BROOKHAVEN BULLETIN
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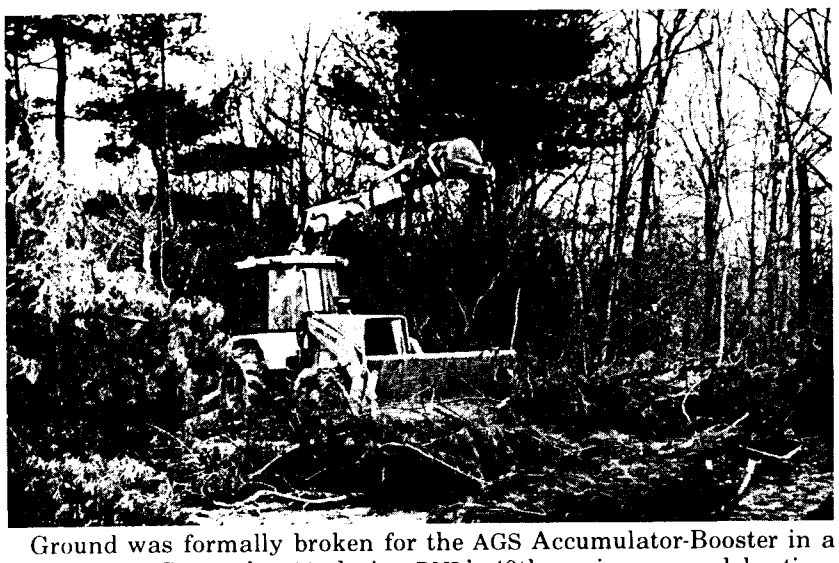
BROOKHAVEN NATIONAL LABORATORY

Clearing the Way For the Accumulator-Booster



Peter Horton

Ground was formally broken for the AGS Accumulator-Booster in a ceremony on September 11, during BNL's 40th anniversary celebration, but construction actually began on March 18 with an informal ground clearing.

The Accumulator-Booster will be a small but powerful accelerator to be used in conjunction with the Alternating Gradient Synchrotron (AGS). It will enhance every aspect of the AGS physics program.

Two weeks ago, scrub pine and other shrubs came down, as a combination backhoe and payloader cleared an area for the Accumulator-Booster. The land for the Accumulator-Booster is bound on one side by the AGS in Bldg. 913, on another by the 200-MeV AGS linac in Bldg. 930, and on a third side by Bldg. 914, former home of the old 50-MeV AGS linac.

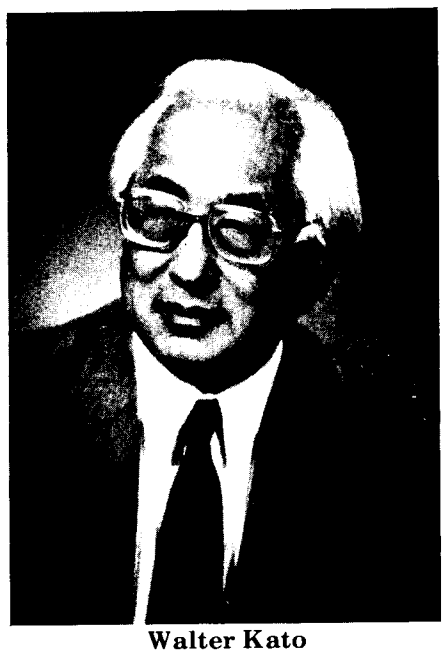
On Monday, more heavy equipment will be brought in to begin excavation for the Accumulator-Booster tunnel. By summer, construction will break into the 200-MeV linac's high energy beam-transport tunnel and into Bldg. 914, so the Accumulator-Booster can be connected to the linac and to the AGS, respectively.

Walter Kato Assumes DNE Chair Today

Walter Kato, whose interest in the physics and safety of reactors has spanned more than 30 years, begins a three-year appointment today as the Chairman of the Department of Nuclear Energy (DNE).

"Walt has made significant contributions to the department's work in reactor physics and safety since 1975 [when he came to BNL]," recalled Laboratory Director Nicolas Samios in announcing Kato's appointment.

"Walt assumes the Chairmanship of a vibrant department with a diversity of activities," Samios continued, "including programs in nuclear safety, nuclear waste, nuclear safeguards, SDI, advanced reactor analysis and development, risk analysis, structural analysis, and management of the nuclear data center. The department has been steadily growing in recent years with a staff of around 300 and an annual budget of about $45 million."



Mort Rosen

Walter Kato

Kato succeeds Herbert Kouts, who has completed two five-year terms as DNE Chairman. Kouts will remain in the department, working on a number of independent activities, ranging from international matters to nuclear waste management to various committees for the National Academy of Sciences. "I consider this a fine arrangement," Kouts said, "and that the department is in very capable hands."

Of Kouts's leadership, Samios noted, "His wise judgment and expertise has nurtured and expanded the activities of this department to their present state of excellence. I am pleased that this outstanding international authority on nuclear and reactor physics, and nuclear materials safeguards will continue his distinguished career full time within the Department of Nuclear Energy. BNL is fortunate to have such a valuable resource on its staff."

Reflecting on his department, Kato called it "very healthy." About 40% of DNE's funding comes from the Nuclear Regulatory Commission (NRC), and the balance from the Departments of Energy (DOE), Defense (DOD) and State (DOS).

"We have been fortunate that our NRC research and technical assistance programs have been supported quite well this year," Kato said. "We have a very strong technical staff, and the NRC has depended on us for sound technical support in the reactor safety area. For example, our programs in the severe accident analysis area have been very strong."

Other programs that have been increasing include the neutral particle beam studies undertaken for DOD and the generic research being done for the DOE on the concept of a particle bed reactor, which offers the possibility of fulfilling electric power generation requirements in space. DNE also continues its critical work on nuclear materials safeguards funded by DOE and DOS.

In addition to maintaining this stability, Kato outlined other goals for DNE. "In the past," he said, "we have tended to do more theoretical studies. Now, I am very anxious to increase our experimental effort, as we have, for example, in the neutral particle beam work."

Whether research is theoretical or experimental, Kato said, "I would like to provide an environment where scientists can develop their ideas and take the initiative to go after new programs. Though this must be done within the framework of a mission-oriented department, where we always have deadlines for accomplishing certain things, I believe that it's important to provide such a climate."

Walter Kato first came to BNL in 1952 as a graduate student from Pennsylvania State University who worked on his Ph.D. thesis in the Physics Department. He received his Ph.D. in physics in 1954.

As Kato had left BNL in 1953 to go to Argonne National Laboratory (ANL), he said, "I have basically grown up with nuclear reactors. Argonne was in the forefront of the design of boiling water reactor and fast breeder reactors, and I was involved with both, especially in the physics of fast

(Continued on page 2)

BNL Wins DOE Award for Top Use Of Small and Disadvantaged Business

Mort Rosen

Small and disadvantaged businesses can have a not-so-small advantage if their products can be used by BNL. Buyers from the Lab's Division of Contracts and Procurement (DCP) look for quality, and they are committed to placing orders whenever possible with small, minority owned and operated companies that produce high-quality products.

Some of the firms now contracted with BNL are on Long Island, such as B.C. Chemicals in Bohemia, N.T.U. Circuits in Bayshore or Tools for Industry in Lake Grove. Other firms are scattered from Manhattan to California.

BNL's 1987 contracts with 75 such firms won the Lab a Department of Energy (DOE) Small Business Award for using small and disadvantaged businesses. Photographed at the presentation on March 17 (above) were: (seated, from left) Nicholas Samios, BNL Director; Hilary Rausch, Manager, DOE's Chicago Operations Office; Jerry Bellows, Manager, DOE's Brookhaven Area Office (BHO); and Jerome Hudis, AUI Vice President - Programmatic Affairs and Secretary; (standing, from left): Martin Blume, BNL Deputy Director; Leonel Miranda, Director, DOE Office of Small and Disadvantaged Business Utilization; John King, Manager of DCP; Mary-Faith Healey, Assistant Manager DCP; Timothy Drawbridge, Contracts Specialist, BHO; and Earl Blanton, BNL's Assistant to the Director for Affirmative Action.

Another presentation (right) on March 17 was made to Joseph Kenneally, Senior Buyer, DCP, who won the first BNL Small Disadvantaged Business Standard of Excellence Award, which is being given by the Lab each quarter to the buyer with the best performance in small and disadvantaged business participation. With 27.9% of his orders in this category, Kenneally is being given the BNL plaque by Leonel Miranda, DOE. Also present are (from left): Timothy Drawbridge, BHO; Mary-Faith Healey, DCP; and Dennis Hall, Buyer, DCP.

Peter Horton

Spring Forward Sunday Morning

It's that *time* of year again: Daylight Saving Time will begin at 2 a.m., Sunday, April 3. If it seems a bit early, keep in mind that President Reagan signed legislation in 1986 moving up the start of Daylight Saving Time to the first Sunday in April. This change, according to the Transportation Department, will save many lives in traffic accidents nationwide. So, remember to set your clocks ahead one hour.

Off Site This Spring

William Floyd Estate

The historic William Floyd Estate is scheduled to reopen for the 1988 season on Wednesday, April 6. The 613-acre site preserves the home of William Floyd, signer of the Declaration of Independence, and illustrates not only his role in history, but also the story of Long Island during the lives of the eight generations of Floyds who lived there.

The estate, which is administrated by the National Park Service as part of the Fire Island National Seashore, will be open Wednesday through Sunday, from 10 a.m. to 4 p.m., April 6 through October 31, including holidays. Visitors can take a guided tour of the 25-room furnished house and a self-guided tour of the grounds. There are no entry or guide fees.

According to Fire Island National Seashore Superintendent Noel Pachta, there are a variety of tasks for which volunteers are needed. These include giving house tours, maintaining garden and grounds, providing public information or assisting with curatorial maintenance.

To reach the estate, use the new entrance at 245 Park Drive, Mastic Beach. Take the William Floyd Parkway south to Havenswood Drive, then left to Neighborhood Road to its end. Go left on Park Drive, then four blocks to the entrance.

For more information or to volunteer, call 399-2030.

Suffolk County Farm

From home gardening workshops to an Easter egg hunt — it's all happening at the Suffolk County Farm & Education Center in Yaphank, beginning in April.

The Cornell Cooperative Extension has planned a full calendar of events, mostly for the weekends. Some of the scheduled activities include:

- Regular weekend programs on "The Chicken & the Egg," "Let's Get Hog Wise," "Animal Care," and "Haybarns . . . A Glimpse at the Past."
- Educational workshops on deck building, home gardening, landscaping and the art of bonsai.
- Consumer-oriented workshops on furniture refinishing, food preservation, complaint resolution, freezing and jelly making, and health and nutrition.
- Two outings geared toward Long Island appreciation — a Montauk Park Nature Walk on May 21 ($3) and a Whale Watch Cruise on June 12 ($25, adults; $15, 10-15 years.)
- Family fun, including a 5th Annual Easter Egg Hunt on April 2, Senior Citizen Day on May 3, Grand Opening Day on May 15, the 5th Annual Rural Life Photography Contest on June 5, and a Barn Dance and Fund Raiser on June 5.
- "Time for Kids" programs on making fun snacks, potting plants for Mother's Day, natural puppetry, T-shirt painting and more.
- Instructional programs on origami, star gazing, butter making and ice cream making.

Small fees are charged for some programs, and some require preregistration. For more information, call the Suffolk County Farm at 924-4535, Ext. 506.

Walter Kato (cont'd)

and thermal reactors." Kato headed an ANL group that contructed zero power critical experiments for fast reactors.

In 1975, Kato returned to BNL as Associate Chairman for Reactor Safety in the Department of Applied Science (DAS). When DAS split into the Department of Energy & Environment and DNE in 1977, Kato followed the reactor safety research to DNE becoming Deputy Chairman in 1981.

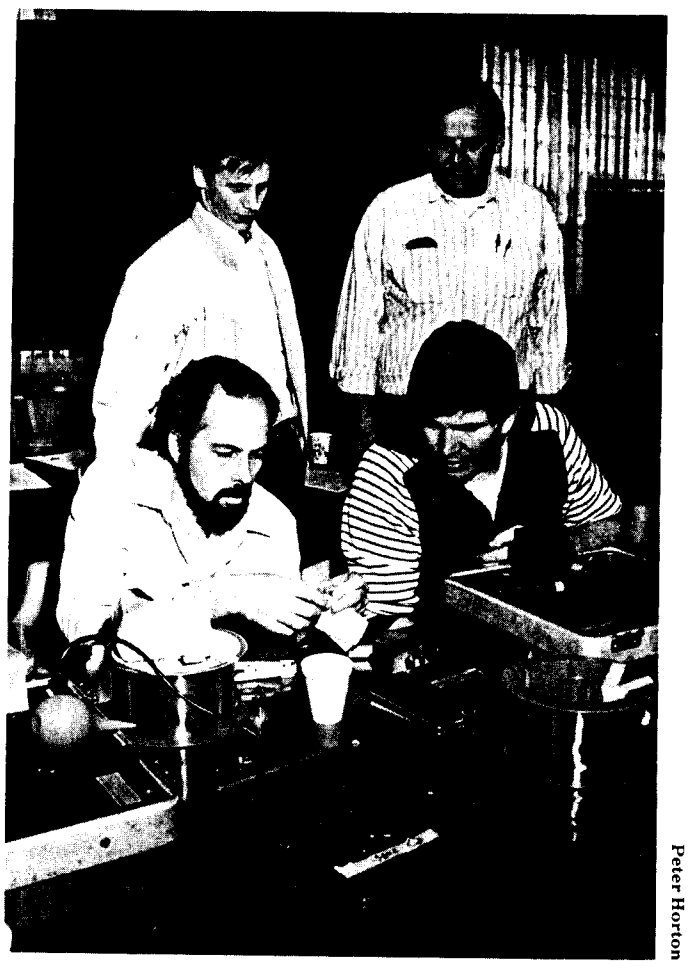
Kato has occasionally pursued another interest — teaching. On a Fulbright Fellowship Award from 1958-59, he was a research professor at the Japan Atomic Energy Research Institute and a lecturer at the University of Tokyo. From 1974-75, he was a visiting professor at the University of Michigan in the Nuclear Engineering Department.

Kato, who has been a consultant to the NRC's Office of Nuclear Regulatory Research, was elected a Fellow of the American Nuclear Society in 1973. He is a member of the American Physical Society, the American Association for the Advancement of Science, the American Nuclear Society, Sigma Xi and Sigma Pi Sigma.

Learning About Fiber-Optic Cable

As time goes on, BNL's on-site communications systems will be upgraded with improved fiber-optic cables. As this happens, there will be an increased need for people who can install and maintain these cables, which transmit light via thin, transparent fibers, such as glass or plastic.

In anticipation of this need, the first training session for fiber-optic cable splicing took place the week of March 14 at the Brookhaven Center. Instructors from Fiber Optic Communications Specialists, Massachusetts, conducted this intense, five-day program for 12 staffers from the Plant Engineering (PE) Division. Primarily included in this training were supervisors, craftsmen and engineers who anticipate an increased use of fiber optics in their upgrading of the overall site communications network. The program was coordinated by PE Staff Engineer Christopher Johnson.



Peter Horton

Four participants in the fiber-optic, cable-splicing training program practice cleaning a fiber-optic cable in preparation for fusion splicing. From the Plant Engineering Division, they are (standing from left): Christopher Johnson, Staff Engineer and program coordinator, and Stephen Waski, Electrical Supervisor; and (seated, from left) Stephen O'Kula, Electrician, and Thomas Butler, Electrician.

Addled Addresses

- Brookhausen National laboratory Uplan, Long Island, NY
- Pres. Maxwell M. Brookhaven National Laboratory
- Brookhaven National Laboratory Associated Universititis, Inc.
- Rook Haven National Lab
- Brookhaven Natl. State Lab
- Grookhave Hat Lab
- Brookhaven Natl Lane

Arrivals & Departures

Arrivals

Cynthia Griffiths	Accel. Devel.
Charles F. Grigg	Sfgrds. & Sec.
Albert L. Mack	Staff Services
David J. Pate	AGS
Richard Sanniola	Sfgrds. & Sec.
William D. Staker	Sfgrds. & Sec.
Michael A. Timm	Sfgrds. & Sec.
Michael P.R. Waligorski	DNE
Sharon S. Wang	MIS

Departures

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

John C. Hunt	Sfgrds. & Sec.
William J. Schneider	Accel. Devel.

Possible Top Quark Tracks in BNL Woods

"The top quark at last!" bubbled Guest Scientist Jay-Sigh Mesonne, Visiting Brookhaven National Laboratory Fellow of Electromagnetic Relations from the University of Quirky Assumptions, Ruritania.

Mesonne described the rosy excitement that colored his vision as he photographed what may be the first track ever observed of a top quark — a long-sought member of the powerful Hadron family, which high energy physicists need to make their strongest theory matter.

For years, Mesonne's career has had its ups and downs as he searched high and higher for these unstable particles. In strange contradiction to their top-drawer connections, they seem to lead very short, uncharmed lives and fall easily into a decayed state. Now, just as his morale had reached bottom, Mesonne thought he tasted the flavor of the fruits of success.

"I feel bound to state," admitted Mesonne, "that we shouldn't crow too soon. That string of bird-dog prints cluttering the tracks in which we are interested *may* be sending us on a wild-goose chase."

With the fastest available film loaded in his trusty Instamatic, Mesonne will be out again tomorrow, weather permitting, in an attempt to repeat his results.

Mesonne became accustomed to prowling in the woods in his early years as a philosophy minor in Vienna. At that time, his research was focused on whether he could hear trees fall when they didn't know he was there. Once the top quark issue is settled, he plans to keep searching for further generations of quarks among the forest detritus.

(April Fool, from Liz Seubert)

The tracks of the top quark as photographed by Jay-Sigh Mesonne.

Cigarette Break-Away

Want to take a break?

If your usual break from work consists of coffee and a cigarette, maybe you want to break away from the tobacco habit. If so, sign up for the Cigarette Break-Away Hypnosis Plus Program, to be conducted on site by the American Lung Association.

Hypnosis is one of the methods by which people have succeeded in breaking the habit. Offered as a Health Promotion activity of the Occupational Medicine Clinic, the three-session Cigarette Break-Away will be held on Tuesdays, April 12, 19 and 26, from 5:15-6:45 p.m., in the Brookhaven Center.

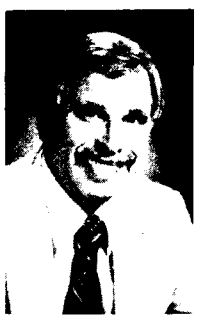
As the Laboratory is splitting the $50 cost with each participant, the registration fee is $25. The number of participants is limited to 30, and fees are due by April 6. Make checks payable to the American Lung Association of Nassau-Suffolk, and send them to Health Promotion Specialist Elaine Friedman, Bldg. 490.

BERA Announces Election Winners

Congratulations to Lawrence Musso and Jean Ramirez who were elected to the 1988 BERA Board in elections held last week. On May 1, they will replace outgoing members Lois Marascia and Richard Scheidet and join incumbents Skelly Frei, Rosalie Piccione, Sharon Smith and Doris Terry.

The Board thanks all those who contributed to the success of the election, including the nominating committee, the other candidates, Robert Brown and Martin Leach, and, of course, all the voters.

Members of the Brookhaven Employee Recreation Association (BERA) Board are elected by you to act as your representatives. You are encouraged to discuss with them suggestions or complaints you may have related to recreation activities.



Lawrence Musso

Jean Ramirez

—photos by Rosen

Hospitality News

Basil Dolphin, a member of the Suffolk County Department of Health's Division of Disease Control, will be the guest speaker at the next Hospitality Committee get-together on Tuesday, April 5, at 9:30 a.m., in Room C of Berkner Hall. The topic of Dolphin's presentation will be "Lyme Disease." Lyme disease is a tick-borne illness characterized by a skin rash that may be followed by arthritic symptoms.

Spouses of Laboratory employees and guests are invited to attend this informative discussion. Please come and bring the children. As babysitting will be provided free of charge, parents are asked to leave their children with the babysitters during the presentation.

Coffee, tea and danish will be served.

Software Demo

P-CAD's new electronic CAD software package, Master Designer 386, will be demonstrated on Tuesday, April 5, from 9:30 a.m. to 4 p.m., in the Applied Math Seminar Room, Bldg. 515. Doug Marks, of Eberhard Engineering, will lead the demonstration and answer questions when it is finished.

The demonstration, using an Intel 386 PC, will begin with an introduction by Bill Boyle, of Intel, and Rocco Fredella and John Waldron, of Hamilton/Avnet, on their Intel 386 hardware. This will be a tutorial for those users receiving Master Designer 386 with their maintenance upgrade, as well as an introduction for those curious about P-Cad's newest releases.

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Composers String Quartet Returns to Berkner

For the second time during the 1987-88 BERA Concert Series, the Composers String Quartet will perform an all-Beethoven concert in Berkner Hall. Their performance will begin at 8:30 p.m., on Wednesday, April 6.

Founded in 1966, the Composers String Quartet has won critical acclaim on six continents. As quartet-in-residence at Columbia University since 1975, the ensemble has been featured in a variety of concerts there, including three complete cycles of the Beethoven string quartets.

The players are not only masters of the classical repertoire, however. During the past concert season, their 20th year together, the Composers String Quartet performed the world premiere of noted American composer Elliott Carter's Fourth String Quartet. They last performed at Brookhaven in October.

The upcoming BNL concert will feature three Beethoven quartets: Op. 18, No. 2; Op. 59, No. 1; and Op. 74. Concertgoers will have an opportunity to compare works that come from different periods in the composer's life.

The six Opus 18 quartets were Beethoven's first compositions in this medium. They reflect the music of his predecessors, Joseph Haydn and Wolfgang Amadeus Mozart and were published in 1801. Four years later, Beethoven began work on the three quartets in Opus 59.

The single work in Op. 74 was written in 1809. These quartets, along with another single quartet, Op. 95, were written during a period in Beethoven's creative development that produced big, expansive pieces, such as the "Eroica" symphony and the "Appassionata" sonata for piano.

Tickets for the concert can be purchased at the door the night of the performance. Prices are $9 for general admission, $6 for students and those over age 65, and $5 for those under 18.

Composers String Quartet

Bus Trip to View Art in Brooklyn

On Saturday, May 7, the BERA Art Committee is sponsoring an all-day bus trip to the Brooklyn Art Museum and the nearby Botanical Gardens. The price of the bus is $15, museum entry is $4 and a voluntary contribution to the gardens is about $1. Call Art Committee Chair Clare Sheppard, Ext. 3946, for further information.

A Dearth of Daffodils

The Recreation Office and BERA Board thank all BNL employees for their overwhelming response to the Daffodil Day sponsored for the American Cancer Society.

We regret that we had such a limited supply. Next year, we'll be sure to welcome spring with many more daffodils for all to enjoy.

Equipment Demo

The Polaroid Corporation will demonstrate their photographic equipment on Thursday, April 7, from 9 a.m. to 4:30 p.m., in a trailer set up in the parking lot across the street from Berkner Hall.

Volleyball

Standings — Week of March 21

League I		League II	
Upfagrabs	45-9	Nuts & Bolts	32-16
Dinkers	42-12	Set Ups	30-15
Xrayted	30-24	Fossils	26-22
Phoubars	18-36	Chunga's Revenge	25-23
Cannonballs	18-36	Slammers	24-21
Bumpers	9-45	Upton Ups	15-30
		Photons	10-35
League III		**Open League**	
Sourcerers	41-13	Phoenix	40-8
Printouts	40-14	Dakota	37-8
Spikes	34-20	Serendipity	36-12
Renegades	28-26	Not Too Bad	19-29
MISfits	26-28	Rowdy Radicals	12-33
Screwballs	23-31	Duituits	10-35
Airheads	14-40	Leftovers	8-37
Good Times	10-44		

Leap Into Spring

Grab your partner and promenade down to the Brookhaven Center for an evening of square dancing and contradancing on Saturday, April 16. Then and there, the "Leap Into Spring" benefit dance will get underway at 8 p.m.

Sponsored by Brookhaven Women In Science (BWIS) to benefit the Renate W. Chasman Scholarship Fund, the dance will feature callers David and Margaret Conover, from the Long Island Traditional Music Association, and music by the Conover's four-piece band.

Contradancing is similar to square dancing, except partners line up opposite to each other instead of in squares. As dance instructions are called out, no prior experience is necessary.

Admission is $5 per person, and tickets are available from: Robin Appel, Bldg. 510C, Ext. 2420; Eva Emmerich, Bldg. 911A, Ext. 2197; and Susan Eng, Bldg. 515, Ext. 7988, 2132.

BWIS annually awards the Renate W. Chasman Scholarship of $1,000 to a Long Island woman who is continuing her education in the sciences, engineering or mathematics after an interruption. The Scholarship, which honors the noted BNL accelerator theorist, the late Renate Chasman, is made possible by corporate and private contributions, as well as benefit events. Tax-deductible contributions may be made to the Chasman Scholarship Fund, P.O. Box 183, Upton, N.Y. 11973.

Social Club

For those people with the travel bug, the Social Club has organized the several fun trips, for which club members, BNL employees and all our friends are eligible. These include:

- **Whitewater Rafting** — Fri.-Sun., May 13-15, $159 per person; rafting on the upper gorge of the Lehigh River; condominium/chalet accommodations/10 per unit; 20 people needed for bus pickup at BNL.
- **Party Cruise to Nowhere** — Sat.-Sun., June 25-26, $151 per person/2 to a cabin (includes $12 port tax).
- **Mystery Weekend** — Sat.-Mon., Sept. 3-5, Connecticut, $215 per person/3 to a room, $219 per person/2 to a room; $25 deposit due by April 15; 10 people needed for bus pickup at BNL.
- **Las Vegas/Honolulu/San Francisco** — October 18-29, 12 days, $1,396 per person/3 to a room, $1,425 per person/2 to a room, $1,804 single; deposit of $100 needed to hold reservation.

For more information, call Doris Terry, Ext. 2228, or Jean Ramirez, Ext. 2119.

Pool Closed Sunday

The BNL Pool will be closed all day Easter Sunday, April 3.

Bowling

Red/Green League
High games were bowled by C. Scarlett 256, E. Gill 234, R. Mulderig 225, R. Jansson 223, A. Warkentien 222, N. Combatti 210, J. Morris 207, C. Bohnenblusch 206, R. Jones 206, M. Guacci 206, K. Riker 203, H. Marshall 203, H. Dawson 201, H. Ackerman 200.

Purple League
Carl Murray had a 206, Caryl MacDougall 191, Mary Grace Meier 206/182 for a 557 scratch series.

Pink League
Renie Rosati rolled a 201/170, Maria Apelskog 172.

CREF Values

March	$36.02	April	$36.02
May	$36.03	June	$37.74
July	$39.33	August	$40.94
September	$40.06	October	$31.55
November	$29.30	December	$31.28
January	$32.51		

February $34.10

Cafeteria Menu

Week of April 4

Monday, April 4

Minestrone	(cup)	.75
	(bowl)	.95
Baby beef liver w/onions & 1 veg.		2.85
Country captain chicken w/1 veg.		2.95
Spinach, bacon & egg chef's platter (lite-weight)		2.25
Hot deli: Baked ham	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

Tuesday, April 5

Lentil soup	(cup)	.75
	(bowl)	.95
Macaroni beef casserole w/1 veg.		2.75
Fried fish amandine w/1 veg.		2.95
Baked fish w/lemon & 1 veg. (lite-weight)		2.95
Hot deli: Sloppy Joes on a bun		2.85

Wednesday, April 6

Chicken mulligatawny soup	(cup)	.75
	(bowl)	.95
Roast beef au jus w/1 veg.		3.05
Pork El Paso w/1 veg.		2.85
Seasonal fresh fruit plate (lite-weight)		2.25
Hot deli: Roast turkey	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

Thursday, April 7

Beef noodle soup	(cup)	.75
	(bowl)	.95
Chicken breast piccata w/1 veg.		2.85
Spaghetti w/meat sauce & garlic toast		2.85
Julienne salad plate (lite-weight)		2.25
Hot deli: Corned beef	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

Friday, April 8

Mediterranean chowder	(cup)	.75
	(bowl)	.95
Chicken chow mein over rice		2.75
Fillet of fish Florentine w/1 veg.		2.95
Baked fish w/lemon butter (lite-weight)		2.85
Hot deli: Pastrami	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

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 only.

2824. FIREFIGHTER/EMT - Previous substantial firefighter experience is required. Completion of New York State EMT course and possession of training certificate is highly desirable; if not, completion of course within one year is required. Must be willing to work shifts at the completion of a thirteen-week training period. Safety & Environmental Protection Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

2825. PLUMBERS (2) (temporary 4/4/88 - 9/30/88) - Requires completion of 4-year apprenticeship and/or substantial commercial/industrial experience. Will layout, construct, install, repair and maintain water, sewage and gas systems, related facilities and auxiliary equipment. Plant Engineering Division.

Motor Vehicles & Supplies

81 CHEVY CITATION - 4 dr., hatchback, British green, 4 speed, very good cond., price neg. 475-7272 after 6 p.m.

80 DODGE OMNI 024 - a/t, a/c, p/s, p/b, am/fm 8-track stereo, 66k mi., many new parts, engine needs work, $250. Ext. 2679 or 472-6922.

79 OLDS DELTA 88 - 350 eng., a/t, a/c, am/fm tape, new tires & exhaust. Ext. 7539 or 821-9834.

80 CITATION - 4 cyl., a/t, 4 dr., green, good tires, runs, needs work, $250. Dave, Ext. 4561.

82 RELIANT - 4 dr., a/t, 84k mi., runs well, asking $1,300. Tamara, 588-0068.

78 PONTIAC GRAND PRIX - needs windshield, good motor, good body. 286-3334.

79 BMW 320I - red, dealer maintained, a/t, sunroof, a/c, f/b spoilers, stereo, mags, excel., $5,500. 623-3367.

TIRES - 3, w/rims, 205-75-14; 1, HR-78-15, $15/ea. Craig, Ext. 7898 or 395-1084.

84 CHEVY CAPRICE CLASSIC - 49k mi., two-tone, all options, excel., $6,500. Ed, Ext. 7943.

83 CJ-7 - 5 speed, tilt, hitch, 6 cyl., new tires, 31x15 KC lights, good cond., $6,500; Barre Crafter 4-set ski rack for CJ-7 Jeep, $75. 744-7549.

86 FORD PICK-UP - long-bed, 4x4, 300, 6 cyl., cap, bed liner, low mi., $10,995; 77 Celica GT, runs well, $950. Chas, Ext. 2021 or 878-8901 after 5 p.m.

80 CADILLAC COUPE DeVILLE - red w/white top, cruise, tape, tilt, good cond., $4,500. Ext. 7732.

75 FIATS - X19, buy one, get one free, one runs, second for parts, $300. Bob, Ext. 5010 or 289-2986.

WIRE WHEEL COVERS - set of four, fits 15" tires, like new. 325-0447 after 6 p.m.

65 DODGE DART - slant 6 engine, $100. Ext. 2314 or 567-5131.

80 CHEVY MONZA - 4 cyl., 4 speed, looks good, needs some work, $950. Ext. 2175.

87 TOYOTA PICK-UP - radials, am/fm digital cass., a/c, low mi., mint cond., asking $8,750. 567-6658.

72 YAMAHA 650 - many extras, $300; 69 Honda Dream 305, excel., $400. Kevin, 281-8031.

83 BUICK REGAL - a/c, p/s, am/fm, beige landau top, excel. cond., $5,800 neg. Ext. 2964.

88 PONTIAC GRAND AM - black, 6k mi., excel. cond., must sell, relocating, $12,700. Ext. 7108.

84 VW RABBIT - 4 dr., gray, sunroof, must sell, asking $2,500. 286-2093.

73 MERCEDES BENZ 280 - 4 dr., white w/dark green int., $3,000. Ext. 4099 or 689-9214.

83 OLDS STATION WAGON - custom cruiser, p/s, p/w, a/t, tilt, am/fm, 97k mi. 475-9131 after 5 p.m.

85 DODGE COLT E - 4 speed, hatchback, am/fm cass., a/c, tinted windows, excel. cond. Rosemarie, Ext. 3555 or 878-6431.

82 DATSUN 200SX - hatchback, 5 speed, a/c, loaded, excel. cond., asking $2,600. John, Ext. 7770 or 4480.

66 CHEVY IMPALA - no dents or rust, excel. int., all orig., 8 cyl., a/t, 4 dr. Ext. 4052 or 744-7017.

74 FORD F-250 - 4 speed, $200-$300; 5 h.p. electric motor, $150. 744-3968.

75 AMC GREMLIN - runs well, best offer. 924-6129.

84 FORD MUSTANG - console am/fm tape, p/s, p/l, a/c, sunroof, alum. wheels, excel. cond., asking $5,700. Ext. 4846 or 363-6940.

77 MERC MARQUIS - 122k mi., luxury int., runs well, body damage, $200. Sam, Ext. 4023/5211 or 929-3721.

86 PONTIAC TRANSAM - every option, T-tops, a/c, mint, asking $11,000. 543-8116.

SEATS - 2, blue plaid car seats, $35; seat pedestal, $10; engine cover for 1975 Dodge van, $25. Ext. 2434.

Boats & Marine Supplies

22' MARATHON - 1986, 170 h.p. Mercruiser, Shoreline trailer, camper canvas, loaded, $16,500. Ext. 3341 or 981-9474.

26' OWENS - wood, 327, great family boat, best offer. Roger, Ext. 2384.

15' LYMAN - 1953 lapstrake, engine needs work, $100. Don, Ext. 4821 or 286-2267.

22' SEAFARER SAILBOAT - 1974, 3 sails, Volvo outboard, full keel, $4,000 neg. Fred, Ext. 4407/4435 or 499-1214.

BAYLINER BOWRIDER - 1984, mint, 124 h.p. Volvo I/O, used 100 hrs., fully equipped, $7,000. Ext. 2981 or 424-6916 eves.

20' IMPERIAL - 1984, cuddy, 140 h.p. I/O, excel. cond., low hr., full canvas, extras, $8,500. Dennis, 736-5736 after 5 p.m.

CHAIN - ½-inch galvanized mooring chain, proof coil, $2.25/foot. Bob, Ext. 5314.

PROPELLER SHAFT - 1¼"x10' bronze, $50; 200# mushroom mooring w/40' chain & float, $175; 8' dinghy, $250. Walter, Ext. 4605 or 938-8353.

Miscellaneous

ANDERSON PERMASHIELD SCREENS - 6, alum. frame, 28"x51", $15/set. Joe, Ext. 4204.

RECORD SAFE - Diebold, high security, fire retardant, approx. 2'x2'x3', $300. Sheldon, Ext. 3499.

QUEEN SIZE BED - dresser, bureau, end tables, all good cond. Ext. 2493 or 929-4270 eves.

GREEN HOUSE - poly-type, 22'x100', furnace, fan, sprinkler & watering system. Jim, Ext. 4040 or 289-0876.

QUADLINK BOARD - for MS-DOS mach., runs Apple II+ prog.; View Master-80, runs Apple, works on Apple II+, $100/ea. or trade. Cadwell, Ext. 2934.

BEDROOM SET - blond wood, full headboard, chest, dresser w/mirror, night table, vanity w/mirror & bench seat, $250. Ext. 4262.

MICROWAVE - Magic Chef, like new cond., w/factory installed door latch & output check. Al, Ext. 2043.

TOPSOIL - screened, delivered, 5 yd. min., leave message. 924-9427.

LAWN SWEEPER - for ride-on mower, 31", Lambert Libra Model MT-319, good shape, $100. Rick, Ext. 3932.

SOFA - & chair, $100; coffee & end tables, $100; lounge chair & ottoman, $75; punch bowl, $25; blender, $20. Ellie, Ext. 3395 or 325-1537.

SOUND MOVIE CAMERA - projector screen, film splicer, $175; bdrm. furniture, full-size bed, etc., $175. Jim, Ext. 4615 or 4758.

COFFEEMAKER - Toshiba, new, $150; freezer, 18 cu. ft., auto defrost, $100; adult tricycle, 26" wheels, w/basket, $175. A.H. Nintzel, Ext. 2434.

WEDDING GOWN - white, size 3-5, dry cleaned & stuffed, w/veil & slip, excel. cond., $100 or best offer. 588-0287.

SOFA & LOVESEAT - w/foam cushions & loose pillows, $125. 751-1884.

BEDROOM FURNITURE - 3 sets, 1 walnut, 1 light-toned, 1 white w/gold trim. Bob, Ext. 3512.

COLOR TV - Sharp Lynatron, instant picture & sound, good picture. $50. Ext. 2050 or 473-6432.

NOMAD TRAILER - 1969, 24', new 3-way refrig., new awning, sleeps 6, 2 tables, bathrm., good cond., $2,000. 878-6637.

BIKES - girl's 16" Huffy, pink, good cond., $40; boy's Ross BMX, handbrakes, good cond., new $220, sell for $75. 924-5419.

BICYCLE - man's 3-speed, new, make offer. Ext. 2679 or 472-6922.

LAWN MOWERS - 21", J.C. Penny, $50; 20", Huffy w/bag, $65; Sears rear bag, $80. Dan, Ext. 4987 or 698-7322.

THREE-RING BINDERS - for scrapbooks or photo negatives, vinyl, (9) 4" blue, $4 ea., (4) 3" black, $3 ea., (2) 3" blue, $3 ea. Ext. 5053.

BUNNY RABBITS - $6. John, Ext. 3675 or 924-3528.

MET OPERA TICKETS - 2, *Il Trovatore* by Verdi, Sat., April 9, 8 p.m., $34/pr. Tolsten, Ext. 3817 or 878-1210.

SHRUBS - hemlocks, Tsuga Canadensis, 3'; yews, Taxus Cuspidata, 2', $15 ea. 589-4363 after 6 p.m.

WALKING SHOES - Dynacoil Kangaroos, woman's size 7, buff color, never worn, $55 new, selling for $30. Ext. 2733.

BLENDER - Sears, 14-speed, $15; food prep. ctr., many accessories, $135; table-top oven, $20; Mr. Coffee Jr., $17. Ext. 2434.

BIKE HELMET - brand-new, "Kiwa", silver, $30. Chas, Ext. 2021.

UMBRELLA STROLLER - lightweight, $17; large multipocketed diaper bag, sky blue, new, $13. 929-3795.

BLENDER - Waring, $5; 7-drawer desk, 40"lx30"h, $20; old Mark Twain books, good set, $25. 878-6637.

REFRIGERATOR - Amana, 20", w/ice maker, excel. cond., $195. 351-1017.

SHOP VACUUM - Sears Craftsman, 16 gal., wet & dry, w/all attachments, $60. Sheldon, Ext. 3499.

WASHER - Kenmore, 4 cycle, excel.; electric dryer, good, $50, you move April 9 or 10. Ext. 2981 or 473-7809.

SCREENS & STORM WINDOWS - wood, 9 ea., good cond., $35. Cliff, Ext. 3794.

KITCHEN CABINETS - wood; G.E. stove, w/2 ovens; antique 6' oak bench, finished, indoor or outdoor use. Ext. 7115 or 744-5801 after 6 p.m.

AQUARIUS COMPUTER - w/16K memory, data rec., printer, $120 neg.; Polaroid camera, auto 250, w/case, flash, cable release, $35. Ernie, 588-4987.

CLARINET - wood, LeBlanc Noblet, made in France, very good cond., used 2 yrs., $195. 751-5868 eves.

WINDOWS - new, thermo pane, (5) 32"x62", (5) 32"x50", (1) 32"x34", orig. cost $2,200, best offer. 589-4792 after 5 p.m.

GARAGE & CAKE SALE - 5446 Expressway Dr., South Holtsville, benefits cub scouts, 4/9, 10 a.m.-4 p.m., rain date, 4/16.

CARRIAGE - w/stroller insert, Prego, $50; rattan wicker, 3 piece set, $100. Ext. 4070 or 475-7272 after 6 p.m.

Free

CALORIC RANGE - bottled gas, 4-burner, oven, broiler, coppertone, needs cleaning. Ext. 5319 or 363-9527.

LHASO APSO MIX - 1-year-old female, spayed, shots, lovable, excellent with children, affectionate. Ron, 874-3445.

Car Pools

BOHEMIA/OAKDALE - 2 drivers needed for car pool. Frank, Ext. 2314.

BABYLON/BAYSHORE - need 2 riders to form 4 person car pool, 8:30 a.m.-5:00 p.m. Mike, Ext. 2705.

BAYPORT/BLUE POINT - need 1 driver. Phil, 363-2070.

HUNTINGTON/COMMACK - exits 52/54, person to join or start car pool, 8:30 a.m.-5:00 p.m. Frank, Ext. 4639.

Real Estate

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

For Rent

MIDDLE ISLAND - 3 bdrms., 2 baths, eik, fp, 2-story, carport, wooded 2 acres, avail. April 1, $900/mo. + util. John, Ext. 3675 or 924-3528.

BAITING HOLLOW - 5 bdrm. contemporary, new, $1,500/mo. + util. 821-2002 or 331-7060 eves.

HILTON HEAD, SC - 2 bdrm. condo, sleeps 6, beach, pool, golf, tennis, April-Sept. $420/wk. 585-9149.

BROOKHAVEN HAMLET - 3 bdrms., l/r, eik, fenced yard, quiet area, 10 min. to Lab, $775/mo. + util. 281-3479.

NORTH SHIRLEY - 3 bdrm. apt., excel. cond., 1 mile to Lab. 924-1374, (215) 758-3930 or (215) 867-8064 after 5 p.m.

CATSKILLS, GILBOA - 2 bdrm. chalet, deck, fully furn., elec. heat, woodburning stove, TV/VCR stereo, full kitchen, great fishing, hiking, relaxing. Ted, 928-1445 eves or beeper #506.

For Sale

PORT JEFFERSON - Harbor Hills, 3 bdrm. ranch, 3 baths, wooded golf course setting, balcony, deck, patio, 2-car garage, 3-zone gas heat, $259,900. Ext. 3791 or 928-7154 eves.

PORT JEFFERSON - Harbor Hills, 4 bdrm. split ranch, d/r, eik, family room w/fp, brick patio, winter waterview, 24'x44' bsmt., excel. cond., $199,000. Ext. 4483 or 473-3689.

HILTON HEAD, SC - 3 bdrm. condo, sleeps 8, 2 baths, washer/dryer, wet bar, 6 tennis courts, 3 pools, whirlpool, golf, ocean view, asking $89,000 or will rent. 929-8912.

SETAUKET - north of 25A, 6 rm. cape, 2 baths, 2-car garage, wooded area, 3 Village schools, asking $190,000. 751-1401.

BELLPORT - 4 bdrm. Colonial, 3½ baths, l/r, d/r, kitchen, pantry, sunroom w/jacuzzi, 3 screened porches, attic, 2-car garage, walk to village & bay, asking $675,000. 286-0269.

HOLIDAY, FL - Sandpiper, 3 bdrms., 2 baths, oversize garage, corner lot, cathedral ceilings, laundry rm., clubhouse facilities, asking $80,000. 744-3968.

RIVERHEAD - 2 bdrm. mobile home in adult park on Peconic River, 1½ baths, new carpet & floors, new baths, woodburning stove. 369-2838.

RIDGE - 3 bdrm. modern ranch, cedar skylight bath, new carpet & cedar, full bsmt. w/bar & priv. ent., energy efficient, low taxes, 5 min. to Lab, $149,000. 744-9802.

SETAUKET - huge 4 bdrm. colonial, 2½ baths, 2-car garage, cac, cul-de-sac, fin. bsmt. w/1 bdrm., mint cond. in/out. 751-5849.

ROCKLEDGE, FL - 2 bdrm. house, block & stucco, 2 baths, kitchen, d/r, family rm., 2-car garage, combo porch, extras, 75x115 lot, good location, $64,500. (305) 631-2840.

MILLER PLACE - north of 25A, 3 bdrm. custom ranch, l/r, family rm., custom fp, 24'x26' garage, fin. bsmt., much more. Ext. 3353 or 473-5786.

PALM COAST, FL - ¼ acre lot, 80'x125' Greenbelt in back, 5 miles to ocean, 24 miles north of Daytona, water drainage & sewage util., $3,995 & take over loan $141/mo. over 7½ years. Tom Nolan, Ext. 5265.

STONY BROOK - mint 4 bdrm. Colonial, 2½ baths, eik, d/r, l/r, 2-car garage, new siding, Anderson windows, ½ acre, 3-Village school district, asking $225,000. 689-8605 eves & wknds.

EAST QUOGUE - 3 bdrm. ranch, 2 baths, l/r with fp, d/r, eik, fin. bsmt., new deck & patios, ½ acre, in-ground pool. 728-8771.

Wanted

BIDDERS - auction at K of C Patchogue, sponsored by Bellport Kreamer Street PTA, March 28 at 7:00 p.m.

OUTBOARD MOTOR - not running, 35 h.p. or less. Ext. 2081 or 878-9384 eves.

TOPSOIL - 20 yards, delivered to Riverhead area. Ken, Ext. 3263 or 722-4498.

DRIVEWAY - & garden hose where I can wash my car on weekends, near Lab, will pay $3/wash. Bob, Ext. 2136.

ROOM OR STUDIO APT - for rent, below $350/mo. for all, near Lab, non-smoker, clean. Bob, Ext. 2136.

ROOMMATE - prof. female, non-smoker, to rent spacious 2 bdrm. apt in St. James, $400/incl. all. Angela, 444-1359 or 751-8955 after 6 p.m.

BOBCAT/CEMENT MIXER - to buy or rent. Tony, 698-9274.

TRAILER - for Boy Scout troop 187, Ridge. Rich Scheidet, Ext. 5284.

HOUSE TO RENT - 2-3 bdrms., Center Moriches/Eastport area. Jim, Ext. 3296 or 878-6275.

ROOMMATE - to share house in East Patchogue, female only, walk to beach, $375/mo. + ½ util. Ext. 2145.

SOFTBALL PLAYER - for competitive men's team, town of Brookhaven, summer night league. Rich, 744-4816 eves.

LAWN MOWERS - old, gas, will buy if complete. Dan, Ext. 4987 or 698-7322.

Services

MARINE MECHANIC - I/B & O/B only, Merc., OMC, Volvo, gas or diesel, summerize now. Ted, 928-1445 eves.

ROOFER - repairs & new roofs, insured, free estimates, guarantee. 732-4679.

ROTOTILLING - small gardens, reasonable price. Paul, 924-8143.

ISLAND TENT RENTALS - let us cover your next party, tents, canopies, tables & chairs. 689-6666.

SPACKLING - excel. work, free estimate, best price. John, 281-3342 after 6 p.m.

3T's PLUMBING & HEATING - complete boiler/water heater installations, licensed & insured, free estimates. 821-3495.

PAINTING CONTRACTOR - experienced, reliable workmanship, interiors only, free estimates, Western Suffolk only. 935-8557.

FREE CONSULTATION - concerning money investments & life insurance. Bob, 584-7350.

PARTY TENTS FOR RENT - we set up & take down, call for info. Fred Kuehl, Ext. 7947, beeper 792 or 588-2268.

WORD PROCESSING - papers, letters, resumes, quality work, reasonable rates, 12 yrs. experience. 924-2012 after 6 p.m.

TROYBILT ROTOTILLING - custom work, garden & lawn. Bob, 732-9517.

LAND CLEARING - using excel. rake on JD 450 track loader, $60/hr. w/operator. Tom, Ext. 4084 or 878-1060.

TYPING - good speller, resume, letters, term papers & reports, fee reasonable. 727-2058.

BRICKWORK - patios, walks, swimming pools, Belgian block, landscape ties, 20 yrs. experience, Lab discount. Tony, 698-9274.

TREE REMOVAL - trimming, topping, free estimates. Ken, 289-8212 eves.

TAXES - prepared by tax consultant, your home or mine, reasonable. John, 732-2472 or Bea, Ext. 3642.

CEMENT WORK - sidewalks, fireplaces, patios. Al, 281-3613 after 5:30 p.m.

ROBERT'S POOL SERVICE - openings, closings, repairs, services, 10% discount Lab employees. Robert, 395-4387.

ELECTROLYSIS - permanent hair removal, physician trained, licensed, free consultation, eyebrow shaping, by appointment. 331-4768.

HOUSE CLEANING - at reasonable prices, windows & gutters cleaned for spring. 758-3749.

ENGLISH AS A SECOND LANGUAGE TUTOR - flexible hours. Cathy, 924-2205.

CHILD CARE - I will watch your child in my Holbrook home, reasonable rates. 981-9037.

TAX RETURN PREPARATION - professional accountant, your home. 929-6744 eves.

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