

## Booster Accelerates Heavy Ions; Let AGS Physics Runs Begin!

On February 28, silicon ions were accelerated for the first time in the Booster from 4 million electron volts per nucleon (MeV/n) to about 20 MeV/n. Using harmonic switching and bunch coalescing, work is now going on to accelerate silicon to the top energy of 900 MeV/n.

This Booster-commissioning milestone with heavy ions follows the final step in proton commissioning that occurred on February 7. On that date, the proton beam from the Booster was first injected into the Alternating Gradient Synchrotron (AGS), and then accelerated to the AGS's working energy of 26 billion electron volts (GeV).

"These successes mean that the Booster will be up and running when the AGS comes on line on March 16 for its heavy-ion physics run and on May 8 for its proton physics run," says Bill Weng, Head of the AGS Accelerator Division. "These successes also show that the heavy-ion transfer line to the Booster, the Booster-to-AGS transfer lines, and the associated injection and extraction devices perform according to design

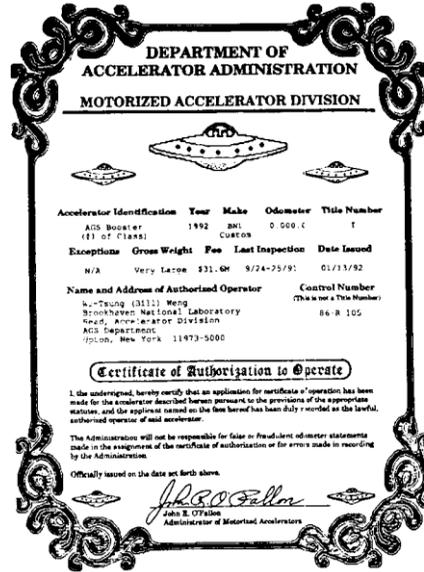
specification."

Under construction since 1986 and being commissioned since last year, the Booster is a preaccelerator one-quarter the size of the AGS. As a link between the Tandem Van de Graaff and the AGS, the Booster also completes the chain of accelerators forming the injection system for BNL's Relativistic Heavy Ion Collider.

As a preaccelerator for both protons and heavy ions, the Booster is designed to increase the intensity of the AGS's proton and polarized proton beams, and allow the AGS to accelerate beams of heavy ions up to the atomic mass of gold.

In fact, because of the higher vacuum within the Booster's beam pipe and the better magnetic field quality at injection, the intensity of the silicon ion beam within the Booster on February 28 was more than ten times higher than that of any heavy ions circulated in the AGS to date.

Another commissioning accomplishment that fell into place in the last few weeks was the operation of all 48 of the Booster's beam position



In addition to congratulating Bill Weng, who managed the Booster Project, and his staff for their success with commissioning the Booster, DOE's John O'Fallon issued Weng this "driver's license," permitting his operation of the Booster.

monitors. These monitors accurately locate the beam within the vacuum chamber and allow the beam to be centered in the Booster precisely within 1-2 millimeters. Such accuracy and precision result in less beam loss and more intense stored beam.

The U.S. Department of Energy, which funded Booster construction, closed the books on the project last October and considered the new preaccelerator to be commissioned as of January 13 of this year. This followed the June 26, 1991, extraction of protons from the Booster at the injection energy planned for the AGS.

In formally approving the Booster's operation, John O'Fallon, Director of DOE's Division of High Energy Physics in the Office of High Energy and Nuclear Physics, noted, "The completion of this technically complex project is a major step in the AGS upgrade program to produce more intense proton beams for important, high luminosity, high energy physics experiments. . . . We look forward to integration of the Booster into AGS operations for the physics program this spring." — Marsha Belford

## BNL Among 25 Labs Participating In DOE Review of Women's Programs

In the U.S., more than half the population is female, and, in 1988, almost 45 percent of those 25 years old and older who had completed four or more years of college were women. Yet only 16.8 percent of the doctorates awarded in the physical sciences went to women in 1988, and only about 15 percent of those working in the physical sciences were women.

Why don't the statistics for women entering the physical sciences parallel those for the general population? How can the U.S. Department of Energy (DOE) and its laboratories help improve those statistics, as well as those for the other sciences and for mathematics and engineering?

Such questions were tackled earlier this month by the 160 women from 25 DOE laboratories and contractors who attended the second annual DOE Review of Laboratory Programs for Women. A five-woman delegation represented BNL at the review, which was held at Lawrence Livermore and Sandia National Laboratories, February 4-5.

Brookhaven's delegation was headed by Victoria McLane, Department of Nuclear Energy, and included: Carol Creutz, Chemistry Department; Susan Eng, Computing & Communications Division; Louise Hanson, Department of Applied Science; and Frances Ligon, Office of Equal Opportunity. The group was appointed by Women's Program Coordinator Virginia Brown, and their participation was funded by the Director's Office. Renée Flack, Office of Educational Programs, and Barbara Schmidt, Personnel Division, assisted in preparations for the meeting.



BNL participants in the DOE Review of Laboratory Programs for Women; (from left) Frances Ligon, Victoria McLane, Susan Eng, Louise Hanson and Carol Creutz.

—Photos on this page by Roger Stoutenburgh

bara Schmidt, Personnel Division, assisted in preparations for the meeting.

As DOE Secretary James Watkins noted in a letter to all participants, "All of you know how critical it is to the future scientific and technological competitiveness of this country that we improve the access of women to careers in science, engineering and mathematics. . . . I expect our national laboratories to develop model programs for assisting young women in pursuing scientific and technical careers. . . ."

Continued Watkins, "We must also ensure that the Department and its laboratories are exemplary places of employment where women have the opportunity to rise to the highest level of their professional capabilities unhampered by real or perceived administrative barriers or organizational biases."

Watkins charged the program's participants with providing recommendations on how DOE and its laboratories can work to become model employers, and be more actively and effectively engaged in outreach efforts targeting women.

Thus, the review began with a

keynote address by the eminent solid-state physicist Mildred Dresselhaus, Massachusetts Institute of Technology. In her "Perspective on Women in Mathematics, Science and Engineering," she emphasized the importance of getting a "critical mass" of women into these fields — enough women to provide enough role models and support to sustain the chain reaction that is necessary to assure women's continuing place there.

Two approaches to attaining this goal are educational outreach and strategies for career advancement. These were explored in working groups that focused on women at each stage of development.

Frances Ligon was the BNL representative on the Grades K-6 working group. Among the many recommendations made by this group, as well as the one for Grades 6-12, was that, at this stage, all students — both girls and boys — should be included in any introductions to science and math, to help eliminate stereotypes. This is the approach Ligon has taken in the Introduction to Computers programs that she oversees and BNL offers to youngsters in local communities.

(continued on page 2)

## Nice Bridgework!

Four students leapt over more than 400 other high schoolers from Suffolk and Nassau Counties to take top honors in BNL's annual Model Bridge Building Contest on Leap Day, Saturday, February 29.

The top two winners in each county are now eligible to enter the 1992 International Model Bridge Building Contest, to be held at BNL on May 2. Like the regional competition, the international contest will be organized by the Tour Program in the Public Affairs Office.

For the third consecutive year, Brad Terris (right, in photo below), now a senior at Ward Melville High School, was first in Suffolk County. Here, Terris watches as contest engineer Marty Woodle, National Synchrotron Light Source Department, positions the student's 21.63-gram basswood bridge in the stress tester. Before it began to crack, the well-designed bridge supported a load of 255.7 pounds — some 5,362 times its own weight!



The second-place qualifier in Suffolk was Richard Post Jr., a junior at East Islip High School, whose 24.66 gram bridge held 203.4 pounds, about 3,741 times its weight.

The top one-two bridge builders in Nassau County were, respectively: Alex Panagacos, a junior at the Wheatley School, and James Leiz, a sophomore at Massapequa High School. Panagacos's 28.46-gram bridge bore 277.8 pounds, or 4,427 times its own weight, while Leiz's construction withstood 164 pounds — 3,540 times its 21.01 grams.

## Coming Up

Romney Duffey, Chairman of the Department of Nuclear Energy, will deliver the next Brookhaven Lecture. A physicist, Duffey will discuss "From Thin Films to Deep Oceans — Reactor Cooling to Global Warming," beginning at 4 p.m. on Wednesday, March 18, in Berkner Hall.

## Leaving the Lab — After 35 Years or More

After 36 years of service, Elizabeth B. Mill left the Lab on January 31, as a senior clerk in the Supply & Materiel Division (S&MD). The Bulletin caught up with her this week, over a month into her retirement.

"Believe it or not, I do miss this place," muses Elizabeth B. Mill, who clerked in S&MD's Machine Repair Section. "But, with everyone using computers instead of typewriters and most of the electronic office machines on service contracts instead of being repaired in house, I felt it was time for me to move into a new phase of my life."

Mill began her association with BNL on February 1, 1956, as a clerk in the main office and warehouse of the then Receiving, Warehousing and Distribution Group.

"I worked in building T-100, which was then on Brookhaven Avenue between Contracts and Procurement, and Personnel," recalls Mill. "I typed and retyped orders, answered phones, made stencils, did cataloging — whatever they needed me to do."

From the late 1950s through 1965, Mill worked in the Requisition Section, ordering supplies and materiel for the entire Lab. Over the years, she watched the variety and quantity of supplies and materiel handled by her



Roger Stoutenburg

### Elizabeth B. Mill

division grow along with the Laboratory. And, during that time, she received three promotions before being named to her final title in 1983.

In November 1967, Mill joined the Machine Repair Section in Bldg. 194, where she did all the clerical work, answered all calls for service, and coordinated repairs with repair peo-

ple and outside vendors. "In those days, we fixed everything ourselves, including stencil machines, mechanical calculators, manual and electric typewriters, time stamps — you name it," remembers Mill.

As office machines came to require more specialized repair or became disposable, Mills noted that the number of repair calls to her section decreased as the calls for outside repair increased. By the time her section moved to Bldg. T-87 in 1976, Mill says, "Stencil machines had been replaced by copiers, the typewriter was becoming obsolete, and calculators were hand-held electronic throwaway items."

As a consequence, the number of repair staff went from six mechanics in the section's heyday down to the one Mill left behind when she retired.

Over one month into her retirement, Mill is "giving my house a good cleaning and painting, and looking forward to spring and taking care of my garden. Maybe I will visit my four sisters more often and maybe I will take some trips. But now I can just enjoy a whole day with nothing to do — it's all up to me."

— Marsha Belford

## More Take-Home Pay, No Tax-Rate Change

New withholding tables issued by the Internal Revenue Service (IRS) took effect at BNL on March 1, reducing the amount of federal income taxes to be withheld from the wages of employees who earn less than \$53,200 a year and whose taxes are withheld at the single rate, and less than \$90,200 a year if taxes are withheld at the married rate.

So, many weekly employees who are being paid today will notice that they are receiving more take-home pay — about \$3.20 for those at the single rate and \$6.60 for those at the monthly rate. Monthly employees will note any changes — about \$14 for single and \$28 for married — in paychecks to be issued on March 31. For the rest of the year, increases will total up to \$142 for those withheld at the single rate and \$284 for employees withheld at the married rate.

The new withholding rates are intended to put more money into circulation and increase consumer spending. But, employees should note that, while their weekly or monthly take-home pay may show an increase, *there is no decrease in the tax rate.*

Thus, employees who are used to getting a refund when filing their income tax returns may find that their refunds for 1992 will be smaller. Others may find that they owe part of their tax liability when they file their 1992 returns.

If you owed federal income tax for 1991 or received only a small refund, you may wish to have additional tax withheld from your check each payday by completing an Additional Withholding Tax Form, available at Payroll, Bldg. 134. For more information, call Payroll, Ext. 2470.

## Reports for Review

Two reports related to BNL's status as a Superfund site are now available for public review and comment until March 17. The reports are: the *Remedial Investigation/Feasibility Study Work Plan for Operable Unit IV* and the *Solid Waste Management Unit Classification Report*. They may be reviewed on site at the Research Library, Bldg. 477, or off site at: the Longwood Public Library, the Mastic-Moriches-Shirley Community Library or the Town of Brookhaven Public Information Office.

## Healthline Lecture Oh, My Aching Back!

When our ancestors went from knuckle walking to walking upright, anatomy became destiny, as the back came to be prone to injury from the stress and strain of bearing body weight it was never designed to carry.

In addition to being inherently vulnerable, the back can suffer from years of poor posture, improper lifting and lack of conditioning. Then one day, due to the proverbial straw that breaks the camel's back, it can give — resulting in muscle spasms, joint sprains, curvature of the spine, slipped discs or worse.

"Dos and Don'ts for a Healthy, Pain-Free Back," will be the next presentation of the Healthline lecture series, sponsored by the Health Promotion program of the Occupational Medicine Clinic. It will take place Tuesday, March 10, from noon to 1 p.m. in Room B, Berkner Hall, and the speaker will be physical therapist Howard Makofsky of Southside Hospital, Bay Shore.



Howard Makofsky

## DOE Review (cont'd)

The College working group attended by Carol Creutz proposed such strategies as targeting two-year colleges, to encourage students to go on to four-year schools; setting up mentoring programs; and strengthening and broadening internships with a goal of targeting 50 percent women.

Susan Eng's Career Management working group suggested that each of the laboratories should have an advocate for women, as BNL does with the Women's Program Coordinator. Other ideas included establishing mentoring systems, identifying systemic problems, encouraging managers to hire and promote female staff, and fostering family-friendly work environments.

Retraining, Re-entry and Continuing Education were the subjects of another working group, reported on by Louise Hanson. This group called for such strategies as: DOE funding for these types of programs, recogni-

tion of diversity among women, reimbursement for courses that improve professional development, and the establishment of work/study programs and evening child care.

Victoria McLane participated in the Point-of-Contact working group for representatives of the different delegations, and she was part of the subcommittee that drafted the review's mission statement. McLane also gave a presentation on Brookhaven Women in Science and its accomplishments.

Mark Sakitt, BNL's Assistant Director for Planning and Policy, has appointed this year's participants and Gail Williams, Manager of the Office of Scientific Personnel, to an Ad Hoc Committee on DOE Review of Women's Programs. This committee will coordinate the follow-up items to this year's conference, and assist the Laboratory and DOE in planning next year's review. Victoria McLane will coordinate the committee and Barbara Schmidt will provide administrative support.

To register for this lecture, complete and return the bottom portion of the Healthline flyer recently sent to all employees by Monday, March 9, to Health Promotion Specialist Mary Wood, Bldg. 490.

For more information about the Health Promotion program and its Healthline lecture series, call Ext. 5923.

## Open Wide

Attention the nearly 950 BNLers enrolled in the Adult Fluoride Study: The first round of dental exams starts on Monday, March 9, and continues Monday through Friday over two weeks.

Participants were each mailed an appointment notice, stating the date and time of their first ten-minute checkup. All appointments will take place in the North Room of the Brookhaven Center.

Conducted by the School of Dental Medicine at the State University of New York at Stony Brook, the study needs 1,000 BNLers and 3,500 inhabitants of Portland, Maine, to find out how effective fluoride mouthwashes and gels are in preventing tooth decay in adults. As part of the study, volunteers will be provided with free toothbrushes, Colgate toothpaste, fluoride mouthwash or gel, and dental exams at BNL at 16-month intervals over their four-year participation.

Since 50 more volunteers are needed, BNLers, retirees and their spouses age 45 and over who have at least 15 natural teeth may sign up by calling Health Promotion Specialist Mary Wood, Ext. 5923.

## In Memoriam

Abe Seifert, a senior project engineer with the National Synchrotron Light Source (NSLS) Department, died on February 21 following surgery. He was 68 years old.

Seifert joined BNL's Architectural Planning Division on April 8, 1963, as a facilities engineer I. The division became Plant Engineering in 1972, and he became a structural engineer I in 1974. Named project engineer I in 1980, Seifert transferred to the NSLS in 1983, where he was promoted to his final position in 1984.

Within the NSLS, Seifert worked on all building-related matters. Recalled Senior Engineer Jules Godel, NSLS, "He played a significant role in the construction of the original NSLS building, was project manager for the building portion of Phase II and had been involved with every NSLS proposal for new facilities."

Specific NSLS construction projects that Seifert worked on were: plans for Phase III, a conceptual design report for an x-ray lithography center at BNL, plans for the building to house the superconducting x-ray lithography source, and, most recently, the proposal for the ultraviolet free electron laser project.

In addition, Godel said, "He was extremely active in overseeing a myriad of modifications to the NSLS building and in serving the user community, by helping them with any building or structural concerns. It also gave him great pleasure to work on plans for new research buildings, and some of his contributions have been used in light sources throughout the world."

Abe Seifert was a resident of Belle Terre. He is survived by his wife Selma, son Leslie, daughter and son-in-law Hillary and Bill Kay, and three grandchildren.

Charles Pukit, who retired from the Alternating Gradient Synchrotron Department in September 1978, died on January 31. Pukit, who was 77 years old, had spent 28 years of his life at BNL, having started on September 18, 1950. At the time of his retirement he was a staff shop technician IV.

A resident of Hampton Bays, he is survived by his wife Vera, son Charles, daughter Gail Comey, and two grandchildren.

## Atlantic City Trip

The next BERA-sponsored, one-day trip to Atlantic City will be to Trump Plaza Hotel and Casino on the Boardwalk, on Saturday, April 11. The cost will be \$20, but the hotel-casino will give a \$5 coin return, \$3 food offer and a \$5 deferred-return voucher.

Tickets are on sale now at the BERA Sales Office in Berkner Hall, weekdays from 9 a.m. to 2 p.m. If you have questions, call Carolann Zebrowski, Ext. 3347; Rosalie Piccione, Ext. 3160; or Kay Dellimore, Ext. 2873.

## Softball Captains

A Softball captains' meeting will be held on Wednesday, March 11, at noon, in Berkner Hall, Room B, during which preliminary rosters must be turned in. Anyone interested in forming a team or finding a team to play on may call Denise Miesell, Ext. 5873.

## Bowling

### Red/Green League

H. Arnesen had a 224/216/612 scratch series, A. Sauerwald 220/205/600 scratch, K. Asselta 219, S. Dimaiuta 217/201, R. Sick 216, R. Larsen 212, A. Warkentien 212, S. Thompson 210, R. Eggert 209.

### White League

Tom Romano had a 231, Norman Fewell 204, John McCarthy 202, Joe Ferrante 200, Sharon Smith 188/184, Skelly Frei converted the 6/7/10 split, Kay Conkling the 3/4/7/10, Joe Ferrante the 4/7/10.

### Purple League

Debbie Keating had a 219, George Munoz 204/204, Brian McCarrick 204, Phil Radusewicz 202, Kevin Carney 201, Diane Lombardi 197, Maryellen Hubner 187, Caryl MacDougall 180, Andy Warkentien converted the 4/6/10 and the 6/7 split, Jim Goode the 4/6/7.

## Volleyball

### Standings as of February 27

Open League		League I	
Magnum	35-4	Upfagrabs	42-12
G-Team	22-17	Network News	39-18
Phoenix	20-19	Rude Dogs	34-20
Me and the Boys	19-20	Dinkers	33-21
Penetrating Veggies	11-28	Six Pack Attack	25-32
Leftovers	10-29	Setups	14-40
		Bumps & Sets	5-49
League II		League III	
Monday Night Live	33-3	Renegades	30-15
Net Wits	25-11	Over the Top	29-16
Just Ups	19-14	Nutcrackers	29-16
Nuts & Bolts	18-15	High Volley'em	27-15
Night Court	19-17	Interns	24-18
Fossils	17-16	Good Timers	20-22
Volley of the Dolls	11-22	Sourcerers	19-23
Upton Ups	9-27	Undertakers	7-32
Muffits	5-31	Silver Bullets	7-35

## Basketball

### Week of February 24

X-Men 79		Runaways 57	
J. Hobson	34	J. Desmond	11
G. Mack	13	M. Fulkerson	11
B. Gunther	10	W. Cummings	11
E. Meier	10	P. Ratzke	9
J. Garrison	9	J. Belz	6
R. Schuhmann	3	G. Shepherd	5
		L. Furenlid	2
		J. Gaeta	2
3-point shots: J. Desmond, J. Garrison, J. Hobson (2), E. Meier, R. Schuhmann			
Trailblazers 98		Deep Six 49	
T. Buck	21	S. Anderson	11
C. Edwards	18	D. Eleazer	9
T. Mayo	13	J. Simms	9
A. Ratti	12	S. Dometto	8
R. Domenech	12	R. Hart	6
R. Garappolo	8	S. Olenski	4
S. Springston	8	C. Saxton	2
A. Jones	6		
3-point shots: S. Anderson, R. Domenech (2), R. Garappolo (2)			

# "Murders Done for Love" Will Benefit Scholarship Fund

A mixture of crime, passion and mystery will entertain BNL theatergoers on the evening of Saturday, March 28, at 8 p.m., in Berkner Hall.

Brookhaven Women in Science (BWIS) will sponsor crime historian E. J. Wagner's dramatic presentation of "Murders Done for Love" to benefit the Renate W. Chasman Scholarship Fund.

Awarded annually to a woman reentering college, the \$1,000 scholarship honors the late Renate Chasman, a noted BNL nuclear physicist and accelerator theorist.

Described by *The New York Times* as "a compendium of what is lethal and why," she has been telling tales of suspense for over 20 years. She performs regularly at the Museum of Long Island Natural Sciences at the

State University of New York at Stony Brook. Wagner has told her tales — a mixture of fact, fiction and folklore — on radio and national television, at universities and historical societies from New York to Nevada, and, now back by popular demand for the third time, at BNL.

Featured at the BWIS performance will be such Victorian tales as "Chloroform Concealed, or An Unpleasant Subject," as well as a detective story from the 1920s called "Enough for an Elephant," and a turn-of-the-century curiosity, "You'll Never Guess What's in the Attic." The Accomplices, a musical duo, will provide appropriately atmospheric music — from ragtime to sizzling tangos — for the tales of passion.

"Murders Done for Love" is designed for adult audiences, and reservations are strongly advised. Tax-deductible tickets are \$9 each if purchased in advance, or \$10 at the door. If you cannot attend this event, but would like to make a donation to the scholarship fund, all contributions would be appreciated. To make a donation, or to purchase tickets in advance, contact:

Name	Ext.	Bldg.
Anita Cohen	5054	134
Susan Eng	7988	515
Pat Giacalone	4628	911A
Rae Greenberg	5564	510A
Louise Hanson	7709	480
Ellie Hughes	3339	460
Millie Laster	3775	911A
Harriet Martin	3487	477A
Vicki McLane	5205	197D
Mary Wood	5923	490



Crime historian E. J. Wagner

## PSI Meeting

Rosemarie Nolan, legal counsel for the State University of New York at Stony Brook, will explain "How I Became a Lawyer," at the next monthly meeting of the Upton Chapter of Professional Secretaries International (PSI), on Tuesday, March 10, at 6 p.m., in the Brookhaven Center's south dining room.

Guests are welcome. For more information, call Patricia Durcan, Ext. 3807, or Nancy Griffin, Ext. 4177.

## Arrivals & Departures

### Arrivals

Carin J. Ashjian.....App. Science  
Michael Falletta.....Accel. Dev.  
Vincent E. Harris.....Accel. Dev.  
Guy N. Gartsough.....Reactor

### Departures

This list includes all employees who have terminated from the Lab, including retirees:  
Jeffrey J. Aspenleiter.....NSLS  
Murray J. Klein.....Reactor  
Joseph Montalto.....Reactor  
Gad Shani.....Medical  
Arthur J. Waligura.....Nuc. Energy

## BERA Returns to Disney World



Heigh-Ho, Heigh-Ho,  
It's Off to Play We Go...

It's time to sign up for the second annual group trip that the Brookhaven Employees Recreation Association (BERA) is sponsoring to Walt Disney World in Florida. The seven-day, six-night trip is scheduled for October 8-14.

The following per-person rates are based on occupancy of one room: (maximum five per room, six w/child under 3).

4 adults - \$857 Children age 3-9, \$553, age 10-17, \$599  
3 adults - \$910 Rates for ages 3-17 are applicable only when  
2 adults - \$1,017 occupying room with adult(s); children  
1 adult - \$1,435 age 2 pay airfare only, \$359; no fare under age 2.

The trip is open to a maximum of 44 BNL employees and family members, and reservations are now being taken on a first-come, first-served basis. To reserve your space, contact Recreation Supervisor M. Kay Dellimore, Ext. 2873, Bldg. 185. A deposit of \$100 per person is required, and, once the 44 slots are filled, a waiting list will be kept.

The trip rates include:

- Round-trip airfare between Islip and Orlando via American Airlines.
- Round-trip transportation between the Orlando airport and the hotel.
- Greeting and assistance by Disney representative upon arrival and departure.
- All baggage handling.
- Six nights at Disney's Polynesian Resort
- Six days' unlimited transportation within the Walt Disney World Resort.
- Unlimited admission and use of attractions at the Magic Kingdom, Epcot Center, Disney-MGM Studios Theme Park, Typhoon Lagoon, Pleasure Island, River Country and Discovery Island.
- One breakfast or lunch at any resort, including the exclusive Grand Floridian.
- Steve Birnbaum's *Guide to Walt Disney World* (one per room).

For more information, call Carolann Zebrowski, Ext. 3347, or M. Kay Dellimore, Ext. 2873.

## P-CAD User Meeting

The P-CAD User Group will meet on Wednesday, March 11, at 10 a.m., in the seminar room of Bldg. 515, Computing & Communications Division. Doug Marks of Doug Marks Associates will be available to discuss any problems with version 5.0. For more information, call Pam Mansfield, Ext. 7286.

## Cooking Exchange

Eggplant dishes will be among the foods demonstrated at the next Cooking Exchange meeting, on Wednesday, March 11, at 11:30 a.m., in the Recreation Building in the apartment area. Recipes will be provided and dishes can be sampled. A charge of \$2 per adult helps defray the cost of ingredients, and baby-sitting costs \$1 per child.

Please join us and invite neighbors and newcomers at BNL. For more information, call Yfke Boosman, 736-2880, or Megumy Akiba, Ext. 3015.

•••••  
**• Live D.J. Night •**  
**• Brookhaven Center Club •**  
**• Friday, March 27 •**  
**• Starting at 7:30 p.m. •**  
 •••••

## Pick a Student

Applications for two summer programs run by the Office of Educational Programs (OEP) will be available for review March 2-13, from 9 a.m. to 4:30 p.m., in the conference room of the Science Education Center, Bldg. 438.

The two programs are:

- **Summer Students** — The traditional summer program in which junior and senior undergraduates receive ten-week summer research appointments, June 8 to August 14. OEP pays the individual stipends of \$200 per week and round-trip transportation. The sponsoring department pays for the student's housing at \$77 per week.
- **Summer Interns** — This is the same as the Summer Student program except appointments are offered to students who have participated in prior U.S. Department of Energy High School Honors Programs at BNL. Generally, these students are finishing their college freshman year, but a few may be recent high school graduates. OEP pays all costs associated with these students — stipend, travel and housing.

A special effort is made to offer minority students summer research opportunities at BNL. If your student choice is a minority, you will substantively contribute to this effort. All requests for students must be submitted to Departmental Coordinators by Wednesday, March 18. For more information, call OEP, Ext. 4503.

## Cafeteria Menu

<b>Monday, March 9</b>	
Soup: Beef barley	.80/1.10
Entree: Fettuccine Alfredo	3.20
Entree: Baked fish w/1 veg.	3.45
Entree: Chef's choice	3.20
Carvery: Hot pastrami sandwich	2.95
Grill: Monte Cristo w/French fries	2.95
<b>Tuesday, March 10</b>	
Soup: Chicken & rice	.80/1.10
Entree: Flank steak w/1 veg.	3.65
Entree: Pizza	2.25
Entree: Chef's choice	3.20
Carvery: Hot roast beef sandwich	2.95
Grill: Chicken tenders on croissant w/fries	2.95
<b>Wednesday, March 11</b>	
Soup: Cream of potato	.80/1.10
Entree: Vegetable lasagna w/1 veg.	3.20
Entree: Chicken stir-fried over rice	3.45
Entree: Chef's choice	3.20
Carvery: Baked Virginia ham sandwich	2.95
Grill: Reuben on pumpernickel	2.95
<b>Thursday, March 12</b>	
Soup: Vegetarian vegetable	.80/1.10
Entree: Fried chicken w/1 veg.	3.45
Entree: Curried pork over rice	3.65
Entree: Chef's choice	3.20
Carvery: Hot corned beef sandwich	2.95
Grill: Barbecued pork on bun w/fries	2.95
<b>Friday, March 13</b>	
Soup: Seafood chowder	.80/1.10
Entree: Fresh baked fish w/1 veg.	3.45
Entree: Sausage & pepper hero	3.20
Entree: Chef's choice	3.20
Carvery: Hot turkey sandwich	2.95
Grill: Fish fillet on bun w/fries	2.95

# BROOKHAVEN BULLETIN

Published weekly by the Public Affairs Office for the employees of BROOKHAVEN NATIONAL LABORATORY

ANITA COHEN, Editor  
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LIZ SEUBERT, Reporter

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## Equipment Demo

Products of the John Fluke Mfg. Co., Inc., will be displayed in Berkner Hall on Monday, March 9, from 8:30 a.m. to 3 p.m. Fluke equipment will include: ScopeMeter; Hydra data-acquisition system; logic analyzer with boundary scan test; four-channel combination analog/digital oscilloscope; four-channel, 200 megahertz oscilloscope; rf signal generator.

Doug Marks of Doug Marks Associates will demonstrate the ELSA high-speed, high-resolution graphics processor, in the seminar room of Bldg. 515, Computing & Communications Division, on Wednesday, March 11, at 11 a.m. ELSA allows the user to redraw, pan and zoom quickly with display-list processing technology. Both P-CAD and AutoCAD applications will be presented.

W.L. Gore and Associates, Inc. will display their cable and interconnect systems in Berkner Hall, on Thursday, March 12, from 9 a.m. to 2 p.m. Gore products are applicable in such areas as communications using microwave technology and cables for computers, peripherals and switching systems.

## Classified Advertisements

### Placement Notices

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

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and, second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

**SCIENTIFIC RECRUITMENT** - Candidates may apply directly to the department representative named.

**SCIENTIST** - with a Ph.D. degree in nuclear engineering, geochemistry or environmental chemistry and a strong background in radioactive waste management, computer programming and code development, to participate in various waste management programs. Contact: Peter Soo, Department of Nuclear Energy.

**POSTDOCTORAL RESEARCH ASSOCIATE** - position available immediately for recent Ph.D. to join research effort in solution-phase thermal and photo-induced electron-transfer reactions. Experience in laser spectroscopy and familiarity with modern computer and instrumentation systems are required. Contact: Edward Castner, Chemistry Department.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees only.

**DD 0909. COMPUTER OPERATIONS POSITION** - (part-time, evenings) Requires AAS in computer science or equivalent. Familiarity with MIS computer operations desired. Will assist in the operation of the Hewlett Packard 3000/960, 3000/922 and 3000/70 computers and peripherals. Management Information Systems Division.

**OPEN RECRUITMENT** - Opportunities for Laboratory employees and outside candidates.

**DD 8124. ENGINEERING POSITION** - Requires BS in health physics, nuclear engineering or physics and significant operational health physics experience. ABHP certification desirable. Will work closely with waste-management group to ensure that the environmental, health and safety demands of DOE, EPA and DOT regulations for radioactive and nonradioactive hazardous-waste operations are met. Safety and Environmental Protection Division.

**DD 8128. ENGINEERING POSITION** - Requires BS in science or engineering and extensive experience in hazardous waste-management. Radioactive waste management and waste-minimization experience are highly desirable. Demonstrated knowledge of relevant environmental regulations is essential. Responsibilities will include performing process-waste assessments and compliance audits, preparing regulatory/compliance documents, and supporting the Laboratory's hazardous waste-management and waste-minimization programs. Safety and Environmental Protection Division.

**DD 8966. TECHNICAL POSITION** - Requires AAS in electronic technology or equivalent background with experience troubleshooting electronic equipment to the component level. Duties will include maintenance and calibration of various radiation-detection and environmental monitoring instruments. Must be able to obtain

and maintain a security clearance. (Reposting). Safety and Environmental Protection Division.

**NS 0655. TECHNICAL POSITION** - Requires AAS in a technical field and substantial QA/QC experience. Working knowledge of PCs desirable. Work will include participation in Division QA audit, surveillance, corrective action, inspection and test activities. Must be able to obtain and maintain a DOE security clearance. Reactor Division.

### Motor Vehicles & Supplies

90 NISSAN 4x4 - 40k mi., 5-spd., p/s, p/b, king cab, rims, tires, roll bar, am/fm stereo, anti-theft switch, \$8,000 neg. Kevin, 878-1594.

88 MITSUBISHI MIGHTY MAX TRUCK - 70k mi., good cond., int. excel. ask. \$2,800. Steve, Ext. 5376.

88 ISUZU PICKUP - 5-spd., am/fm, bedliner, excel. cond., \$4,200. 369-0432.

88 FORD ECONOLINE VAN - 35k mi., new tires, recently tuned, heavy-duty suspension, V-8 eng., fuel inj., excel. cond., \$8,000. Victor, Ext. 2395.

88 FORD BRONCO 4x4 - 302, V-8, full power, running boards, push bar, sun visor, 57k mi., 31-1050 tires, \$9,950. Ken, Ext. 2350 or 732-2635.

88 FORD BRONCO II XLT 4x4 - a/t, ac, cruise, am/fm, p/w, p/l, push bar, 90k mi. Jeff, 363-8789.

87 MUSTANG GT - 5-spd., dark blue/silver, ac, p/w, p/l, 58k mi., gar., orig. owner, \$7,900. Rich, Ext. 2386.

87 JEEP GRAND WAGONEER - 49k mi., 4wd, all power, leather, new RWL Goodyears, brakes, tuned, charcoal gray, \$9,500. Keith, 924-5062.

87 JETTA - 55k mi., a/t, p/s, p/b, needs some work, asking \$2,500 or best offer. Ext. 3983.

86 CHEVY SPRINT - 3-cyl., 50+ mpg, front-end damage, \$475. Joe, Ext. 2898 or Pager 0925.

86 FORD TAURUS LX - clean, keyless, p/s, p/b, Climate alloy wheels, 91k mi., \$3,500; 4 slotted wheels for Ford pickup, \$75. Kathy, Ext. 2223.

85 FORD ESCORT - 4-dr. h/b, white, a/t, 80k mi., needs exhaust, \$750 or best offer. Vishwas, Ext. 3087.

84 DODGE OMNI - 5-spd., 115k mi., ac, new timing belt, muffler, battery, etc. ask. \$350. Ext. 3983.

84 DODGE ARIES - a/t, p/b, p/s, am/fm, 67k mi., \$1,400. Carol, Ext. 2673 or 744-8632.

83 HONDA CB1000 MOTORCYCLE - custom, 10-spd., h/low range, new battery & tire, fast, \$2,300. Chuck, Ext. 5215.

83 OLDS DELTA ROYALE - metallic brown, a/t, p/w, cruise, fully loaded, 87k mi., orig. owner, \$1,700. Chan, Ext. 4059.

77 FORD LTD II - 302 cu. in. V-8, a/t, p/s, p/b, ac, new battery & brakes, runs well, \$500. Frank, Ext. 7519, or Vita, 277-0464.

76 DODGE JAMBOREE MINI-MOTORHOME - sleeps 5; well cared for, engine overhauled, must see to appreciate, \$5,000. Larry, Ext. 5796.

75 CHEVY WAGON - 8-pass., reliable, some rust, good Michelin tires, \$400. Ron, Ext. 4553.

31 CHRYSLER - 2-dr, rumble set, all original, excel. cond., asking \$8,000. Rosalie, Ext. 3160 or 289-5704.

FORD TRUCK PARTS - '72-'79, set of manuals, \$15; Black Jack headers w/50" side pipes, fit #390 eng., \$125; tailgate, full, \$55. Chuck, 589-1069.

VALLEY TRAILER HITCH - for '90-'92 Toyota Four Runner, like new, \$100. 475-8640.

CASSETTE CAR STEREO - Pioneer, under dash, auto reverse, loudness button, all parts incl., hardly used, no am/fm radio, \$50. Sue, Ext. 4931.

WHEELS - 2, Cooper Cobra G/T radials, 215/60/15, on alum. 4-hole Z rims, best offer. Rich, Ext. 3971.

### Boats & Marine Supplies

26' SEARAY SUNDANCER - 1984, cabin sleeps 6, stove, frig., head, hot shower, camper back, Loran, many extras, \$21,000. 751-8133 after 6 p.m.

24' SEARAY - flybridge, many extras, good cond., asking \$6,000. 475-9643 or 289-1726.

23' 4 WINNS - 230-h.p. Merc. i/o, used two seasons, many extras, trailer optional, \$11,500. Charlie, Ext. 2407.

18 1/2' STARCRAFT BOWRIDER - 1975, rebuilt 70-h.p. Evinrude, great on gas, excel. for fishing or skiing, \$2,500. Harold, 758-7179.

SUNFISH SAILBOAT - \$750. Carl, Ext. 4420.

### Furnishings & Appliances

BEDROOM - triple dresser, armoire, mirrors, nightstands, \$175; china cabinet, \$75. Walter, Ext. 4958.

BEDROOM SET - \$95; color TV, \$50; dark round table, \$50; table, 1930, enamel top, \$75; door; sewing machine, moving, much more. 878-6637.

CABINET - Colonial, maple w/record player & radio, storage, suitable TV, 72"x35"x23", \$400. 929-4701.

CHAIR - oak, needs refinishing & seat, \$25; metal box, w/key, 4 1/2"H x 11"W x 3"D, \$5. Ext. 7647.

SOFA BED - & armchair, \$200/both; pair of lamps, \$25. Paul, 924-8143.

DAYBED - steel frame, white porcelain knobs, young girl's, \$100; oak coffee table, 2 end tables, \$50; H-O trains, \$150. Rod, Ext. 4428.

DINING ROOM - antique, 6 upholstered chairs, reasonable. 363-7032.

DINING ROOM - sturdy, walnut, Colonial, 40"D, 2 leaves 11 1/2"W, 4 chairs, 2 armchairs, more. Pat, 722-4489.

DINING ROOM - country oak, 48" round, pedestal, w/leaf, 6 carved back chairs, hutch w/etched glass, mint, \$1,800. Bonnie, Ext. 2875.

FREEZER - Amana, upright, 13 cu. ft., w/lock & key, \$100. Mike, 941-9283.

KITCHEN CHAIRS - 4, white cushions, chrome frame, good cond., \$30/all. Ext. 5249 or 331-5874.

LIVING ROOM - red velvet, Spanish; 2 end tables; coffee table, 62" glass; couch, 2 chairs, 2 lamps, \$400; kitchen set, \$100; more. Frank, 928-9834.

REFRIGERATOR - freezer, Sears Coldspot, 19.2 cu. ft., automatic ice maker, cold-water tap, good cond., \$100 neg. Mike, 929-4716.

REFRIGERATOR - Sears Coldspot, frostless, \$50; classic stove, upper/lower ovens, copper-tone, \$50; freezer, 4 large sections, \$100. Kelly, 744-3069.

REFRIGERATOR - Admiral, 15 cu. ft., works well, \$75; Farberware convection oven, turbo-oven, large size, counter-top, \$50. Cora, 878-4825.

SOFA & CHAIR - glass-top end table, \$175; book-case w/sliding glass doors & storage cabinet, \$60; chairs, \$85; 2 director's chairs, \$15. 732-1389.

VASE - Art Deco, \$50; Amberdina glass pitcher, \$50; crystal lamp, \$50; scale, \$10; brass desk lamp, \$10. Kathy, 744-2203.

WATER BED - king-size, base, liner, sides, \$100 neg.; glass-top table, 72"x40", marble base, \$350 neg. Don or Jackie, Ext. 744-2921.

WATER BED - super single, baffled, frame, heater, headboard, best offer. 744-4611.

### Tools, House & Garden

COAL STOVE - Surdiac MCK 516, self-feeding, high Btu output, coal bin, approx. 2 tons of coal, shovels, scuttle, flue pipes, \$350. 878-6637.

FIREWOOD - split, seasoned, stacked, delivered, \$100/cord. 331-1841, leave message.

FIREWOOD - split, oak, J. Scesny, 732-2849.

LAWN MOWER - Snapper, rear bag, Briggs & Stratton engine, good cond., \$75. John, Ext. 4028.

WINDOW - Andersen triple, 4'x6', thermal pane, w/bottom louvers, \$500. 929-6235 after 5 p.m.

### Sports, Hobbies & Pets

WEIGHT-LIFTING BENCH - Weider, w/leg lift & butterfly, brand-new. Frank, Ext. 3120.

BICYCLE - Colnago Master, 56cm frameset, DuraAce headset & BB, \$400; Time pedals, Cinelli stem & handlebars, Scott aero bars. Ext. 3499.

BICYCLES - woman's 3-spd., free; boy's Fuji-SJ10, 10-spd., \$50. Ext. 2604 or 473-2473.

BIRDS - finches, gouldan, green singers, orange weaners, cordon blue, canaries, zebra, society, spice, new & used cages, reas. Kelly, 744-3069.

CLARINET - Yamaha, w/case, in excel. cond., \$250. Al, Ext. 7725 or 727-6155.

DOLLS - Princess Diana & Prince Charles, 19" & 21", porcelain, wedding outfits, \$450. Ext. 2012.

HORSE - Appaloosa gelding, 13 yrs. old, 15.1 hands, black & white, show & trail, \$1,500. Larry, Ext. 5796.

POOL TABLE - Fisher Price 3 in 1, Ping-Pong & knock-hockey table, used twice, orig. \$160, asking \$80. Tirre, 281-0360.

WEIGHT-LIFTING BENCH - good cond. Victor, Ext. 2395.

YARNS - knitting, crotchet, all colors. 281-6233.

YARN - large spools, single strand, rust & brown, \$8/ea.; slide projector, 2x2, Argus 3.5 lens, \$20. Susan, Ext. 7647.

### Audio, Video & Computers

COMPUTER - IBM XT clone, for word processing, spreadsheets, games, etc., amber screen, 20mb HD, 2 floppies, \$525. Rob, Ext. 4553.

COMPUTER - AT&T PC6300, 640k memory, 30 meg. hard drive, 1-360K floppy, MS DOS 5.0, asst. software, \$500. 286-0654 after 6 p.m.

COMPUTER - monitor, Lear Siegler, mono working, \$10; data terminal keyboard & screen Datamation, working, \$10. Victor, Ext. 2395.

COMPUTER - Apple CPM-80 system, dual drives, monitor, Epson FX-80 printer, software, \$300 or best offer. Don, 744-2921.

CD PLAYER - Harman Karmon 7500II, new, 2 yr. warranty, audiophile, orig. \$499, sell for \$350. Vasils, Ext. 2830.

DISK DRIVE - 3.5 high density, IBM compat., will work on any compat. system, w/board, \$175. Mark, Ext. 7978.

STEREO - Centrex, 8-track recording, am/fm, compact system, Pioneer, excel. cond., \$25 firm. Pete, Ext. 4581.

TV - Sears, portable, b&w, fm radio, ac & battery, \$50; 12" Magnavox TV, portable, b&w, \$50. Ext. 7039 or 289-8428.

### Miscellaneous

BABY'S ITEMS - playpen, car seat, walker, carriage, carrier, clothing toys, most in great cond. Mary, Ext. 4938 or 924-6235.

JACKET - Longwood, winter, size L, \$20. Arleen, Ext. 4519.

OPERA TICKETS - Met Opera, Sat. matinee, March 14, Don Carlo, Levine conductor, row K, center orchestra. Ext. 3922.

OPERA TICKETS - 2, Don Carlo, including bus from Shoreham library, March 19, balcony, \$84. Steve, Ext. 4008 or 821-0686.

TICKETS - 2, Tokyo Quartet, March 21, 8 p.m., Sayville. Ext. 2914 or 286-3742.

TYPEWRITERS - 1 electric, \$10, 1 manual, \$5, both need ribbons. Ext. 5249.

### Free

DOG - Lab mix, male, 9-mo.-old, very friendly, housebroken, needs new home. Victor, Ext. 2395.

PIANO - Gulbransen, upright, very old, needs work. Mrs. Agostine, 588-6853.

### Lost & Found

LOST - gold cross, sentimental value. Al, Ext. 5817.

LOST - man's wedding ring, area of Bldg. 902A, ring has three insets. 744-5613.

### Wanted

ANIMAL LOVER - to take in a stray cat, black & white, young, friendly. 331-5874.

APARTMENT OR ROOM - from March to September. Martin, Ext. 3734.

ENGINE - 5 h.p., Briggs & Stratton, good running cond. 363-7032.

LIFT CHAIR - for elderly arthritic grandmother, reasonable. Kathy, 821-2586 after 5 p.m.

SCANNER - 400-channel, also band saw and wood lathe. Chuck, Ext. 5215.

WEST HIGHLAND TERRIER - puppy, female, to adopt. Mary, 727-0082.

### Services

Services listed are neither screened nor recommended by the Bulletin.

AUTO DETAILING - protect your investment, full detail or bi-weekly washings at your home/office, reasonable rates, refs. avail. Andy, 929-4450.

AUTOMATIC LAWN SPRINKLERS - free estimates, professional layouts, repairs, alterations & additions, courteous service. Lou, 928-7042.

BABY-SITTING - exp. mom to care for your child on site, full or part time. Karen, Ext. 3181.

BABY-SITTING - experienced high schooler available after school and weekends, available all summer. 399-2179.

BABY-SITTING - mature mother of one will watch your child in my home, Shinnecock Hills area, reasonable, reliable. Darlene, 287-1310.

BABY-SITTING/CHILD CARE - reliable mother of 3, close to Lab, in our home, reasonable rates. Ann, 399-1721.

BAKERY-STYLE CAKES - beautifully decorated for St. Patrick's Day, all occasions; cookies, pies, and pastries also avail. Millie, 367-4147.

BICYCLE REPAIRS - overhauls, tune-ups, upgrades, no basket cases please. Joe, 924-4425.

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

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

CARPETING - discount purchase, installation & repair, custom work, stripes, borders, printing in carpet. Mark, 399-2813.

CHILD-CARE - responsible mom of one to care for your child in my Eastport home, afternoons, evenings, weekends. Deborah, 325-1207.

CHIMNEY CAPS - fireplaces, wood, coal and oil flues, stainless steel, lifetime guarantee, installed, Lab discount. Mike, 821-5526.

COLLEGE FINANCIAL AID - guaranteed, fee refunded if no aid, computer-match grants, scholarships, Lab discount. Tom, 736-6691.

DJ/MC - the Music Connection, music from 40s-90s, quality sound/service at affordable prices, all occasions, insured. Lou, 698-8210.

DOG & CAT GROOMING - discount rates, will pick up, boarding available. Jennifer, 727-3830.

DRESSMAKING - tailoring, alterations, over 30 years exp., reasonable. Tomiko, 727-1412.

GOLF CLUBS REGRIPPED - \$3.50 & up. Ray V., 758-4937.

HOME IMPROVEMENTS - kitchens & baths, windows & doors, finished bsmt., 35 yrs. exp., lic. & insur., Lab discount. Carl, 698-9274.

HOUSE CLEANING - done your way, refs. avail. Carmen, 744-2715.

HOUSE CLEANING - reliable, reasonable rates, flexible hours. Susan, 821-1721.

HOUSE CLEANING - islandwide general cleaning, and opening houses for summer. 727-6385.

HOUSE CLEANING - reasonable, efficient, references. Cathi, 281-0360.

HOUSE CLEANING - Marty, 399-3496.

INCOME TAX PREPARATION - let a CPA w/years of exp. prepare your taxes, very reasonable. 878-5886.

INCOME TAX PREPARATION - tax consultant, your home or mine, reasonable, serving Lab people for over 16 years. John, 732-2472.

INCOME TAX PREPARATION - individual, partnership, corporate, your home or mine, 19 years exp. Joyce C. Smith, enr. agent, 366-0541.

INCOME TAX PREPARATION - free pickup and delivery, experienced, call for estimate. 567-1973.

INCOME TAX PREPARATION - IRS enrolled, 18 yrs. exp., 12 yrs. w/Lab returns. Jack, 864-2236.

JEWELER - expert repair and special order work, honest, affordable, no job too small or large. Kelly, 821-5239.

LAND CLEARING - carefully removing stumps, trees, and brush with rake on 450 loader, \$70/hr. Tom 878-1060.

LANDSCAPING - general cleanup, shrubs moved, driveways sealed, reas. Ernie, 698-9274.

LANDSCAPING - cleanups, lawn maint., decking, landscape design, free est. Dennis, 395-6055.

LAWN MAINTENANCE - cleanups, yard, attic, basements, free estimate. 737-8281.

LAWN MOWER REPAIRS - and service, also rider repairs, have trailer will travel, reasonable rates. Dan, 698-7322.

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

MAILBOXES - distinctive, custom-made, heavy-gauge steel, 9 colors, free lettering, free datalog, installation avail., Lab discount. Mike, 821-9709.

MASSAGE THERAPIST - therapeutic massage by licensed therapist, Medford. Alana, 475-4947.

NAILS - nail tips, gel, silk wrap and designs for special occasions or everyday. Jackie, 744-2921.

PAINTING - interior/exterior, taping, spackling, papering, power washing, roofing, wood shingle, seamless gutters, insured. James, 399-4912.

PARTIES - make every party a special event, every detail covered, all size parties, any occasion. Rosalie, 289-5704.

PERSONAL TRAINER - pre/post natal, aquatics, aerobics, conditioning & body sculpting, certified, experienced instructor. Helen, 728-5201.

PIANO LESSONS - from experienced, qualified teacher. Bartek, Ext. 3126 after 5:30 p.m.

PLUMBING & HEATING ALTERATIONS - repair work by Jim Morris ret. BNL employee. 472-1205.

ROTOTILLING - start your garden early this spring, any size, free est. Paul 924-8143.

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

SKYLIGHTS - complete, prof. service, cleaning, preventive maint., installations. Joseph, 924-6019.

VIDEOGRAPHER - capture those precious moments, will tape weddings, parties, all occasions. Larry, 281-7240.