PLYMOUTH - V8, running cond., \$650. Steve, Ext. 3100 or 878-4880.

74 CAPRI - 4 cyl., 4 spd., snow tires, \$700. Bill or Nancy, 585-2563 eves.

75 CUTLASS SUPREME - red, new tires, sunroof, \$1,500. 744-7073.

Boats & Marine Supplies

27' CHRIS CRAFT - twin eng., sleeps 4, standup head, kitchen, dinette, good cond., \$5,800. Bill, 281-3624.

78 MERCURY - 115 HP, completely rebuilt, new rings, gaskets, seals, carburetor. Dave, Ext. 7921.

16' ALUMINUM BOAT - 30 HP Chrysler outboard, trailer, runs well, \$1,700. Ext. 4312.

26' PEARSON - 1972, 15 HP eng., 5 sails, d/f. Ext. 3921 or 689-9214.

Miscellaneous

ORGAN - Thomas Jester 132 Color Glow, w/rhythm section, memory chords and more, \$600. 234-7225.

GE CLOTHES DRYER - old, good cond., \$25. Kathy, Ext. 3797.

GE REFRIGERATOR - 1973, 18 cu ft., avocado, auto. defrost, side by side, excel. cond., best offer. 286-1214.

IBM PC - compatible, portable, 640k, 2 drives, serial, parallel, clock, monitor, MSDOS and CPM, plus WP, SS, DB, communication, utility sw, \$975. Dick, Ext. 2911.

DRUMS - trio, blue sparkle, great gift for beginner. Susan, Ext. 7235 or 399-1736 after 5 p.m.

8 TRACK TAPE DECK - 25 tapes, \$20; RCA 45 rpm record changer, \$10. Frank Rumph, Ext. 5107 or 588-3565.

LOLLIPOP DOLLS - handmade, colorful, lovable boy & girl dolls, approx. 14" tall, \$15 ea. Frances, 286-0439.

SNOW BLOWER - Sunbeam Snow Champ, 12", electric, \$175. 878-4285 after 5 p.m.

STEREO - Aiwa, RX-30, receiver w/equal., clock, alarm, auto. turntable, cass. deck w/Dolby BC, new \$600, now \$300. Ext. 7144.

WASHER - Sears Kenmore, brown, \$60. Pierrick, Ext. 7591 or 736-0073.

JUICE EXTRACTOR - Oster, new, \$40; Sears electric lawn mower, \$20; Melnor walking sprinkler w/75' hose, \$30. Victor, Ext. 2395.

FITNESS GYM - Universal-type, Marcy, 2 yrs. old, excel. cond., orig. \$2,800, now \$1,500; oak dining table, 2 leafs, 6 chairs, can seat 16, orig., \$1,500, now \$700. John, Ext. 3292, or Beth, 475-4370.

SAFE - steel combination, 26" x 26" x 42". 286-0027.

CRIB - \$30; humidifier, \$35; Futon, twin size, new, plus platform, \$90; plastic bifold doors, new, \$30. Ext. 2007 or 751-1474.

FREEZER - Westinghouse, 17 cu. ft., white, good cond. 744-2097 after 5:30 p.m.

ELECTRIC RANGE - Okeefe & Merritt, 30" double oven, glass doors, deluxe, good cond., \$75. Ext. 2180 or 286-3937.

TV CONVERTER - VHF to UHF, like new, \$28. 286-8664.

TABLE SAW - and extension, Sears Craftsman, 3/4 hp motor, \$225. Dot, 286-8909 a.m.

BATHROOM SINK - round, in 37" formica top, faucets, \$15. 286-0795.

BEDROOM SET - light pine, queen mattress, head & footboard, 2 night stands, double oval mirror, triple dresser, \$300. Ext. 2877 or 289-8428.

CLARINET - Bundy/Selmer, good cond., \$135. 744-6874.

ORGAN - Yamaha portable, \$425; Singer touch & sew, wood cabinet, \$475; side-by-side refig. freezer, \$275; huge capacity dryer, \$125. 399-1868.

REFRIGERATOR - Admiral, 10 cu. ft., 2 yrs., \$150. 588-0689 after 6 p.m.

SPACE HEATER - new, \$22; Willard water, 363-7032.

ELECTRIC RADIATOR HEATER - oil filled, 2 settings, therm., \$20; Braun juice extractor, \$20; electric drill, Skills, \$10; child's country pine desk w/bench, \$15. 751-0345.

STUFFED ANIMALS - unbeatable prices, proceeds to Bethel A.M.E. Church School. Debbie, Ext. 3420 or 736-4962 eves.

COUNTERTOP - molded, almond, 7'4", new, \$20; (2) tires, L78-15 on GM rims, \$30. Chuck, Ext. 3525 or 589-1069 after 6 p.m.

BICYCLE - man's coaster brake, Royce Union, 26", \$35. Mac, Ext. 4660 or 821-2515.

CHIMNEY PIPE - triple wall, Sears, 1 length, 45" elbow, roof flashing, ceil. collar, pipe brkts., new, \$20; heater, vented, nat. gas; Sears, 45k btu, new, \$150. Chuck, Ext. 3525 or 589-1069 after 6 p.m.

CAR SEAT - Century 300, used for 9 months, \$30 or best offer. Peggy, 286-9388 or John, Ext. 3292.

SKIS - AMF Head Vector, Lange ski boots, 10-1/2, Rossignol ski poles, \$150. Ext. 2423.

KEROSENE HEATER - Kerosun Radiant 10, excel. cond., 55 gal. drum, like new, \$50. Ext. 2366.

FREEZER - large, upright, Westinghouse, like new, \$160. Jim, 286-0024.

FUR - long coat, Chinese mink, brown, size 8, 2 yrs old, \$450. Ext. 3187.

FIR TREES - you dig, 22" to 5', 3/\$10; Presto 6 qt. pressure cooker, \$10; (4) sturdy wooden kitchen chairs, \$20 for all. 878-6637.

WOOD & COAL STOVE - Petit Godin, large model, \$475 incl. 1/2 ton coal. 286-1470.

RACING BIKE - Patterson BMX, Araya rims, Cal. light, extras, new \$400, sell for \$200. Steve, Ext. 4049 or 744-8087.

GRETCH DRUM KIT - chrome snare, blue sparkle base, 2 toms (1 standing), Zildjian hi-hat, 16" crash, 18" sizzle, all hardware & stool, \$500. Tom, Ext. 3592 or 286-1378.

ELECTRIC STOVE - & oven, \$35; counter top, \$30; couch, \$50. 473-5776 after 5 p.m.

BATHROOM FIXTURES - Amer. Std., green toilet, sink, faucet, hardware including flush, medicine cabinet, \$75. 727-6481.

UNICEF CHRISTMAS CARDS - and gifts. Ann, Ext. 2022 lunchtime or 744-8386 after 5 p.m.

JEWELRY - coral shells, rings, etc. Whitey, Ext. 2913.

CRAFTSMAN SNOW THROWER - 32", attachment for Sears tractor, \$25. Frank, 722-3887.

CAPTAINS BED - w/matching dresser and new twin size mattress, \$300. 878-6528.

SKI BOOTS - Koflach, size 9, good cond., very warm, 3 or 4 buckles, \$50 or best offer. Ext. 2914 or 286-3742 eves/weekends.

CHRISTMAS TREES - blue/green Spruce, live, cut while you wait, clearing property, Brookhaven Hamlet, Sat. & Sun., Dec. 14-15 & 21-22. Jim, Ext. 4040 or 289-0876.

BERA OPERA TICKETS - (2), eve of Dec. 28. Arnie Aronson, Ext. 2606.

COLOR TV - with remote control, \$250; stereo, \$70; turntable, \$40; plates; kitchen utensils. Uli, Ext. 5508.

Free

SHOP MANUAL - for Ford Fiesta. Ext. 2500.

OAK DESK - 6 drawers, trunk, cloth covered, old, you pick up. 473-7739.

Lost & Found

LOST - name of man who wanted purchase info on motor generator set. W.S. Webster, Ext. 2525.

Car Pools

TIDES AREA - 4th driver needed. Sal, Ext. 2460 or 744-9822.

BABYLON/W. ISLIP - driver needed for on time pool, 8:30-5:00. Mike, Ext. 2705.

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 Rent

MASTIC BEACH - spacious 1 bdrm. apt. in nice neighborhood, near water, lg. kitchen with d/w, d/r, full bath, lots of closets, priv. ent., \$500 mo., incl. heat. Jim, 281-2849.

BELLPORT - 1 family house, newly redecor., 2 bdrms., l/r, eik, bath, no children or pets, avail. immed. 286-2005 between 12:00 and 6:00 p.m.

MANORVILLE - Rock Hill Country Club, new unfurn. condo, 2 bdrms. and den, 2 full baths, l/p, skylights, golf, tennis, pool, full appl., \$975 plus util. Ext. 4495, 4049 or 2400.

WHITE MOUNTAINS/NEW HAMPSHIRE - Ski Loon, deluxe 3 bdrm. condo., 2 baths, f/p, colort. v. with HBO, clubhouse, jacuzzi, 1/4 mi. slopes, free shuttle, 4 nights \$450, weekly \$600. 914-232-4039.

N. SHIRLEY - efficiency apt., furn., kit., priv. ent., 1 person only, nonsmoker, no pets, security, lease, \$400 mo. incl. all, 5 min. from Lab. and stores. 281-8044.

FARMINGVILLE - 1 bdrm. apt., single, \$500 incl. all. 732-2141 before 1 p.m.

LAKE RONKONKOMA - 1 bdrm. cottage, min. to SUNY and Smithtown, 20 min. to Lab., \$500 incl. elec. and water. 588-1889.

BELLPORT - 2 bdrm. house, S. of S. Country, \$600 plus util. 286-1147.

CENTER MORICHES/S. MONTAUK - 1-1/2 blocks to water, 3 bdrms., 2 baths, basement with outside entrance, garage, eik, d/r, l/r, \$825 neg. 878-8177.

PORT JEFFERSON - \$600 mo., winter rental, \$900 mo., summer rental, 5 bdrms., 3 baths, for summer, 3 bdrms., 2 baths, for winter, plus util., sec., comm., ins. for furnishings, and refs. 751-8711.

RONKONKOMA - close to LIE, beach/recreational facilities, 2 bdrms., l/r, eik, full bath, storage, yard, \$600 plus util. Ext. 2676 or 543-0487 eves.