BROOKHAVEN BULLETIN
Vol. 47 - No. 39 October 1, 1993
BROOKHAVEN NATIONAL LABORATORY

Assessing Two Decades of BEAG

Exactly two decades ago, on October 1, 1973, the Biomedical and Environmental Assessment Group (BEAG) was created in the Department of Applied Science (DAS).

Over the past twenty years, BEAG has become an internationally known leader in assessment of health and environmental effects of energy systems, including cancer risks, and risks associated with the development of photovoltaic technologies, air pollution and nuclear waste disposal.

BEAG has always been headed by Leonard Hamilton. Samuel Morris, who is also deputy head of DAS's Analytical Sciences Division (ASD), is the other remaining founding member.

Other BEAG staff are: Sharon Baxter, Janice DePass, Michael DePhillips, Vasilis Fthenakis, Gary Goldstein, Seymour Holtzman, John Lee, Frederick Lipfert, William Marcuse, Anne Meinhold, Paul Moskowitz, Michael Rowe, Arlean Vanslyke and James Waters.

"BEAG was started two years before the Atomic Energy Commission, which then funded most of the Lab, was divided into the Energy Research and Development Administration (ERDA) and the Nuclear Regulatory Commission. Then, in 1977, ERDA was phased out and absorbed by the new Department of Energy [DOE]," recalled Hamilton. "They knew a lot about nuclear health effects already, but suddenly there was a need for comparing health and environmental effects of all energy resources, and our function was to fill that need.

"One of our earliest tasks was to provide an overview of biological models to be used in the Rassmussen reactor safety study of 1975 — WASH 1400," Hamilton continued. "In another pioneering effort we estimated the health effects of fuel combustion. That work underlay much of the consideration leading to the Clean Air Act of 1977."

In the mid-80s, DOE called upon BEAG for an investigation on radon. Results of the study appeared in the second of a series of DOE handbooks on indoor air pollution, written for local public health officials and planners. BEAG studies were also used for the first book in 1986, which centered on indoor combustion sources such as gas stoves and kerosene heaters.

For the past eleven years, BEAG has also worked on the public and occupational health effects of photovoltaic technology, which enables sunlight to be turned into electricity. In BEAG's procedure, new materials, production processes and applications for photovoltaics are assessed to check on potential chemical and physical hazards to workers manufacturing the devices or to the public once the devices are in use.

The contribution of BEAG's assessments to the development of research and industry in this area was recognized in 1990 by a Federal Laboratory Consortium special award to Hamilton and Moskowitz for excellence in technology transfer.

BEAG's reputation spread not only within the U.S., but also, internationally. In 1983, with Hamilton as World Health Organization (WHO) Focal Point, BEAG was designated the Collaborative Center for WHO and the United Nations Environment Programme (UNEP) and since then has participated in all UNEP's assessment meetings on the environmental effects of different energy sources.

Another international group that has sought BEAG's expertise for studies on sulphur-oxide control in 1981 and renewable energy source health and environmental impacts in 1988 was the Organization for Economic Cooperation and Development in Paris. BEAG has also been playing a key role in a joint International Atomic Energy Agency-WHO-UNEP program on risk assessment and risk management from 1983 to the present.

"Another collaboration we participated in was organized jointly in 1980 and 1984 by the Beijer Institute in Sweden and the then USSR Academy of Sciences to assess the environmental implications of expanded coal use," commented Hamilton.

Morris recalled a project extending from 1980 to 1989 which involved a study of health effects found in workers at a coal-gasification plant in Kosova, Yugoslavia. "The study helped Yugoslavia assess the health impact of the plant and at the same time, provided U.S. agencies with guidance on potential problems of commercial synfuel plants being considered over here," he said.

Recently, BEAG staff modernized MARKAL, a giant 1970s model for energy systems that was built and tested jointly at BNL and Jülich, Germany, by a consortium of 15 countries sponsored by the International Energy Agency.

"MARKAL is now widely available in a user-friendly form that is being adapted by countries such as China and Columbia to meet specific needs," said Morris. "Within the last year, working jointly with Alan Manne of Stanford University and Clas-Otto Wene of Chalmers University, we succeeded in hard-linking MARKAL to a macroeconomic model, producing a new model we call MARKAL-MACRO. It will be used worldwide to make studies on how reducing greenhouse gases will affect national energy and economic systems."

BEAG staff has now so much collective experience in assessing health and environmental risks of all sorts and in developing techniques of how to assess risk, that the group has become uniquely expert in evaluating the different approaches used to assess risk.

"Risks should be assessed realisti-

(continued on page 2)

Roger Stoutenburgh

The two remaining founding members of the Biomedical and Environmental Assessment Group (BEAG), Leonard Hamilton (foreground) and Samuel Morris, take a moving look back at 20 years of BEAG history.

A Message From the Director:

The annual salary review normally concludes at this time of year with the awarding of salary increases to recognize performance. Unfortunately, as you are aware, we will not be able to grant increases in fiscal year 1994 due to the salary freeze mandated by the Department of Energy for all its contractors.

I am disappointed that we cannot reward your performance with salary increases. However, I want you to know that your contributions to the success of the Laboratory are very much appreciated. I am pleased with the progress that we have made in many areas over the past year and want to thank you for your efforts and dedication.

I believe employees are strongly motivated by personal pride and recognition by their peers and supervisors. I encourage you all to continue to work toward even greater accomplishments during the coming year. I also look forward to the future when employees' performance *can* be recognized with appropriate monetary rewards.

N.P. Samios
Nicholas P. Samios

One-Year Extension For IBEW Contract

A new agreement between BNL and Local 2230 of the International Brotherhood of Electrical Workers (IBEW) extends IBEW's current contract with the Laboratory for the full year ending July 31, 1994, with all of the conditions of the current contract remaining fully in force.

IBEW represents about 550 bargaining unit employees in six BNL divisions: Central Shops, Photography & Graphic Arts, Plant Engineering, Safety & Environmental Protection (fire fighters), Staff Services and Supply & Materiel.

Roger Stoutenburgh

Reduce, Reuse, Recycle

Long Island leads the world in garbage production, with 3.4 kilograms (7.5 pounds) of municipal solid waste produced per person per day. This statistic was repeated often during the day-long conference on "Recycling Technologies and Market Opportunities," held September 20 at the Lab. In his address to the 75 conference attendees, Congressman George Hochbrueckner put forward a recycling credo: Reduce, reuse, recycle and compost before incineration and disposal in a landfill. Joining Hochbrueckner (left) at the conference were: Leon Petrakis (center), Chairman of BNL's Department of Applied Science, which organized the conference; and Jerry Schubel, Director of the Marine Sciences Research Center at the State University of New York at Stony Brook.

Coming Up

BNL historian Robert Crease, Director's Office, will deliver the next Brookhaven Lecture: "History of the Laboratory, Part I: The Early Years." It will begin at 4 p.m. on Wednesday, October 13.

1993 Healthfest

BNL Health, Fitness & Safety Fair

Two fitness activities, two talks and a two-day information fair will be featured during *Healthfest* 1993 — BNL's first celebration of health, fitness and safety, which is scheduled for October 11-14. Under the sponsorship of the Director's Office, *Healthfest* '93 is being organized to encourage BNLers to take personal interest and responsibility for their individual health, fitness and safety.

"We are hoping that employees who attend *Healthfest* will not only use the information being provided to improve their personal well-being, but also to decrease their risk of occupational accidents and illnesses," says M. Sue Davis, Associate Director for Reactor, Safety and Security.

The festivities begin with two fitness events organized by on-site sports clubs. First, on Monday, October 11, a Fitness Walk will take place, starting at noon at the Science Education Center, Bldg. 438. Hosted by the BNL Walking Club, the walk is 2 miles.

Then, on Tuesday, October 12, the BNL Roadrunners Club will host a Fitness Run, which will start at noon at the Medical Department, Bldg. 490. The 5-kilometer (3.1-mile) route will be a jogging or running tour of BNL's big machines.

The first 200 registered walkers and 100 registered runners will receive a 1993 *Healthfest* T-shirt. In addition, those *Healthfest* walkers and runners who then use the Lab pool at least once through Sunday, October 17, will each be considered BNL Biathletes of the Week — and the first 50 will be awarded another memento.

Mid-week, *Healthfest* will feature two talks sponsored by the Health Promotion Program of the Occupational Medicine Clinic.

On Wednesday, October 13, "The Back to Back Basics Workout" will be demonstrated and discussed by physical therapist Lisa Morrone, who is a clinical specialist at Southside Health Institute brought back to BNL by popular demand. From noon to 1 p.m. in Berkner Hall, Morrone will go over a set of exercises designed to maintain a healthy back — and hand out an exercise manual in which these exercises are described. They not only involve strengthening and stretching the back, but also the abdomen and legs.

The second talk, on Thursday, October 14, entitled "Fats, Cholesterol and the Wary Consumer," will be presented by registered dietitian Debbie Spector of the American Heart Association, from noon to 1 p.m. in Berkner Hall. After defining cholesterol and discussing the difference between unsaturated, monosaturated and polysaturated fats, she will talk about the current 30-percent fat dietary guidelines, explain how to calculate grams of fat — and review current research showing that butter may be better for you than margarine.

The main feature of *Healthfest* '93 is a Health, Safety & Fitness Fair, to be held on both Wednesday and Thursday, October 13 and 14, from 11 a.m. to 2 p.m. in Berkner Hall.

During the two days, BNLers are invited to peruse displays on such topics as back safety and ergonomics, cancer and heart-disease prevention, home fire safety, on-site mental health and substance-abuse services, BNL fitness clubs, and Weight Watchers at work.

While picking up information, participants may witness demonstrations of stretching and aerobic dance techniques, exercise and personal protective equipment — and the Convincer, a ride offered by the Suffolk County Police to convince the general public to wear seat belts. They may also partake in health analyses, including body composition, blood pressure and foot screenings.

Healthfest organizers include the Central Shops Division, Occupational Medicine Clinic, Plant Engineering Division, Public Affairs Office, Safeguards & Security Division, Safety & Environmental Protection Division, and employees involved with several BNL and BERA clubs.

To register for *Healthfest* activities, complete the coupon at left. For more information, contact Gary Kaczmarczyk, Ext. 4532, or Mary Wood, Ext. 5923.

Healthfest '93 Registration Form

Name: _____

Life number _____ **Bldg.:** _____ **Ext.:** _____

I would like to participate in the following:

❑ **2-mile Fitness Walk**, Monday, October 11, noon - 1 p.m.
Start at the Science Education Center, Bldg. 438.
First 200 registered participants receive 1993 Healthfest T-shirt.

❑ **5-k (3.1-mile) Fitness Run**, Tuesday, October 12, noon - 1 p.m.
Start at the Medical Department, Bldg. 490.
First 100 registered participants receive 1993 Healthfest T-shirt.

❑ **"Back to Back Basics Workout" Lecture & Demonstration**
Wednesday, October 13, noon - 1 p.m., Berkner Hall

❑ **"Fats, Cholesterol and the Wary Consumer"** Lecture
Thursday, October 14, noon - 1 p.m., Berkner Hall

❑ **Podiatry Foot Screening** -- *registration limited to 75 people*
Wednesday &Thursday, October 13-14, 11 a.m. - 2 p.m., Berkner Hall

Return completed form to Mary Wood, Bldg. 490, by October 7.

BEAG (cont'd)

cally," declared Hamilton. "That means setting priorities. For example, remediating the environmental contamination at DOE facilities was estimated originally at $160 billion. But, last year, estimates had already risen to $360 billion, and public funds are not limitless. If some areas must wait, where should we start? As a physician, concerned with protecting human health, I think it's vital to ensure that money is not wasted on lesser problems while greater and real health hazards lack funds."

BEAG's answer to these considerations was to create "realistic" risk assessment — an extremely detailed approach that they, together with Lawrence Livermore National Laboratory, used in three studies conducted for DOE at Savannah River, Fernald Environmental Management Project and Nevada Test Site. The success of these pilot studies established realistic risk assessment of DOE sites as the way to go, Hamilton said, and BEAG is being funded to continue this work.

One extremely realistic risk assessment BEAG members have made continually over the past few weeks has been in deciding which cardboard box to open first to find a needed file.

A month ago, the changing needs of DAS and other departments were accommodated by consolidating various groups within DAS's ASD from three different buildings into one location.

So, as part of ASD, BEAG packed its twenty years of expertise into countless boxes and moved from its original location in a wing of Bldg. 475 to its new address, Bldg. 490D.

"We're a persistent group," commented Hamilton. "We've achieved a lot — and our experience is a solid base for more creative and original contributions in the assessment field — no doubt for the next twenty years!"

— Liz Seubert

Get Out! Stay Out! — For Fire Safety

Every 15 seconds, a fire department somewhere in the U.S. responds to a fire. Nationwide, one fire death occurs every 118 minutes.

To counteract these alarming statistics, since 1922 the National Fire Protection Association has sponsored Fire Prevention Week. It will be observed this year on October 3-9, with the theme "Get Out! Stay Out!"

"In case of fire, leave the scene immediately, and call for help when you are out of danger. Only use an extinguisher when you are sure you know how. Once outside, don't go back inside until fire fighters say it is safe for you to do so," explained Joe Levesque of the Fire Protection Engineering Group in the Lab's Safety & Environmental Protection (SEP) Division, who is coordinating BNL's efforts to make employees aware of fire-safety precautions.

If a fire occurs on site, Levesque advised sounding the nearest fire alarm on the way out, or calling the Lab's emergency number, Ext. 2222, from a safe location. "All of BNL's major structures have fire alarms — 180 systems in total," he said.

BNL's Fire/Rescue Group has a staff of 29 who work in three shifts around the clock, seven days a week, ready to respond to fires and other emergencies.

To inform BNL staff about fire safety, two brochures, *Fire Safety on the Job* and *Fire Extinguishers*, will be mailed to all employees this month. Also, BNL's Fire/Rescue Group, along with the Town of Brookhaven Fire Marshall's Office, will staff a fire prevention display at the Lab's Healthfest 93 (see story above) in Berkner Hall, October 13 and 14.

Levesque advised that Fire Prevention Week is a good time for everyone to inspect their homes, offices and vehicles for potential fire hazards. "Stop by the Healthfest fair for information on common hazards and how to correct them," he suggested.

To make sure the children in the Lab community know the ABCs of fire safety, SEP's Fire/Rescue Group will visit the Child Development Center and the Upton Nursery School, and Fire Chief James Roesler will invite the children to visit the BNL Firehouse, Bldg. 599.

Attn: Retirees

In November — just in time for card writing during the holiday season — the Bulletin will publish its annual Special Edition updating retirees names and addresses.

We'll also have room to include some greetings, brief reminiscences and photos that you may wish to share with the BNL community.

Send them — along with your name, life number and phone number — to the Brookhaven Bulletin, BNL, Bldg. 134, P.O. Box 5000, Upton, NY 11973-5000.

To consider your submittal for publication, we must receive it by Friday, October 29. It may be edited and will be published as space permits.

Call For Voices

This October, the BNL Gospel Choir celebrates its second anniversary — and invites all singers of any denomination to join. Membership is open to all Lab employees, on-site contractors, guests and their families.

So far this year, the Gospel Choir has performed in over 30 concerts and programs, including presentations to local nursing homes, Riverhead School District's Multicultural Awareness Day and gospel extravaganzas.

Upcoming fall performances include:

- 10/3, 3 p.m., Veterans' Monument Dedication, Riverhead Town Hall
- 10/9, 6:30 p.m., Gospel Extravaganza, Center Moriches
- 11/21, 3:30 p.m., Concert, Patchogue

If you are interested in participating, contact Frances Ligon, Ext. 3709, or Nanci Hoey, Ext. 2821.

BGA Tournament, Awards Dinner

On Friday, October 15, at the Swan Lake Golf Club in Manorville, the last tournament of the BGA season will be held and followed by the annual awards dinner. The tournament format will be a two-person scramble. Golf and dinner for BGA members will cost $40; for non-members, $60. Sign up by Friday, October 8, by contacting Rick Jackimowicz, Ext. 3802.

Weekdays at Work, Weekends on the Track

Auto racing is a sport pursued by several BNLers in their spare time. This story introduces some of those Lab employees who take to the track on the weekends. Anyone who would like to be included in a possible follow-up to this story may call the Bulletin, Ext. 5054.

When most of us think of a relaxing weekend we think of beaches, books, beds and barbecues. But, for Robert Danowski, Richard Eggert, Darren Harris and Hubbard Harris Jr., Mary-Faith Healey, and David and Kathryn Warburton a relaxing weekend includes revving, ripping, roaring — and racing.

These seven are among BNL employees who enjoy the fast-paced world of auto racing in their spare time. The racing season generally spans from April to November.

Mary-Faith Healey has been interested in racing for about 20 years. She finds the time to race by getting a season schedule in January and marking the calendar to fit it in her busy schedule as Manager of the Division of Contracts and Procurement (DCP). Sponsored by BF Goodrich, Healey competes in time trials at Bridgehampton several times a year.

She and her husband Gordon, who also races, share a red, 1980 Volkswagen Rabbit. "Driving is great and lots of fun. It teaches car control, not just speed," says Healey, who also suggests that anyone interested in racing get good instruction and practice.

Hubbard Harris, a driver in the Plant Engineering (PE) Division, gained his interest from his father, who often took him to races. Now, he races with his son Darren, a PE custodian. Actually, Darren Harris races and Hubbard Harris "makes sure everything is just right."

The Harris' pro-street stock racing cars are a 1970 Chevelle, which can go 97 mph, and a 1968 Camaro, which does 120 mph in 11.2 seconds. They can be found racing at Westhampton every Sunday on a quarter-mile straight track.

To participate in this expensive and potentially dangerous sport, Hubbard Harris says, he and his son "have to be safe, listen to tech guys, use our heads, and leave plenty of time and patience to gain experience with our cars."

Some of BNL's auto-racing employees include: (from left) Darren Harris and Hubbard Harris Jr., with their 1968 Camaro; Mary-Faith Healey, who is leaning on her 1980 Volkswagen Rabbit; Richard Eggert; Robert Danowski (kneeling); Kathryn Warburton and David Warburton, with their Fiat Strada.

Roger Stoutenburgh

David Warburton, a senior technical specialist in the Alternating Gradient Synchrotron Department, started racing ten years ago as a weekend activity. To train, Warburton went to a three-day professional competition school. Because husband David enjoyed it, Kathryn Warburton, a principal technician in the Department of Applied Science, became interested in racing too.

Together, the Warburtons race street stock cars, mainly a Fiat Strada. Before races at Bridgehampton, Pocono or Watkins Glen, they check their car's suspension and attach tires with less tread, for speed and more tire on the road. Although she's always nervous before a race, Kathryn Warburton finds racing invigorating — and rewarding. Sponsored by BF Goodrich, Jimmy's Garage and Corsa, the Warburtons have each been season champions many times.

To advise aspiring racers, David Warburton says, "Make the car reliable so you'll have time to learn how to drive. But, to be the best takes natural ability." Kathryn Warburton suggests going to time trials and "having instructors teach you how to drive the course as opposed to speeding right away. Learn first, then let speed come."

Rich Eggert, a cost and price analyst in DCP, participates in drag racing. Drag racing differs from stock car racing in that, instead of many cars doing laps in a race, two cars race a straight track in elimination heats.

After first becoming interested 25 years ago while building hot rods and custom-made cars, Eggert now races a 1971 Chevy Nova on Saturdays and Sundays at Westhampton, the only drag raceway left on Long Island because of noise complaints. Eggert offers only one piece of advice: "Keep yourself alive! Use roll cages and other safety devices."

Without people like Robert Danowski in their corner, racers would be left in the dust. A PE custodian, Danowski is on the pit crew for driver Bob Zurawski. As a member of the crew, his task is to "go over the car 100 percent front to back," and, as a member of Zurawski's public relations team, Danowski's task is to ensure a clean image and find a cause to race for.

The cause of choice was DARE, short for Drug Abuse Resistance Education, because it's aimed at keeping kids away from drugs. As Danowski says, "If it saves just one kid, it's worth it."

The fact that they won a race the first night they put the DARE sticker on also helped in the decision.

And, to further the cause, the team has painted the body of the 1992 Chevy Lumina black with DARE written boldly across it in red. They want to get the message out, Danowski said, because "if we don't do something about it today, there won't be any tomorrow for some kids."

These efforts were rewarded on September 18, when the five team members were each awarded jackets and hats identifying them as a "Maxwell House Real Hero of NASCAR." In this national competition run by the National Association of Stock Car Auto Racing (NASCAR) and Maxwell House, the DARE team was one of only 94 teams throughout the country recogized for contributions that improve the quality of life in their community and reflect a spirit of generosity and dedication. — Adrienne Beasley

Adrienne Beasley was a student contributor to the Bulletin last summer. Student Tina Cardinale also contributed to this story.

Bowling

Red/Green League
E. Beadle bowled a 265/211/639 scratch series, R. Mulderig 258/639 scratch, F. Griswold 254/208/645, R. Larsen 248/219/665, R. Wiseman 247/627 scratch, A. Sauerwald 236/202/604 scratch, A. Warkentien 235, K. Asselta 228/203/609, M. Guacci 224, E. Sperry IV 212, F. Hohmann 209, K. Riker 208, J. Goode 205, W. Cahill 200.

Purple League
Ray Raynis bowled a 212, Tirre Farmer 202, Fred Schaefer 201, Ken Batchelor 198, Larry Musso 198, Ben Belligan 192, Kay Conkling 189.

White League
Mike Meier bowled a 232, Jim Goode 205, Gerrie Riker 196, Caryl MacDougall 188/178, Jeanne Penoyar 179, Elaine Zukowski 177, Lorraine Petro 173.

BROOKHAVEN BULLETIN

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

ANITA COHEN, Editor
MARSHA BELFORD, Assistant Editor

Bldg. 134, P.O. Box 5000
Upton NY 11973-5000
Tel. (516) 282-2345; Fax (516) 282-3368

Dinner-Mystery Theater

The gourmet dinner-mystery theater event, in which guests join forces with Murder Mystery, Inc., actors to solve a murder, is plotted by the BERA Special Events Committee for Friday, November 12, at the Knights of Columbus Hall, Patchogue. The evening includes dinner of prime ribs or chicken cordon bleu followed by a dessert table, an open bar for five hours and after-mystery dancing hosted by deejay Ed Taylor until 1 a.m.

At $45 each, tickets are on sale at the BERA Sales Office in Berkner Hall, Ext. 3347, weekdays, 9 a.m. to 1:30 p.m. Don't delay — if 100 tickets are not sold by October 4, the evening must be canceled. And you may go for free! All tickets paid for or reserved with a $10 nonrefundable down payment by October 4 will be entered in a drawing for four free tickets to the night's events.

Volleyball Clinics

The Volleyball League will offer a skills clinic on Wednesday, October 6, from 5:30 to 7 p.m. in the gym, during which instruction and practice drills in volleyball basics will be provided.

Then, a referees' clinic will take place on Monday, October 11, from 5:30 to 7 p.m. in the gym. A representative from each team should attend to become familiar with BNL rules. In addition, anyone interested in refereeing games may attend.

Arrivals & Departures

Arrivals

Christopher P. Channing ... Plant Eng.
Yan Liu ... Physics
Christine B. Ronick ... Staff Serv.

Departures

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

Michael D. Brown ... RHIC
De Huai Chen ... Physics
John A. Weiner ... RHIC

Toastmasters

The Toastmasters Club is sponsoring a humorous speech and table-topics contest on Tuesday, October 5, at 5:20 p.m. in Berkner Hall, Room D. All are invited to attend.

For more information, contact Brian Boyer, Ext. 7431; Mitch Sussman, Ext. 4212 or Sharon Yen, Ext. 7140.

Walking Club

At the next meeting of the Walking Club on Tuesday, October 5, noon to 1 p.m. in the large conference room, Bldg. 490, Aerobic Dance Club instructor Pat Flood, with the assistance of Annette Gremme, will demonstrate stretching. They will go over primary stretches of the lower back, ankles and feet, and primary and secondary stretches of the leg muscles.

Participants may practice the stretches during the meeting, so wear casual clothes and bring a mat or large towel. For more information, call Mary Wood, Ext. 5923.

AA Meetings

Next month, Alcoholics Anonymous (AA) meetings will be held on site after work on the following Mondays: October 4, 11, 18 and 25.

All employees, retirees, others working on site holding current BNL identification cards and their dependents are invited to attend. For the location and times of the meetings, call the Employee Assistance Program, Ext. 4567. Callers will not be asked to leave their names, and all calls are confidential. Also obtain meeting information by writing to P.O. Box 641, Upton, New York 11973.

Cafeteria Menu

Monday, October 4
Soup: Thyme-scented lentil .80/1.10
A la Carte: Baked pork chops w/1 veg. 3.75
Fitness Fare: Vegetable lasagna w/1 veg.3.35
Deli: Pastrami sandwich 2.95
Grill: Reuben platter 2.95
Fitness Salad: Tuna platter

Tuesday, October 5
Soup: Minestrone w/sausage .80/1.10
A la Carte: Spaghetti w/clam sauce 3.45
Fitness Fare: California chicken w/1 veg. 3.65
Deli: Roast beef sandwich au jus 2.95
Grill: Spanish omelet w/fries 2.35
Fitness Salad: Chef's seafood bowl

Wednesday, October 6
Soup: Beef & vegetable w/rice .80/1.10
A la Carte: Shrimp chow mein w/rice 4.25
Fitness Fare: Oven-crisp chicken w/1 veg. 3.45
Deli: Virginia ham sandwich 2.95
Grill: Italian cheesesteak w/fries 2.95
Fitness Salad: Fresh fruit w/cottage cheese

Thursday, October 7
Soup: Mulligatawny .80/1.10
A la Carte: Baked liver & onions w/1 veg. 3.45
Fitness Fare: Vegetarian green peppers 3.45
Deli: Corned beef sandwich 2.95
Grill: Monte Cristo platter 2.95
Fitness Salad: Cantaloupe bowl

Friday, October 8
Soup: Seafood chowder .80/1.10
A la Carte:Beef w/peppers, onions & rice 3.85
Fitness Fare: Display cooking
Deli: Roast turkey sandwich w/gravy 2.95
Grill: Fried clams 3.25
Fitness Salad: Grilled chicken platter

Burger, Taster's Bar and other specials daily.

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.

RESEARCH ASSOCIATE - Trained in chemistry, with experience in laser spectroscopy of short-lived chemical intermediates or high-resolution chemical dynamics measurements, to work on new experiment involving collisional cooling at 4 K, and ongoing free-radical spectroscopy and dynamics studies. Contact: Trevor Sears, Chemistry Department .

RESEARCH ASSOCIATE - With a background in electrochemistry, to participate in studies on the development and characterization of metal-hydride electrodes. Experience in electrode fabrication and the electrochemical and structural characterization of metal electrodes, and in the application of x-ray methods for structural determinations is required. Contact: James McBreen, Department of Applied Science.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

MK 0769. MATERIAL HANDLERS - (two positions) Supply and Materiel Division.

NS 2826. ADMINISTRATIVE POSITION - Requires written and spoken proficiency in the Russian language, excellent communication, decision-making and problem-solving skills, and the ability to prioritize large amounts of information. Will be involved in the complex coordination of activities between BNL Project Office and Project Office in Moscow, including organizing activities with U.S. freight forwarders, customs officials at frontier border points, and Russian recipients of material and cargo. Department of Advanced Technology.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

MK 2958. BENEFITS ADMINISTRATOR - Requires a bachelor's degree in business administration or a relevant field, an MBA preferred. Substantial experience in the design and administration of health, disability and pension plans is required. Knowledge of pertinent federal regulations and reporting requirements necessary, as is knowledge of LOTUS and WordPerfect. Experience with defined contribution plans as well as experience with managed health care plans and flexible benefits programs desired. Will be responsible for the design and administration of the Laboratory's retirement, medical, disability and life insurance plans and have supervisory responsibility for the Benefits Group. Personnel Division.

NS 9633. LIBRARIAN POSITION - Requires MLS degree, a basic knowledge of library operations, and experience in database searching and INFORM. Prior library experience within a research environment a plus. Technical Information Division.

NS 8632. PUBLIC AFFAIRS POSITION - Requires advanced degree in journalism or science writing. Must have experience in science writing, proficiency in desktop publishing using IBM and Macintosh systems, and excellent communication skills. Knowledge of BNL's research programs and operations highly desirable. Director's Office.

LS 2905. SCIENTIFIC ASSOCIATE POSITION - (term appointment) Requires BS, MS preferred, in physics, instrumentation or engineering, and experience in Nd:YAG and CO_2 lasers, optics and optical diagnostics. Experience in control software such as LabView necessary. Will align, test and maintain laser systems at the Accelerator Test Facility. National Synchrotron Light Source Department.

Boats & Marine Supplies

37' ULRICHSEN - wood, twin 318s, sleeps 8, runs well, must sell, $3,900 neg. Larry, 581-6432.

27' WHEELER CABIN CRUISER - 1962, fg hull, sleeps 5, excel. running cond., completely rebuilt 400ci eng., $3,500 neg. Joe, Ext. 4826 or 821-3762.

26' SEARAY - sleeps 6, 260 i/o, new o.d., dock side, ref., aft cabin, $8,500; 9' inflatable, w/5-h.p. ob. $1,000. Rich, 363-6845.

18' KAYAK - double non-folding frame by Folboat, good cond., very good for camping & touring, $250. Ernie, Ext. 5092 or 281-7873.

Furnishings & Appliances

AIR CONDITIONER - 15,000 Btu, v.g. cond., asking $150. Charles, Ext. 5211 or 321-6674 eves.

ANTIQUE SEWING MACHINE - $100. 689-7326.

BED - high-riser, new mattress, v.g. cond., $150. Brenda, Ext. 2471.

BED FRAMES - Ethan Allen, maple, twin, $35; Colonial, wood, full, $20. Robb, Ext. 4348 or 751-0636.

BEDS - Rose daybed, w/trundle & 2 mattresses, $250; pine bunkbed, $100; 5-piece bedroom set, $200. Bruce, Ext. 2188 or 588-8512.

BEDROOM DRESSER SET - triple dresser, mirror, matching chest, very sturdy, 2 sets bunk beds, full-size bedspread. Ext. 4432 or 473-9678.

BEDROOM - w/desk, chair, Wayside, $125; b&w TV; color TV; floor lamp, $40. Al, Ext. 4442 or 929-8411.

COUCH - convertible, sectional, queen-size foldout bed, needs reupholstering, orig. $1,800, sell for $25. Tim, Ext. 2005 or 474-2780.

DINING ROOM TABLE - 35½"x 60", pine, $125; 6 chairs, matching, $25/ea. H. Atkins, 751-3930.

DINING ROOM SET - table, 8 chairs, orig. $1,500, sell for $700; bedroom set, 4 pieces, $250; Olympia typewriter, elec., solid rock maple, $50. 878-8294.

ESPRESSO MACHINE - Krups, mini model #963, orig. $70, good cond. 744-4611 after 6 p.m.

FREEZER - GE, 18 cu. ft., upright, built-in lock, excel. cond., $350. Ann, Ext. 5740 or 744-8386.

FREEZER - Kelvinator, 42"Lx36"Tx27"W, shelf w/2 compart., glass partition, $75 or best offer. 281-3515.

MICROWAVE - GE, full size, excel., $85. 928-7734.

MIXER - $20; blender, $10. Culwick, Ext. 4930.

REFRIGERATOR - GE, 16 cu. ft., almond, 1987, auto defrost, $200; Brother's elec. typewriter, CE-50, 1985, $50. 744-3744.

SOFA BED - love seat, chair, ottoman, coffee table, end tables, $350/all. Maggie, Ext. 3275 or 924-6681.

SOFA BED - blue, $50; double stroller, Perego, $100; children's & infants' lifejackets. 689-7326.

WATER BED - Soma, 1 yr. old, $275. 821-8347.

BEDROOM SET - work bench, contemporary,used 2 mo., orig. $4,000, sell for $1,800. 689-1539.

CAPTAIN'S BED - 3 large drawers, $50. Sally Meyer, Ext. 4379 or 696-4936 after 6 p.m.

COUCH & LOVE SEAT - brown, $100/both. Dennis, Ext. 5278.

CRIB - white, good cond., mattress almost new, $85. Sharon, 924-5505.

DINETTE SET - wrought iron, 4 chairs, 36"x48", black top, 12" insert. Allen, 286-2265 after 7 p.m.

DINING ROOM - 6' china closet, 4' buffet, 48" round table, w/2 leaves, 6 chairs, custom-made pine,$1,150. Bob, 473-6950.

ENTERTAINMENT CENTER - Formica, $75; white hutch, $50; teak bookcase w/cabinet, $75; black/glass coffee table, $50. Lisa, Ext. 5867 or 467-8185.

FREEZER - 15 cu. ft., GE, white, upright, v.g. cond., $125. John, Ext. 3422 or 929-4101.

FREEZER - 16 cu. ft., Frigidaire, upright, w/built-in lock, white, 5 shelves, excel. cond., $250. 286-0904.

JACUZZI - single hot tub, 3'x6', faucet, new, $250. Roy, 286-8582.

REFRIGERATOR - 2.5 cu. ft., suitable for office/dorm, 3 shelves, ice compartment, one door, excel. cond., $60. Ext. 5076 or 744-4615 after 6 p.m.

ROCKER - bentwood, leather seat back, $25; 2 brown cane swag lights, $5/ea. 473-6546.

RUGS - 9'x12', plush, rose/mauve, $58; 6'x9' deep green, $40; both in excel. cond., w/foam padding. 929-4446. Ext. 3172.

SEWING MACHINE - Singer, w/cabinet, top of the line, many functions, orig. $1,400, sell for $350. Pete, 878-5917.

SOFA - 7', $50; double bed, w/bookcase headboard, no mattress, matching 6-drawer dresser, $200. Ron, Ext. 2525 or 286-0353 after 6 p.m.

TRESTLE TABLE - w/6 chairs & 2 leaves, $150; pine dresser, natural finish, 4 drawers, $60; GE washing machine, large capacity, $150. Nancy, Ext. 5744.

WASHER & DRYER - Sears, apt.-sized, 2 yrs. old, $400. Mauro, 265-6542.

Tools, House & Garden

LAWN MOWER - gas, working, $30. Culwick, Ext. 4930.

STAIR-O-LATOR - ⅓ h.p. 115 Vac, chair lift, fits on side of existing stairs, best offer. Ray, Ext. 3695.

WELL PUMP - 115/230 volt, ¾ h.p., Sta-Rite & Well Mate, f/g tank, 1 yr. old, $100. John, Ext. 4414.

WINDOW - Anderson casement bow, 84"x46", vinyl, new, $400; 36" countertop range, converts to grill, $300, make offers. Joe, 399-4169.

CEMENT MIXER - ½ sack, gas-powered, w/detachable tow bar, $450. 281-6378.

LAWN TRACTOR - 36" cut, riding, elec. start, headlights, owner's manual, $500. 878-1617 or 878-8302.

The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste.

COAL STOVE - Surdiac, excel. cond., black textured, glass front, $225; deep well pump, ½ h.p., excel. cond., $100. 744-2060.

TREES - Japanese maples, $10-$45+. Mauro, 265-6542.

TOOLS - auto-related diagnostic tools, timing light, gravity tester, coolant tester, battery load tester. Bill, 281-6498.

TRACTOR - Bolens lawn & garden, 12 h.p., hydrostatic transmission, 42" mower, 33" tiller, snowplow, rake, v.g. cond., $1,000. Roy, 286-8582.

WINDOW - white, vinyl slider, w/screen, 34"x34½", never installed, $50. Donna, Ext. 2716.

Sports, Hobbies & Pets

BMX BIKE - Fuji, all chrome, $40; mountain bike, Ross Mt. Washington mountain bike, 10-spd., black & red. Ext. 7225 or 929-6748.

BIKE - Diamondback BMX racing, 20", black, $90. Rich, Ext. 7013 or 698-5294 eves.

COMPOUND BOW - Golden Eagle, left-handed, w/quiver, sight-arrow rest, some arrows, $100. Mark, Ext. 4289 or 281-5060.

DIVER'S DRY SUITS - 2, Offshore Pro, polyester pile undergarments. Puleston, 286-1674.

GUITAR - elec., Dean, fine tune, tail, w/wham bar, case, $290; telescope, Jason 80mm refractor, w/tripod, access., $120. Tim, Ext. 2005 or 474-2780.

GUITAR AMP - GK250GL, $200; wireless system, Nady 201 , $225. Doug, Ext. 4661 or 434-7812.

GYM - Weider E5500 Flex Stack Master, hardly used, must see. Donna, 924-3704.

PIANO - console, walnut finish, good cond., nice sound, $600 neg. Lori, Ext. 7036 or 462-2359.

SCUBA - weight belt, brand-new, pellet weights, $65. 722-3905.

SKIS - Head Express, poles, $60; Raichle ski boots, woman's, 7½, $30; Schwinn Prelude bike, 14-spd., 19" frame, 27" wheel, $175. Debbie, 286-2959.

VIOLIN - Suzuki Nagoya, excel. cond.,½ size, $140. Steve, Ext. 4475.

WINE MAKING EQUIPMENT - large wine press, needs work, $20; 5-gallon jugs, $5/ea.; misc. equipment; free wine bottles. Tom, Ext. 7196 or 286-2505.

BICYCLE - Schwinn Sprint, women's, 10-spd., 17" frame, 27"wheels, orig. $180, asking $75, good cond. Ray, Ext. 4561.

BICYCLE - Schwinn Prelude, 14-spd., 19" frame, 27" wheel, $175; Head Express skis & poles, $60; Raichle boots, woman's, 7½, $30. Debbie, 286-2959.

BICYCLE - Fuji, 18-spd., 27", alloy wheels, tour series, center pull brakes, rack, excel., $175. 474-3799.

COCKATIEL CHICKS - just hatched, ready in 5 weeks, order now, $45. 281-3515.

DOG BED - $10; toaster oven, $10; 6'x9' rug, $10; TV table, $10; humidifier, $20. Kathy, 744-2203.

FISH TANK - 8"x16"x10", heater, filter, pump, etc. $25; hutch, for rabbit or small animal, outdoor, 2 sections, never used, $85. Joe, Ext. 2975.

FISH TANK - 125 gal., best offer. Russ, Ext. 2419.

RC CAR - radio-controlled, RC-12, never used, fully assembled, w/custom body, only needs electronics, $75 neg. Ext. 4672 or 399-6257.

REEBOK STEP - orig. $100 or best offer. Ext. 3359.

SAXOPHONE - $225. 924-6348.

TELESCOPE - 13.1", Newtonian reflector on Dobsonian mount, Coulter optics, Novak spider, Meade dual fowser, 6x30 finder, $650. Phi, Ext. 5669.

WET SUIT - full-length, used twice, excel., black boots, gloves, orig. $350., make offer. 289-8105.

Audio, Video & Computer

COMPUTER - Apple IIe, tilt screen monitor, 2 disk drives, Panasonic letter-quality printer, extras, $400. Doreen, 286-0259.

COMPUTERS - two, 486, 3½ & 5¼, computer parts, some need repairs, TV 13" monitor. Vinny, 582-6241.

OSCILLOSCOPE - Elenco model S-1325, 25MHz, dual trace w/NRI electronic course, all labs, books, test equipment, $275. Ray, 878-1947.

VCR - Panasonic, VHS, programmable, one-plus remote for VCR, TV & CD, $50. Phil, Ext. 5669.

Miscellaneous

BLAZER - woman's, size 20, black, almost new, $50; Birnbaum's *Guide to Disney*, $5; part boarder for horse, indoor, trails. Pat, Ext. 5406.

GOWN - teal blue, size 10, excel., $20. 744-5871.

TYPECASES - wood,16"X32", refinish as shadow boxes or use as sorting trays, quality varies, $8-$12. Sharon, 924-5505.

Free

BOAT - 1969, 19', fiberglass, I/O, engine needs work, boat on blocks, you haul away. Dennis, Ext. 5278.

DOOR - wood 36" exterior. Ron, Ext. 5010.

LAWN SWEEPER - push type, Sears, good cond. Joe, Ext. 2975.

SOFA BED - Jennifer, queen, needs reupholstering. Tim, Ext. 2005, 474-2780.

Yard & Garage Sales

YAPHANK - multifamily, 10/2, 9 a.m.-3 p.m., Main St., between Mill Rd. and Yaphank-Middle Island Rd. Sharon, 924-5505.

Lost & Found

LOST - glasses, near AGS, gray plastic frames in black leather case. Steve, Ext. 4121.

Car Pools

BOHEMIA-E.ISLIP-OAKDALE-SAYVILLE - needs 1 more driver, call for interview. Frank, Ext. 2314.

MATTITUCK-CUTCHOGUE - join 2-person pool, door to door pickup, 8-4:30. Richie, Ext. 2175.

STONY BROOK - from Strathmore "M" section or nearby areas. Ext. 5080.

Wanted

AQUARIUM - seeking 55-gal. freshwater setup. Bob, Ext. 7257.

BOAT - 16'-18', alum., w/comp. engine, trailer. 924-6751.

BICYCLE - inexpensive women's 26" mountain bike or hybrid. Loralie, 588-0445.

FLUORESCENT HOOD - 30" for aquarium. S. Holtzman, Ext. 4992.

LAWN MOWERS - and lawn tractors, old, complete only. Dan, 698-7322.

ROOM/STUDIO APT. - quiet, nonsmoking male, Patchogue/E. Patchoque-Brookhaven Hamlet area. 286-0999.

PERSON SELLING SEGA SYSTEM - I lost your number. Pat Carr, Ext. 7192 or 325-5546.

SCUBA LIGHT - for diving. Dave, Ext. 5460.

TIRES - P205/75R14 good to excel. cond. Susan, Ext. 7647.

TREADMILL - good cond. Laurie, 765-1554.

Services

Services are listed in the first Bulletin *of every month as a courtesy to BNL employees. They are neither screened or recommended by the* Bulletin. *Services forms are available in the* Bulletin *lobby, Bldg. 134.*

ALTERATIONS - men's and women's clothes, call for estimate. Theresa, 289-0898.

ANIMAL-SITTER - animal-loving 10 yr.-old will treat your pets like my own while you're away. Kate, 929-5945.

AUTO REPAIR - reasonable, free estimates. Rob, 395-4521.

AUTOMATIC LAWN SPRINKLERS - free estimates, professional layouts, repairs, alterations, additions, courteous service, $25 winterization. Lou, 928-7042.

BABY-SITTING - my home Mon.-Fri., 6 a.m.-6 p.m., meals included, near Lab. Annie, 399-1721.

BABY-SITTING - in my home in Wading River. 929-3910.

BASEMENTS - finished, quality work, baths, kitchens, apartments. Tony, 281-2513.

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

CARPET/UPHOLSTERY CLEANING - spot, pet stains, odor removal, auto interior, fabric protector, free est., Lab discount. Jerry, 874-8259.

CENTRAL AIR CONDITIONING - quality installation, fall specials and Lab discounts. John, 467-5827.

CHEESECAKES - delicious, homemade, various flavors, various sizes, 2 days notice. 286-3425.

CHILD CARE - loving mom will care for your infant or toddler in her Shirley home, fenced yard. Kathy, 281-1971.

CHIMNEY CAPS - fireplaces, wood, coal and oil flues, custom made for pre-fab oil flues, stainless steel, lifetime guarantee. Mike, 821-5526.

COUNSELING - exp., licensed CSW will help w/individual, marital or family problems, confidentiality guaranteed, insurance reimbursable. Linda, 929-5860.

CRAFTS - bridal/baby shower gifts and favors made, designed and colors to match any decor and wedding attire. 395-0584 eves.

DJ/MC - party & dance music from 40s-90s, all occasions, music & entertainment personalized for your affair, BNL refs. Lou, 698-8210.

GUTTERS - cleaned. 281-2746.

HOME IMPROVEMENTS - quality work, extensions, dormers, decks, kitchens, baths, roofing & siding, licensed and insured, refs., free est. Chris, 286-1348.

HOME IMPROVEMENT - carpentry, drywall, spackling, painting, plumbing, ceramic tile, free estimates, Lab discount. Don, 744-2921 after 5:30 p.m.

HOUSE CLEANING - reasonable, very efficient, refs. Marty, 399-3496 any time.

JEWELER - special orders, repairs, honest, affordable, no job too large or small. Kelly, 821-5239.

KITCHENS - three styles for under $3,000, includes cabinets, top, installation. Carl, 698-9274.

LAND CLEARING - trees, stumps, brush removed, topsoil graded and raked with 450 loader, $70/hr. Tom Muller, 878-1060.

LAWN MOWER - and lawn tractor repair, reasonable, have trailer, will travel. Dan, 698-7322.

LETTERING - stripping, airbrushing, trucks, vans, cars, motorcycles, helmets, boats, signs, nurseries, windows, paper signs, shirts, jackets. Gary, 549-9113.

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

MAILBOXES - post or house styles, custom-made, heavy gauge, steel or wood, free catalog, many styles, Lab discount. Mike, 821-5526.

PAINTING - int./ext., taping, spackling, sheetrock, wallpaper, stain, polyurethane, power washing, gutters, roofing, insured, refs. James, 399-4912.

PAINTING AND POWERWASHING - interior/exterior painting, free est., Lab disc., quality work. Tommy, 286-1423.

PLUMBING AND HEATING - alterations and repair work by retired BNL employee. Jim Morris, 472-1205.

PUBLICATION DESIGN SERVICES - newsletters, brochures, flyers, announcements, invitations, letterhead, forms, business cards, etc. Gina, 929-3649.

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

SKYLIGHTS - complete, prof. service, cleaning, preventive maint., installations. Joseph, 874-8259.

TREE CUTTING - Robert, 281-2746.

TUTORING - certified special education, tutor in home, flexible hours, price neg. Mary, 473-2489.

VIDEOGRAPHER - precious moments on video, weddings, parties, all occasions. Larry, 281-7240.

WALLPAPER - painting, odd jobs, babysitting, H.S. student avail. weekends. Kristina/Brian, 399-4480.

WELDING - repairs, window & door guards, railings, flitch plates, columns, trailer and equipment repairs, immediate service. Tony, 281-2513.

WINDOW CLEANING - all work squeaky clean, reliable, refs. 928-3189.

In Appreciation

Thank you very much for the wonderful retirement party. I hope everyone enjoyed themselves and had a good time. You made my day. — Jean Byrne

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