BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

BWIS Seminar
Nuclear Safeguards And Arms Control

Carol Ruth Kempf of the Technical Support Organization (TSO) in BNL's Department of Nuclear Energy will be the speaker at the next Brookhaven Women in Science seminar, on Friday, August 10, at noon, in Room B, Berkner Hall. She will talk about "Nuclear Safeguards and Arms Control — Current Status."

This lecture will focus on domestic and international nuclear safeguards; the roles of the U.S. Department of Energy in the U.S., in the International Atomic Energy Agency, and in the support programs internationally; types of treaties and agreements under which safeguards are implemented; current areas of concern with respect to safeguards effectiveness; the present negotiation status for conventional forces and chemical weapons; and projects under way in TSO.

Kempf received her B.S. in chemistry in 1976, her M.S. in electroanalytic chemistry in 1980, and her Ph.D. in physical chemistry in 1982, all from Rensselaer Polytechnic Institute. In 1981, she was an assistant professor at Fort Lewis College in Durango, Colorado.

After joining BNL in 1982, Kempf spent six years in radioactive waste management working on problems of source-term definition for the commercial low-level waste sector, on management options for mixed wastes, and on modeling radionuclide releases for cesium, strontium, cobalt, tritium, and carbon-14 from waste packages in a low-level waste burial site.

In 1988, she joined TSO, where she has worked on international nuclear safeguards, spent fuel safeguards, and arms control verification issues.

For more information on the lecture, call Susan Hobbie, Ext. 7511.

DOE Deputy Secretary Visits Brookhaven

To become better acquainted with the many U.S. Department of Energy (DOE) programs at Brookhaven, DOE Deputy Secretary W. Henson Moore (front, second from left) visited the Laboratory on Friday, July 27.

One stop during Moore's visit was in Bldg. 902, where magnets are under development for BNL's Relativistic Heavy Ion Collider (RHIC) and for the national Superconducting Super Collider. There he was joined by (from left) Erich Willen, head of the Magnet Division in the Accelerator Development Department (ADD); John Sondericker, who heads ADD's Engineering Division; Charles Baxter, head of DOE's New York Support Office; RHIC Project Head Satoshi Ozaki and BNL Director Nicholas Samios.

The group is shown here looking into an equipment trench where a RHIC full cell, consisting of two dipole magnets and two corrector quadrupole/sextupole assemblies, is being tested under simulated machine conditions.

Other areas Moore visited during his afternoon at Brookhaven were the Alternating Gradient Synchrotron, the High Flux Beam Reactor, the Medical Research Reactor, the National Synchrotron Light Source, the RHIC ring and PETT IV, BNL's positron emission tomograph.

In addition to touring facilities, Moore received an environmental briefing concerning groundwater contamination problems and remediation programs.

BNL in Partnership With Education

U.S. Department of Energy Secretary James Watkins has said, "A partership with education is now part of the mission of the national laboratories." At BNL, this partnership has been evident throughout the summer.

BNL has had a partnership with education since its earliest days. The summer student influx began in 1952, the first year of the Summer Student Program for college juniors and seniors.

Since then, the Lab's summer student ranks have grown to include participants in 12 different programs, including high school, college and graduate students, and high school teachers. These programs all share one goal: To give participants the opportunity to learn and work with BNL's unique facilities and talented staff.

Shown here on the stage in Berkner Hall are some of the students from the various programs being offered at the Lab this summer. Inside this issue are stories highlighting a few of the programs. The Summer Student Program will be among those featured next week, in part two of this Summer Student Special.

Coming Up

Alec Jeffreys, inventor of a method for DNA fingerprinting and a professor of genetics at the University of Leicester in England, will discuss "Hypervariable DNA and Genetic Fingerprinting," in the final AUI Distinguished Lecture of the summer series. It will take place on Monday, August 6, at 4:30 p.m. in Berkner Hall.

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Dirk van Bekkum, Director of the Radiobiological Research Institute of the Organization for Health Research, The Netherlands, and Professor of Radiobiology, Erasmus University, Rotterdam, next week will become the Lab's seventh Haworth Distinguished Scientist, the first to be hosted by BNL's Medical Department.

As part of his two-week stay, van Bekkum will present a lecture of Lab-wide interest on Wednesday, August 15. At 4 p.m. that day in Berkner Hall, he will discuss "Bone Marrow Transplantation: Developments and Restrictions of its Application in Clinical Medicine and in the Treatment of Radiation Victims."

For information on van Bekkum's schedule and the two other lectures that he will present while at BNL, contact Eugene Cronkite, Ext. 7538.

Tune In! — Cashing Credit Union Checks

The Tune In! program is designed to give employees a confidential means of directing questions or complaints to members of management, who respond in writing. If the letter is of general interest, it may be published in the Bulletin while maintaining the employee's anonymity.

For example, this Tune In! came to the Bulletin Editor recently on one of the orange forms contained in plastic Tune In! boxes all around site. The Editor determined that the question could best be answered by the Lab's Fiscal Officer, Mark Israel, so the Tune In! was retyped and sent to him with just a number to identify it. Israel sent the response to Tune In! #772 to the Editor. The reply was then forwarded to the questioner.

If you can't find a supply of Tune In! forms in your building, call the BNL Mailroom, Ext. 2534, or Public Affairs, Ext. 2345.

Tune In!

I have worked at the Lab for many years and I have always cashed checks, usually weekly. I rarely recall any lines at the Cashier's office in Bldg. 134 during that time.

Now the cashier will no longer cash Teachers Federal Credit Union (TFCU) checks. It is much more convenient for me to cash checks at the Cashier than at the Credit Union, and I feel this is true for all those who work in buildings closer to Bldg. 134, than to Bldg. 193.

If there's no cost to BNL, why not let the cashing of TFCU checks continue?

Mark Israel's reply

The primary purpose of the BNL Cashier is to carry out specific functions related to the DOE-funded activities of the Laboratory. This includes processing cash travel advances, collecting housing and telephone charge payments, processing bank deposits and fund replenishment vouchers, and reconciling the fund activity daily. About 70% of the Cashier's total job function is not evident to employees who are only familiar with "window activities."

Given the existence of the Cashier for these Lab business-related purposes, we are able to extend certain limited accommodations to BNL employees, visitors and guests as long as there are no alternative on-site means of accomplishing these activities, and no additional operating costs to the Laboratory for which we are not reimbursed by DOE. The Cashier's function is not now, nor has it ever been, to serve employees' personal banking needs.

It should also be noted that the Fiscal Division has not changed its check-cashing policy. When Barclay's Bank was located on site, it closed its doors at 3 p.m. The Cashier only cashed employees' checks drawn on Barclays after this hour. We previously cashed TFCU checks for employees because while Barclays was on site, the Credit Union did not maintain any cash on hand, and would only issue checks to members withdrawing funds.

Currently, TFCU is open until 4:30 p.m. Monday through Thursday, and until 5 p.m. on Friday, and provides its members with full banking services, including maintaining cash on hand. Therefore, it is not necessary or proper for the cashier to provide personal banking services during these hours to TFCU members.

However, the Cashier will cash personal checks up to $200 drawn on financial institutions not located on site. Also, any employee having an emergency requirement or non-recurring, justifiable need for cashing a Credit Union check at the Cashier will be accommodated by obtaining prior approval from the Fiscal Officer, Assistant Fiscal Officer, or Manager of Accounting.

Fox Family Bluegrass Concert

Tonight!

8 p.m., Berkner Hall

Tickets are $6 each, available at the door before the concert, at the BERA Sales Office before 2 p.m., at the Recreation Office, Bldg. 185, after 2 p.m., or from Rick Backofen, Bldg. 197B; Michelle Cummings, Bldg. 459; Elizabeth Pergan, Bldg. 179A; Jean Ramirez, Bldg. 197C; Maryann Reynolds, Bldg. 703; or Sharon Smith, Bldg. 510A.

More Pledges Needed For Swimarathon '90

It is not too late to make a tax-deductible contribution to the American Cancer Society by pledging to sponsor swimmers participating in tomorrow's Swimarathon'90.

From 9 a.m. to 9 p.m. at the BNL pool, individual and team swimmers will be putting in as many laps as they can for this good cause in the first BNL Swimarathon sponsored by the Brookhaven Employees Recreation Association.

Even if you can't make it to the pool to swim, help or watch the event, you can still make either a per-lap pledge or a flat contribution by calling Kathy Ratto, Ext. 7250.

Scoop of the Week

One scoop gets dished out during summer week number eight of the third annual Scoop of the Week contest — to Margaret Hedrick, Computing & Communications Division, for having the idea for the story "For Summer Apprentice, BNL is a Family Affair."

Throughout the summer, the Bulleting is trading hot tips for scoops of frozen yogurt. To enter the Scoop of the week contest, rush your news and feature scoops to the Bulletin, Bldg. 134, or call Ext. 5053. If you scoop the Bulletin's informed sources, and a story based on your idea is published, you'll win an official certificate, which is redeemable for frozen yogurt at the Cafeteria.

Film badges will be changed tomorrow. Please place your badge in its assigned rack space before leaving work today.

Minority High School Apprenticeship Program

For Summer Apprentice, BNL is a Family Affair

When Elise Vestal participated in the first of three sessions of BNL's Minority High School Apprenticeship Program, family history was made: three generations of the Vestal family were working on site at the same time.

From June 25 to July 27, the tenth-grade Longwood High School student was working at learning science — on the same site where her grandfather, grandmother, father and stepmother have worked for a total of 71 years.

BNL Minority High School Apprentice Elise Vestal (center) surrounded by her family members, who are all BNL employees: (from left) stepmother Donna Vestal, grandfather Alvin Vestal, grandmother Grace Vestal, and father Alvin Vestal Jr.

Fifteen-year-old Elise is eldest of three daughters of Alvin Vestal Jr., a storeskeeper in the Supply & Materiel Division; his wife Donna Vestal works as a senior technician in the Reactor Division. Elise is also the eldest grandchild of Alvin Vestal, an oiler mechanic in the Central Shops Division, and Grace Vestal, a senior telephone operator in the Computing & Communications Division.

"Elise's such a smart kid and I want all the best for her, so I think this program was a great opportunity for her," says her grandmother Grace Vestal.

For the past decade, the Minority High School Apprenticeship Program has been offering an intensive introduction to modern science to ninth or tenth grade minority students in Suffolk County or New York City high schools who have a demonstrated potential or ability in science.

"This program gave her the chance to learn more about science and to see if that's what she likes," says Elise's grandfather Alvin Vestal. "She's very willing to learn and she worked hard at it this summer, so we are very proud of her."

This year's program runs from June 25 to August 24 and is offered by BNL's Office of Educational Programs. During the three overlapping sessions of four weeks each, local high school teachers have been introducing this year's crop of 35 students to a new science subject each week.

For the first and third sessions, physics is introduced during the first week by Barbara Riess of Baldwin High School; Arthur Pitschi, also of Baldwin High School, teaches life sciences during the second week, and, for the last week, he discusses energy and engineering; during the third week, Clayton Hudson of Central Islip High School is the chemistry instructor.

During the second session this year, the high schoolers had two weeks of physics taught by Riess, then two weeks of environmental science taught by Jean Clark of Patchogue-Medford High School.

Mornings, the high school students attend classes and see demonstrations on the different subjects. Afternoons, they visit relevant research facilities on site or do lab experiments.

"Biology and medical science were my favorites — because they have to do with people," says Elise Vestal, who, as a ninth grader last school year, took an honors class in high school biology at Longwood and whose best subject is math.

"The lectures were interesting and the demonstrations were fun," she adds, "but I liked the hands-on stuff best of all. We did a lot of work in the hydroponic greenhouse, planting fruits and vegetables in solutions instead of soil. The other two groups will get to reap what we've sown."

"This has been a great experience for her — to learn about science and the Lab," says Elise's father, Alvin Vestal Jr. "She was impressed with what goes on here, and she's impressed the family with all she now knows."

Elise Vestal also participated in a discussion with members of Brookhaven Women in Science. "I was impressed — not many women go into science and even fewer go into engineering." says Vestal. "One of the women, Chu Ng, talked about the difficulties for minority women in science and engineering, and I could relate to what she was saying."

"It has been a good educational opportunity for Elise," reflects her stepmother Donna Vestal. "Now its up to her to decide whether or not she wants to go into research. One thing is for sure — she's been to more places on site than we have."

"I don't know what I want to be — I keep changing my mind," admits Elise Vestal. "Now its psychology, before it was journalism — but I still have three more years of high school, then four years of college to figure it out. After my summer here, I'll consider science — maybe biology.

"Before, all I knew about the Lab was that it was a research facility and that my family works here," concludes Elise Vestal, "but now I know what goes on in almost every building on site." — Marsha Belford

Service Awards

The following employees celebrated their BNL service anniversaries during the month of July 1990:

40 Years

Herbert Susskind.....Medical

35 Years

Joseph H. Jones.....Photo. & G. Arts

30 Years

Arnold L. Aronson.....Nuc. Energy
Frank R. Norton.....Staff Serv.
Anastasios Soukas.....AGS
Frank C. Strelecki.....Plant Eng.

25 Years

Patrick J. Asendorf.....Biology
Henry W. Danowski.....Sup. & Mat'l.
Robin R. Gianopoulos.....Reactor
Arthur D.S. Harris....Comp. & Comm.
Harold W. Siegelman.....Biology

20 Years

Irma I. Montanez.....Personnel

10 Years

Martin Candito.....AGS
Mark Fuhrmann.....Nuc. Energy
Valarie M. Green.....Plant Eng.
Anthony Ievollella.....Cent. Shops
James Iuliano.....Cent. Shops
Peter F. Pohlig.....Sfgrds. & Sec.
Dennis H. Reuter.....Plant Eng.
Semyon Shteyngart.....Nuc. Energy
Gregory C. Slovik.....Nuc. Energy
Peter Z. Takacs.....Instrumentation
Michael G. White.....Chemistry
Richard J. Wilke.....App. Science

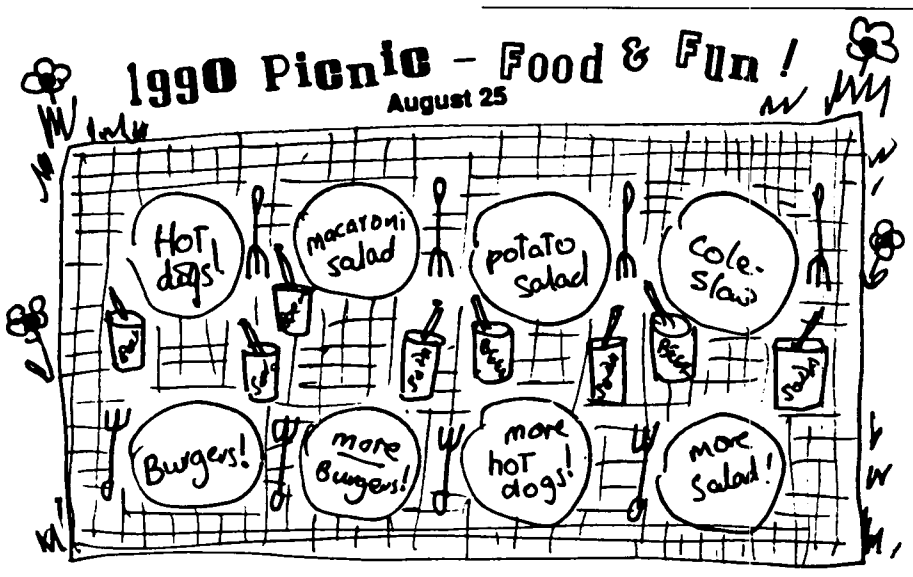
Note: Last month, Robert A. Dagradi, Accelerator Development, celebrated 30 years with BNL. His name, however, was inadvertently omitted from the June list of service awards.

Tennis Tickets Ready for Pickup

U.S. Open bus tickets have arrived and may be picked up at the BERA Sales Office from 9 a.m. to 2 p.m.

Note to Employees:

Attendance at lectures, meetings and other special progams held during normal working hours is subject to supervisory concurrence.



Just three weeks from tomorrow is August 25, date of the BERA 1990 Food & Fun Picnic. Three BERA groups, the Afro-American Culture Club, Social Club and Special Events Committee, have been working together on the arrangements — and it's all set, rain or shine . . .

IF we sell enough tickets. Although many people have called to say they want to come, ticket sales have been slow. Unless another 300 tickets are sold by the end of today, Friday, August 3, the picnic will have to be cancelled.

SO . . . it's now or never! Here are some good reasons to buy your ticket now:

- burgers, hot dogs, salads, soda, beer — all you can eat and drink!
- catering by Uncle Marty
- Fun Olympics
- mimes and clowns
- dance contest
- face painting
- children's games

Buy tickets at $10 each today at the Teachers Federal Credit Union — and every day until August 17 at the BERA Sales Office. Other ticket sellers are Michelle Cummings, Bldg. 459, Ext. 2077; Kay Dellimore, Bldg. 185, Ext. 2873; Liz Mogavero, Bldg. 510, Ext. 3940; Betty Pergan, 179A, Ext. 2937; Rosalie Piccione, Bldg. 355, Ext. 3160; Barbara Simpson, Bldg. 355, Ext. 7187; and Doris Terry, Bldg. 179C, Ext. 7610. To join in the Fun Olympics, contact Mogavero or Pergan.

Community Summer Science Program

Lectures and Internships For Suffolk High Schoolers

Almost 40 scientists have given freely of their time and talents during BNL's five-week Community Summer Science Program. And some 25 high school students hailing from school districts throughout Suffolk County have been the beneficiaries of their presentations, which began July 9 and run through August 10, under the auspices of the Office of Educational Programs (OEP).

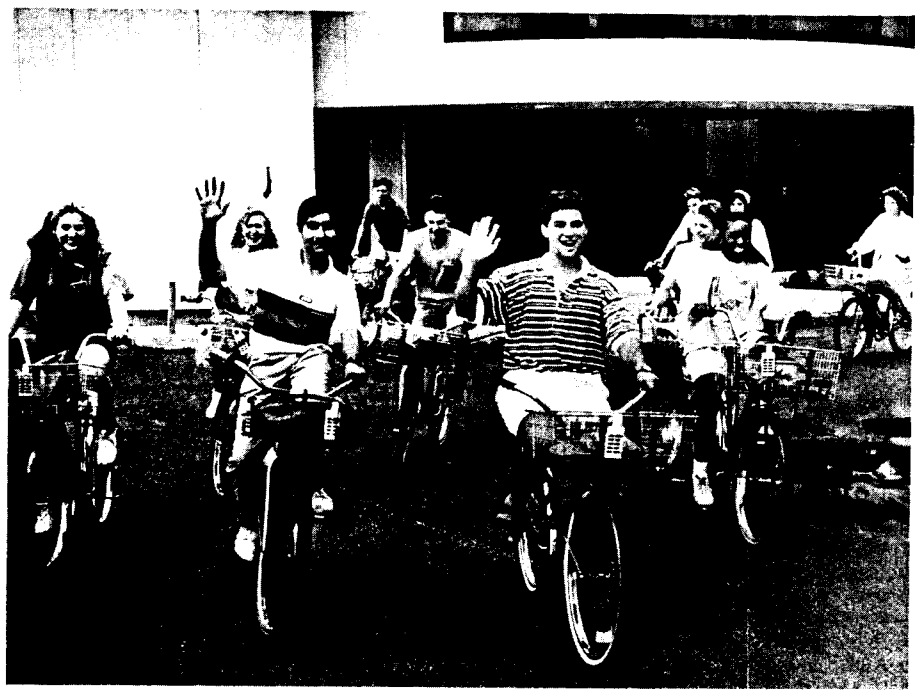
Open to commuting students who have finished their junior or senior years, the annual program consists of daily morning lectures by Lab scientists, as well as tours of appropriate facilities. Seniors may also participate in afternoon internships, doing research with a sponsoring BNL scientist.

Today the participants attend a session on groundwater resources. Earlier sessions were devoted to lectures on condensed matter and atomic physics, nuclear physics and chemistry, nuclear and particle physics, and accelerators.

Next week, the students will learn about medical and environmental science, from physics and medicine of the eye to global climate change. The lectures are open to the Lab community. For more information about next week's schedule, call OEP, Ext. 4503.

High School Honors Science Program

Summer Science Studies For Super Students



They've been cycling around site since July 25, and they'll continue using this means of transportation until their program ends on August 7. They're the 59 students now at BNL as part of the nationwide High School Honors Science Program, sponsored by the U.S. Department of Energy.

For the fifth consecutive year, governors of the nation's states have selected high school students to study science at Brookhaven. Students have also come from the District of Columbia and Puerto Rico. This year's program further includes participants from Canada, France, Northern Ireland, Italy, Japan, Mexico, the United Kingdom and West Germany.

The goal of the program is to interest these outstanding academic achievers in science and engineering careers. Six other DOE labs across the country are also participating.

Eleven of these students are shown here as they leave the National Synchrotron Light Source (NSLS), the focal point of the two-week program at BNL, organized by the Office of Educational Programs (OEP).

At the Lab, the students are divided into ten teams of six, each with a BNL mentor to guide them, from their first formal assignment calculating the Light Source's photon flux to the primary requirement of the program — a written laboratory report that each team must submit on its NSLS experiment by program's end.

BROOKHAVEN BULLETIN

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Hospitality News

Dejun Xue will demonstrate Tai Chi, a form of traditional Chinese exercise, at the next Hospitality Committee get-together, on Tuesday, August 7, at 9:30 a.m., in Room C, Berkner Hall.

According to Xue, this type of exercise is suitable for men and women of all ages. Through gentle, uninterrupted movement, it strengthens not only muscles, bones and skin, but also the nervous, endocrine and circulatory systems and various splanchnic tissues. Xue follows the Yang School of Tai Chi, which is a graceful type of exercise and relatively easy to practice.

Please join us for this interesting presentation. Spouses of Lab employees and guests are welcome. Coffee, tea and danish will be provided. Bring the children: Babysitting will be provided free of charge.

Photos in this issue by Roger Stoutenburgh.

Summer School in Nuclear Chemistry

Encouraging Careers in Nuclear Chemistry

For the second straight year, college chemistry majors have attended a six-week Summer School in Nuclear Chemistry (SSNC) at BNL, sponsored by the American Chemical Society's Division of Nuclear Chemistry & Technology, and funded by the U.S. Department of Energy.

Organized by Seymour Katcoff (front, right) of BNL's Chemistry Department, with the support of BNL's Office of Educational Programs, SSNC was established to encourage college chemistry majors to consider careers in nuclear chemistry.

From June 25 through today, 12 juniors and seniors attended lectures four mornings a week. These were given by John Alexander, of the State University of New York (SUNY) at Stony Brook, Daeg Brenner of Clark University, and J. Robb Grover (front, left) of BNL's Chemistry Department.

Lectures were followed by afternoons of laboratory work in Chemistry Department labs and counting rooms. This was supervised by Yung Yee Chu (front, second from left) of the Chemistry Department, with assistance from James Keenan of the Albany Medical College and Edward Baum (front, second from right) of the University of Kentucky.

In addition, two symposia were organized: a half-day session to introduce the students to the nuclear power industry, and a full day devoted to the application of radiochemistry to nuclear medicine.

To earn three lecture and three laboratory credits from SUNY at Stony Brook for their SSNC participation, students wrote three exams and a term paper, and presented oral reports of those papers last Wednesday.

The students are: (from left) Roehl Cinco, University of California, Irvine; Lisa Segal, Clark University; Jeffrey Babuschak, St. Francis College; Asvin Deshmukh, Princeton University; David Arnett, Eastern College; John Bordeaux, Methodist College; Amy Jo Patterson, St. Mary's College of Minnesota; Neal Conti, Georgetown University; Thomas Spence, Birmingham Southern College; Richard Breitkopf, Wesleyan University; and Travis Day, Austin College. Missing: Ramesh Rengan, University of Michigan.

Call for Bowlers

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

Applications are now available at the BERA Sales Office. Priority registration for existing teams is due by August 17; new team registration is due by August 24.

The women's league is sending out an urgent plea for new bowlers. Without many new members, the league will have to fold.

Don't let this happen — join up for a night of fun. You do not have to be a great bowler, just a willing one! Interested women should contact Donna Cunningham, Ext. 4599, or Maryann Reynolds, Ext. 5241.

On the Menu

At the Cafeteria

Luncheons

Monday, August 6	
Soup: Chicken noodle	.75/.95
Entree: Tarragon lime-baked chicken w/1 veg.	3.10
Entree: Beef fajitas w/1 veg.	3.10
Fitness: Cheese ravioli w/marinara sauce & 1 veg.	3.10
Carvery: Hot pastrami sandwich	2.85
Tuesday, August 7	
Soup: Old-fashioned lentil	.75/.95
Entree: Italian sausage w/peppers & onions & 1 veg.	3.10
Entree: Fried catch of the day w/1 veg.	3.10
Fitness: Stir-fried beef & broccoli over noodles	3.10
Carvery: Hot roast beef sandwich	2.85
Wednesday, August 8	
Soup: Beef barley	.75/.95
Entree: Roast beef w/gravy & 1 veg.	3.10
Entree: Quiche Lorraine w/1 veg.	3.10
Fitness: Eggplant Parmesan w/1 veg.	3.10
Carvery: Black Forest ham sandwich	2.85
Thursday, August 9	
Soup: Cream of broccoli	.75/.95
Entree: Southern-fried chicken w/1 veg.	3.10
Entree: Macaroni, beef & tomatoes w/1 veg.	3.10
Fitness: Veal Marsala w/1 veg.	3.10
Carvery: Hot corned beef sandwich	2.85
Friday, August 10	
Soup: Maryland crab	.75/.95
Entree: Lemon-baked fish w/1 veg.	3.10
Entree: Sweet & sour pork over rice w/1 veg.	3.10
Fitness: Beef & bean burritos w/1 veg.	3.10
Carvery: Hot turkey sandwich	2.85

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.

The vacancies listed below have been exempted by the Director's Office from the current freeze on open requisitions.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

4299. SECRETARIAL POSITION - Requires AAS in secretarial science or equivalent, and a thorough knowledge of Laboratory policies, procedures, and excellent communication skills. Word processing required; IBM PC WordPerfect

preferred. Will perform diverse secretarial duties including processing research proposals, distribution of computer runs, material requisitions, ILRs and correspondence. Budget Office.

4300. ADMINISTRATIVE POSITION - Requires bachelor's degree in business administration or equivalent and an extensive knowledge of Laboratory policies and procedures. Will act as assistant in Production Control and Inventory Section. Responsibilities will include shop production planning and scheduling control, inventory planning and control, material handling, shipping, receiving and warehousing as well as procurement control. Previous IPAP/J-CARS experience and demonstrated ability to interact with various Laboratory personnel also required. Accelerator Development Department.

4301. DATA SERVICES POSITION - Requires AAS or equivalent experience. Will perform computer-programming support services, including data entry, preparation and verification of input data, running reports and/or programs, operating a variety of peripheral equipment and maintaining backups, files and records. Safety and Environmental Protection Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

4302. TRAINING & RECORDS POSITION - Requires BS in physics/radiological sciences, safety engineering or related field. Will manage all training and records pertaining to safety within the Department. Responsibilities will include organizing, developing and instructing safety training programs. Will develop a training data base to document and track all phases of safety training. Requires excellent communication skills. Alternating Gradient Synchrotron Department.

4303. TECHNICAL POSITION - Requires BS or equivalent in a scientific or technical field and a minimum three years' health physics experience. Previous computer experience also required as is knowledge of internal dosimetry practices. Responsibilities will include operating whole-body counter and reading TLDs. Will assist in exposures and calibrations, writing SOPs and personnel monitoring tasks. Some overtime may be required. Safety and Environmental Protection Division.

4304. ENGINEERING POSITION - Requires BS in safety, industrial hygiene or related discipline, training and experience in occupational safety or industrial hygiene. Responsibilities will include program audit and oversight, radiation exposure control practice, general safety, industrial hygiene and radiation monitoring. Safety and Environmental Protection Division.

4305. TECHNICAL POSITION - (one-year term appointment) Requires BSET/BSMT or equivalent. Knowledge of digital and analog circuits; mechanical and vacuum technology, and experience in the construction of prototype and final assemblies also required. Must be able to work from verbal and written instructions, and drawings and schematics. National Synchrotron Light Source Department.

Motor Vehicles & Supplies

87 CHEVY CAVALIER - 2-dr., a/t, ac, 40k mi., fwd, $4,500. Joe, Ext. 4786 or 399-5796.

86 PLYMOUTH HORIZON - 5-spd., p/s, p/b, 44k mi., am/fm cass., 2.2 litre, $1,900. Kan, Ext. 3731.

85 MERCURY LYNX - 52k mi., 2-dr., 5-spd., good cond., $2,000 neg. Ext. 3102 or 3285.

85 BUICK SKYHAWK CUSTOM DX - p/s, p/b, ac, sunroof, am/fm cass., mint in/out, eng. needs work, best offer. Joe, Ext. 7507 or 744-3729.

84 RENAULT ENCORE - 2-dr., blue, 5-spd., am/fm cass., ac, new tires, good cond., $900. 286-0913 after 6 p.m. Ext. 5329.

82 MERCURY LYNX - new tires, a/t, stereo, good cond., $850. Frank, Ext. 3531 or 281-7578.

82 PONTIAC GRAN PRIX - 6-cyl., ac, p/w, good cond., $2,000. Bert Haug, Ext. 5156 or 581-4436.

81 VW RABBIT LS - 2-dr., 5-spd., am/fm, runs well, some work needed, $850 or best offer. Ext. 2914 or 286-3742 eves. or wknds.

81 KAWASAKI 440 LTD - 12k mi., new tires, brakes, battery, chain sprockets, sissy bar, v.g. cond., must sell, moving, $700. 474-5715.

80 DATSUN 210 - 5-spd., am/fm cass., 95k mi., runs well, $300. Dong, Ext. 5510 or 3134 after 5 p.m.

79 MOPED PUCH JAWA - w/baskets, $125. Keith, 474-3863.

74 VW - runs OK, body needs work, $75. Augie, Ext. 3884.

68 LINCOLN CONTINENTAL - white, black vinyl roof, $500. Keith, 474-3863.

HITCH - heavy-duty trailer hitch, removable tongue, $20. Victor, Ext. 2395.

CAP - fits full-size pickup, dark navy blue, fair cond., make offer. Kevin, 758-2653.

RALLY WHEELS - Olds, w/trim rings, 14", 5-bolt hole, G.M. pattern. Glenn, 821-5165.

RIMS - for Chevy pickup, 5-lug, 8", white spoke, $60; truck cap for Chevy step-side pickup, 6½' bed, $150. Steve, Ext. 2496.

TRAVEL TRAILER - Terry, 19'6", self-contained, sleeps 6, stove, refrig., bathroom/shower, $1,950 neg. John, Ext. 3302 or 924-0651.

MOTORCYCLE FAIRING - for '78 to '82 400cc Hondas, face high, excel. cond., $50. 744-7406.

89 GRAND PRIX - 5-spd., SE pkg., all power, fully loaded, 20k mi., $13,000. 689-9234.

89 DODGE SHADOW ES - white, 30k mi., am/fm cass., ac, ground effects, tinted windows, must see, $12,500. 732-3902.

88 HONDA ACCORD LXI - 4-dr., champagne, 52k mi., p/sunroof, loaded, excel. cond., $9,200. Don or Sue, 473-6570 after 7 p.m.

87 TOYOTA SUPRA - 5-spd., anti-lock brakes, remote alarm, loaded, 42k mi., $13,500. Witkover, Ext. 4607.

87 CHEVY S-10 PICKUP 4x4 - 4-spd., sunroof, alum. wheels, 44k mi., excel. in/out, asking $8,800. Dave, Ext. 3199.

87 TOYOTA PICKUP - 5-spd., 34k mi., big tires, tinted windows, sunroof, roll bar, graphics, am/fm cass., like new, $7,995. Beth, Ext. 4120.

87 CAMARO - V-6, a/t, p/s, p/b, ac, orig. owner, mint cond., $5,900 firm. Jim, Ext. 4452.

87 MAXIMA SE - fully equipped, excel. cond., $9,500. Bob, Ext. 7785.

86 NISSAN 300ZX 2+2 - T-top, a/t w/od., all power, new tires, pewter w/black int., mint cond., asking $9,900. Viorel, Ext. 7104.

86 SUBARU GL - 2-dr. h/b, am/fm cass., power pkg., sunroof, 23k mi., excel. cond., $6,295. Devinder, Ext. 4985.

85 CHEVY CAPRICE CLASSIC - 9-pass., 79k mi., loaded, ac, p/s, p/b, roofrack, new battery, excel. cond., $5,200. Zamir, Ext. 4510.

85 KAWASAKI KLR 600 - good brakes & tires, fresh motor w/2k mi., must sell, asking $1,500. Brian, Ext. 5849.

83 FORD ESCORT - gold, 65k mi., good cond., $700. Maria, Ext. 3033.

83 SUBARU GL - 4-dr., p/w, p/s, p/b, p/mirrors, 5-spd., good cond., must see. Victor, Ext. 5407 or 878-6764.

83 DATSUN SENTRA - am/fm, a/t, 115k mi., asking $400. Bertrand, Ext. 3166.

82 BUICK REGAL SOMERSET - 66k mi., 2-tone, all power, am/fm cass., $1,900. 744-1646 after 5 p.m.

82 MUSTANG GL - 4-cyl., 4-spd., 2-dr., runs well, asking $1,000. Julie, 928-1477.

82 CHEVY CITATION - 80k mi., body good, runs well, $425 neg. Paul, Ext. 7697 or 689-2829 eves.

82 BUICK REGAL - 6-cyl., 4-dr., ac, am/fm, new exhaust, brakes, battery, excel. cond., $2,500 or best offer. Steve, Ext. 5567 or 821-9048.

82 DODGE ARIES WAGON - 92k mi., $1,100. Ext. 2475 or 751-4539.

82 CHEVETTE - 4-dr. h/b, beige, clean in/out, dependable, carefully maintained, $2,000. 281-7844 eves.

81 AUDI 5000S - 92k mi., most amenities, good cond., $2,250. 289-5770.

80 FORD F250 4x4 PICKUP - 33" tires, engine runs well, 3" lift kit, new brakes & trans., cap, tool box, 4 extra tires. Ext. 2705.

80 BUICK CENTURY - 4-dr., 6-cyl., excel. cond., $1,000 neg. 345-3778.

78 FORD VAN 150 - 4 spd., 6-cyl., captain's chairs & sofa, fair cond., $650. 878-1178.

Boats & Marine Supplies

29' ULRICHSON - wood, FWC, fly bridge, full galley w/oven, elec. head, many extras, must see, excel. cond., asking $3,500. 732-2754.

20' O'DAY - day sailer, sleeps 4, head, stove, ob. powered, 3 sails, galv. trailer, VHF radio. 286-1331.

13' BOMBARD - 1987, inflatable, '87 30-h.p. Mariner, trailer, w/access., excel. cond., great scuba diving, must sell, moving, $3,500. 474-5715.

18' MARSHALL CATBOAT - new 8-h.p. Evinrude, 2 sets of sails, A-1 cond., many extras, $11,500. 589-5980.

16' MFG - 1962, fiberglass, 75-h.p. Johnson, Gator tilt trailer, $450 neg. Kemp, Ext. 7697 or 689-2829 eves.

15' AQUAGLASS - 85-h.p. Mercury ob., high-loader trailer, excel. cond., $1,500. Ext. 4364 or 286-1709.

14' ALUMINUM BOAT - 324-8150 eves.

13½' BOSTON WHALER - 1965, '84 35-h.p. Evinrude, must sell, need the space, asking $1,350 or best offer. Ext. 4284.

8' DINGHY - fiberglass. Dawn, 758-3830.

OUTBOARD MOTOR - 12.9-h.p. Chrysler, needs cleaning & minor repairs, incl. service manual & fuel tank, best offer. Rich, Ext. 2550.

Tools, House & Garden

LAWN MOWERS - Snapper, 8 h.p., rider, 6-bushel catcher, 30" cut, excel. cond., $400; 21" cut, 3½ h.p., $50. Ext. 2012 or 698-7322.

LAWN MOWER - Dayton, riding, 10 h.p., tractor, 38" cut, electric start, $400 firm. Ken, Ext. 5110.

ELECTRIC GENERATOR - Niagara, gasoline powered, 4 kW, used once, from hurricane Gloria purchase, $200. Gerd, 751-6342.

BRICKS - used, large amount. 325-0447.

ROTOTILLER - Craftsman, 5 h.p., w/power reverse, used less than 5 hours, $290. 281-8274.

BUSH SCYTHE - w/snath, $16; pipe threader ratchet tool, ½" to 2" pipe, $60. Bob, Ext. 4044.

LADDERS - wood, extension, 20', $20; 16', $10; glass panels, 1'x3', aluminum frame, good for greenhouse, etc., $1/ea. Victor, Ext. 2395.

Sports, Hobbies & Pets

DRUM SET - Majestic, 8-piece, plus extras, some need skins, $50/all. Al, 924-0960.

DIRT BIKE - Yamaha YZ-125, 1982, nice cond., $350. Ernie, Ext. 3357 or 281-7873.

FISH TANK - 15-gallon, used, $15; rock & roll albums, used, cheap. Georgia, Ext. 2384.

ZOOM LENS - Canon FD 70-210, w/Macro, $85; RC airplane, Train-Air, 58" wing span, O.S. Max 40, Futaba 6-FN r/c, all new cond. Bob, Ext. 5042.

LOVE BIRDS - 2, colorful, playful, w/cage, play gym & nest, $150. Ext. 3426.

GO-KART ENGINE - Briggs & Stratton, excel. cond. 698-9234.

EXERCISE BICYCLE - Schwinn, professional model, like new, digital readouts, asking $200. A. Romano, Ext. 4024.

BICYCLE - Shogun, 12-speed, brand-new, alloy frame, wheels, $225. Toni, Ext. 5257.

BICYCLE - woman's, 10-spd.; sofa, mixer, hair dryer, coffee machine, various camping equipment, sleeping bag. Tina, Ext. 3078.

COCKATIELS - 3, gray & yellow, healthy, active, large round coppertone cage, stand, mint cond. Thomas Kelly, Ext. 3696 or 744-3069.

BICYCLES - 3, for kids between 3-11 years old, $20/each. Ext. 3136.

Audio, Video & Computers

CONSOLE RADIO - GE, antique, $25. Victor, Ext. 2395.

VCR - Sharp, remote control, good cond., asking $150. 399-4399.

CABINET - for stereo, records & speakers, 48"L x 29½"H, 2 Fisher speakers w/3" tweeters, mid 4½" range & 8" woofer, $175. 653-4647.

TV - color, 13", remote control, 1 yr. old, $100. Ext. 3136.

MONITOR - color, 12", needs work, $25; antique console radio, GE, $25. Victor, Ext. 2395.

Free

GLASS PANELS - 1'x3', aluminum frame, good for greenhouse or window repairs. Ext. 2395.

CAT - female, calico, spayed, 6 yrs. old, outdoor. 736-1525, leave message.

SOLAR PANELS - ASR Sunway, 3, 4'x8', copper tempered glass, you pick up. 744-4611 after 6 p.m.

LIGHTING FIXTURES - single tube fluorescent, size for 4' tubes, one for 3' tube. Bob, Ext. 4044.

Yard & Garage Sales

MIDDLE ISLAND - Aug. 4, 10:30 a.m.-4 p.m., Middle Country Rd., Church Lane, Oakcrest, 5 Patricia Ct., misc. items. Ext. 4519.

STONY BROOK - Aug. 4 & 5, Madeley Lane, contents of house, furn., appliances, bathroom shower, many other items. Mitch, 751-8873.

Car Pools

STONY BROOK - ride needed to BNL for 3 weeks, will share expenses. Jerry, Ext. 5884.

PLAINVIEW - Exit 43 LIE, 4th driver needed. Elliott, Ext. 2495.

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

CENTER MORICHES - 2-bdrm. apt., over 900 sq. ft., recently redone, excel. cond., no pets, $675 + util. 878-1178.

CORAM - 3-rm. apt., full kit., l/r, bath, large bdrm., w/w, priv. ent., yard & pool privileges incl., 7 mi. from Lab, $595/mo. incl. all., 1 mo. sec. Kathi, 698-1971.

CORAM - 1 bdrm., l/r, kitchen, bath, small den or second bdrm., $550 for all but bottled gas. Lynette, 698-6609.

EAST SETAUKET - 3-bdrm. ranch, 2 baths, 2-car gar., 5 new appl., 3VSD, $1,100/mo. + util., sec & refs. Ext. 4368 or 928-3371.

NORTH SHIRLEY - 2-rm. apt., furn., bdrm. w/skylight, eik, w/w, priv. ent., 1 person only, non-smoker, no pets, 5 min to Lab & stores, $490/mo. incl. util. 281-8044.

RIDGE - 2-bdrm condo, ac, w/w, washer/dryer, patio, clean & quiet residential area, 5 min. from Lab., $800/mo., avail. Aug. 924-2783.

ROCKY POINT - furn. studio apt., full kit., bath, l/r-bdrm. combo, nice area, one person, non-smoker, $425/mo. incl. util. & cable. 744-8659.

SETAUKET - 3-bdrm. ranch, 2 baths, l/r, eik, appl., gar., 3VSD. 751-5667.

SOUND BEACH - 2-bdrm. ranch, 1 bath, l/r, d/r, eik, bsmt., w/d, Miller Place Schools, $900/mo. + util. & sec. avail. 9/10. Ext. 3790 or 821-4553.

WADING RIVER - 3-room apt., eik, full bath, one person, no pets, nonsmoker, $500/mo. incl. all, avail. Sept. 8. Janet, Ext. 2345 or 929-3910.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, 2 baths, tennis, golf, pool, beach, July-Sept., $425/wk, Oct & Nov. $300/wk. 689-5378.

For Sale

BABYLON VILLAGE - 2-bdrm. ranch, formal d/r, waterfront, 60'x100' bulkheaded w/boat slip, gas heat & HW, city water, sewer, low taxes, $199,500. Bill, Ext. 7136 or 661-9155 after 6 p.m.

CENTEREACH - 4-bdrm. hi-ranch, l/r, d/r, eik, 2 full baths, large fam. rm. w/fp, deck, pool, large fenced yard, $139,000. 698-8514.

CENTERPORT - 4-5 bdrms., 4 baths, 0.6 acre, 200' waterfront, dock & deep water mooring on Northport Harbor, $595,000. Bob, Ext. 4044 or 261-3890.

CORAM - Tanglewood Hills, 4-bdrm. ranch, 2 baths, 2-car gar., huge attic, gas heat, fenced, sewers, new carpet & paint, $130,000. 928-7154 after 7 p.m.

EAST MARION - beautiful 1 acre building lot, adjacent to Greenbelt. 325-0447.

EAST PATCHOGUE - 3-bdrm., 1 bath, l/r, eik, all appl., full bsmt., ag pool, deck, excel. location, P-M SD, $118,500 neg. 654-5609.

MANORVILLE - bldg. lot, 100'x220', wooded, dead end, South Manor SD, $53,000. Pat, 288-5576.

MATTITUCK - 2 bdrm., full bsmt., gar., deck, porch, walk to beach, near marina, $178,000. Dave, Ext. 5460.

MIDDLE ISLAND - Coventry Manor, 3-bdrm. townhouse, 2 baths, kit., l/r, d/r, laundry rm., cac, 5 appl., patio, pool, tennis, carpet, ask. $102,000. Rosalie, Ext. 3160 or 289-5704 after 5 p.m.

MIDDLE ISLAND - Lake Pointe, 2-bdrm., l/r, d/r, cac, gas heat, washer/dryer, all appl., wood deck off master bdrm., pool, tennis & clubhouse, asking $76,000, just reduced. Bob, 924-7316.

N. SHIRLEY - 3-4 bdrm. 2-story, l/r, d/r, 2 baths, ½ bsmt., new appl., laundry rm., 2 decks + pool w/deck. ½ acre, near LIE & Lab, Longwood SD, $134,000. Kathey, 345-3778.

PORT JEFFERSON STATION - 3-bdrm., 4-yr. Colonial, l/r, d/r, den, eik, 1½-baths, gar., vinyl siding, fence, ig sprinklers, gas util., sewers, $146,000. Ext. 4985 or 331-8459.

RIDGE/SCENIC HILLS - 4-bdrm. Col., 2½-baths, eik, d/r, l/r, w/w, stove, dishwasher, w/d, gar., deck, ½ acre, mins. to Lab, avail. immed. or move in for holidays, $143,000. 924-7520.

SETAUKET - north of 25A, custom house, 4-5 bdrms., 2-car gar., deeded beach rights. 473-4666.

SETAUKET - 4-5 bdrm. Colonial, new European kit., wood patio, ig sprinklers, new windows, alarm system, much more, walk to Univ. & hospital., $249,000. 751-6342.

STONY BROOK - 4-5 bdrm. Colonial (Gladstone), 3½-baths. eik, formal d/r, l/r, laundry rm., new boiler, HWH, gar., poss. M/D, 3VSD, must see, $185,000. Mitchell, Ext. 4212 or 751-8873.

PALM BAY, FL - near Melbourne, 2-bdrm. condo, 2 full baths, l/r, d/r, kit., w/d, priv. screened patio, completely furn., heated pool, near beach, malls, $65,000. 698-8514 after 5 p.m.

TAMPA, FL - Paradise Village Mobile Home Park, 1982 Liberty mobile home, 14'x56', 2-bdrms., 1 bath, family park, all appl., w/d, cac, more, excel. cond. Glenn, Ext. 7148 or 477-8699 after 6 p.m.

TOBYHANNA, PA - 3-bdrm., 2-bath, family rm., gar., Poc country place, maint. free, 24 hr. sec., pool, tennis, clubhouse, lake, paddle boats, close to everything, $110,000 neg. 471-2370.

BOICEVILLE, NY - in Catskills, 2-bdrm. house, English wood/coal stove in fieldstone enclosure, 4+ acres, woods and meadow, year-round brook, mountain views, many extras. 821-0469.

HUBBARDTON, VT - 38 deeded acres on town-maintained road w/power, phone, view of Lake Bomoseen, ask. $39,000, neg. Tom, Ext. 2823.

Wanted

ROOMMATE - to share 2 bdrm. furn. house in Poquott Village, Pt. Jeff. area., charming surroundings near water, $400/mo. + ½ util. Lorraine, 928-7015.

PEOPLE INTERESTED - in toastmaster's group at BNL to meet, improve public speaking, provide support & feedback. Margaret Foster, Ext. 3644.

SURFBOARD - bigger than 7' if possible, pay top dollars. Uwe, Ext. 2738, days or Ext. 3243, eves.

WASHER & DRYER - good working order, reasonable price. Ruth, Ext. 7226.

STOVE - wood burning, airtight, w/outside air intake. Tom, Ext. 2823.

METS TICKETS - box seats. Kevin, Ext. 4424.

COMPUTER - Commodore 64 system and/or component parts, used but in working condition. Pat. Ext. 2836.

LAWN MOWERS - old, complete. Dan, Ext. 2012 or 698-7322.

TAI CHI ENTHUSIASTS - including a Tai Chi instructor for lunchtime exercise. Mike, Ext. 2052.

COMPLETE SET - 54 vols., "Great Books of the Western World," publ. Encyl. Brittanica Inc., 1952. Gus, Ext. 5079.

Services

*Services are listed in the first **Bulletin** of every month as a courtesy to BNL employees. They are neither screened nor recommended by the Bulletin. Services forms are available in the Bulletin lobby, Bldg. 134.*

AC INSTALLATIONS & REPAIRS - central systems, wall/window units, professional work, Lic., ins. Mark, 345-5365.

AUTOMATIC LAWN SPRINKLERS - free estimates, prof. layouts, repairs, alterations, additions, prompt, BNL discount. Lou, 928-7042.

BABY-SITTER - responsible, reliable, 16-yr. old female, your home, experienced, references upon request. Kerin, 585-4038.

BACKHOE SERVICE - town water lines, installed inside & out, dry wells & trenching w/small machine, low rates, free estimates. 929-8876.

BEAUTY SERVICES - perms, haircuts, nails, etc., evening and weekend appointments available, very reasonable rates. Johanna, 878-6378.

BRICKWORK - patios, walks, swimming pools, retaining walls, landscaping ties, Belgian block, repairs, 25 yrs. exp., Lab disc. Tony, 698-9274.

CARPET CLEANING - 1 room free, limit 100 sq. ft., Four Shore carpet & upholstery cleaning. 471-3846.

CARPET/UPHOLSTERY CLEANING - spot, pet stains & odor removal, auto interior, fabric protector, free est., Lab disc. Jerry, 924-6019 days.

ELECTRICIAN - switches, outlets, service upgrades, lighting, electrical problems corrected, licensed. Steve, 586-1440.

FIBERGLASS REPAIR - construction molds refinished or built. Chris, 821-6048.

KAYAK LESSONS - sea kayak, river play boats, 5 hrs. + practice time, $70; intro to kayaking, 2 hrs., $25. Ernie, Ext. 3357 or 281-7879.

LAWN MOWER REPAIR - & small engines of all types. Dan, 698-7322.

LOCKSMITH - sales & service, 10% Lab discount, keys cut during lunch. Pete. Ext. 5105 or 399-2813 after 5 p.m.

MUSIC LESSONS - specializing in guitar, piano woodwinds. John Gibbons, 324-9031.

PAINTING - interior, exterior, reliable, dependable, reasonable rates. Pat, 924-2298 eves. or wknds.

PARTIES - make all your parties special events, every detail covered, all size parties, any occasion. Rosalie, Ext. 3160 or 289-5704.

PLUMBING - heating alterations & repair work by retired BNL employee. 472-1205.

POWER WASHING - decks, houses, driveways, cars, trucks, boats, all types, free est. 665-8171.

ASPHALT COATING - Quality Seal coat, parking lots, driveways commercial sealer. 722-5583.

SECURITY ALARMS - perimeter, installed. Keith, 474-3863.

SCUBA LESSONS - learn to scuba dive in a few short weeks, private or group lessons, reasonable rates, class starting 8/18/90. 474-5715.

SHEETROCKING & SPACKLING- free estimates. Kevin, 563-9855.

SKYLIGHTS - complete professional service cleaning, preventive maintenance, installations. Joseph, 924-6019.

VIDEO - Flair Video professional service, affordable, call to see demo tape. Ray, 878-1947.

WEDDINGS - photographed, reasonable price, professional quality. Ripp Bowman, 286-8594.

Ads left out of this issue due to lack of space need not be resubmitted to appear in the next issue.