

## Booster Magnet Cores Completed



In the background is one of the 37 dipole magnet cores the Magnet Assembly Group recently completed for the Booster project. Working on the project were: (from left) technician Frank Skidmore, engi-

neer Bill Stokes, lead technician John Tradeski Jr., and technicians Doug Gordon, Steve Donato, John Donnelly, Lou Coppa, Dennis Remski and Bob Gamba.

— Photo by Peter Horton

It took about two years, half a million pounds of steel, and lots of dedication.

Today, 37 dipole magnet cores sit on the magnet assembly floor of Bldg. 902, ready for the next step in the fabrication of magnets for the Booster accelerator now being constructed at the Lab. When completed in 1991, the Booster will greatly increase the intensity of protons available for high energy physics at the Alternating Gradient Synchrotron (AGS) and enable it to accelerate the full range of heavy ions produced at the Tandem Van de Graaff. It is also the last link in the injector chain of accelerators needed for BNL's proposed Relativistic Heavy Ion Collider.

Headed by engineer Bill Stokes, the Magnet Assembly Group within the Accelerator Development Department (ADD) stayed on schedule with this mammoth project. The group is

part of ADD's Mechanical Engineering Section, headed by Eugene Kelly. All in all, "The group literally handled a million pounds of steel," says Stokes, referring to the fact that so much of the work was done by hand.

The magnet cores were made in a series of steps, starting with receipt of the steel in the form of 175,000 pieces, called laminations, each about the thickness of a sheet of cardboard and the size of a 40-inch TV screen.

The laminations were distributed into 360 different piles; then, groups of 50 laminations were bonded together with epoxy. The bonded laminations were used as ends to cap an assembly of some 400 laminations into one block. At this point, welders from the Central Shops Division welded the block together.

Since the Booster is circular in shape, the magnets have to be wedged-shaped to go around the ring.

This was accomplished by bending and breaking off portions of 12 pre-scored, bonded laminations at the ends of each block.

To form each finished magnet core, nine blocks — a total of 4,000 laminations — were assembled on a steel base that was welded and machined by Central Shops.

Stokes says that quality assurance was a major concern throughout the project. In addition to following written procedures, quality assurance was achieved in a number of ways: Laminations were stacked carefully, and, before blocks were formed, each pile was weighed and adjusted as needed. The fixtures to hold the laminations in place for bonding and welding were extremely accurate, helping to ensure consistency. Also, the internal horizontal surfaces of each block between which the beam will travel — called the pole faces — were each inspected for flatness.

Finally, to assemble the blocks into uniform magnets, Stokes wrote a computer program to search the entire inventory of blocks. The program took into account weight, thickness, pole flatness and other inspection data, in order to match the blocks the best possible way to ensure 37 uniform magnet cores.

## Coming Up

Winter Holiday Sales at the Science Shop in the Exhibit Center/Science Museum start today and will continue the next two Fridays, December 8 and 15. The shop is open from 10 a.m. to 3 p.m. all three days.

The Science Shop is located in the west side of Bldg 701. Park in the north parking lot. For more information, call Public Affairs' Tour Program, Ext. 4495.

A retirement ceremony will be held on Friday, December 8, for BNL Senior Physicist Ernest Courant, Accelerator Development Department, who was one of the inventors of alternating gradient focusing. Before a dinner in his honor that evening, Courant will give a talk on the "Evolution of High-Energy Accelerators." His lecture, which will begin at 4 p.m. in the Snyder Seminar Room, Bldg. 911, will be preceded by a reception at 3:30 p.m.

Richard Setlow, BNL's Associate Director for Life Sciences and a scientist in the Biology Department, will present the next Brookhaven Lecture on Wednesday, December 13, at 4 p.m., in Berkner Hall. His topic will be "Ozone Depletion and Melanoma: A Fish Story."

The Aspen Wind Quintet, winner of the 1984 Naumburg Chamber Music Award, will appear in concert in Berkner Hall on Wednesday, December 13, at 8 p.m. Tickets can be purchased at the door the night of the performance at \$9, general admission; \$6, students and those over 65; \$5, children under 18.

## Making the Connection From Linac to Booster



Roger Stoutenburgh

Critical to the Booster accelerator now under construction at the Alternating Gradient Synchrotron (AGS) are three injection lines: one for transporting protons between the AGS's linear accelerator, or Linac, and the Booster; one for delivering heavy ions from the heavy-ion transfer line (HITL) to the Booster; and one for sending the "boosted" particles from the Booster to the AGS.

Last month, the Booster Project reached another milestone with the completion of the Linac-Booster injection line.

At this point, all components for the line are finished, and all those up to the first dipole, or bending, magnet are in place. The remaining components will be installed by the end of January, and beam can pass through the line in spring 1990.

Shown here are the newly installed beam line (left) and the members of the AGS Department team that worked on this injection line: (clockwise from left) technician Robert Kowalski, designer Louis Blum, technician John Slavik, designer James Alduino, technician Dennis Remski, and project engineer John Brodowski. Technician Walter Shaffer was absent from the picture.

## Keeping Track of Particle Beams

How to monitor the beam within a particle accelerator — how to measure beam position, intensity, profile, transverse and longitudinal emittance, and losses — was the topic of the first National Workshop on Accelerator Instrumentation.

Held at Brookhaven, October 22-26, sponsored by the U.S. Department of Energy and hosted by BNL's Alternating Gradient Synchrotron Department, the workshop drew over 100 physicists and engineers from other national labs and industry.

In addition to talks on the various methods and instruments used in the U.S. to measure particle beams, the conferees held a roundtable to promote cooperation among the different laboratories in developing future beam-measurement devices. In addition, the workshop organizers hoped to spark industrial interest in supplying accelerator instrumentation needs in the future.

Shown here at the workshop are members of the organizing committee and two invited speakers: (standing, from left) Marc Ross, Stanford Linear Accelerator Center; Oscar Sander, Los Alamos National Laboratory (LANL); Robert Shafer, LANL; Gregory Stover, Lawrence Berkeley Laboratory (LBL); Gerald Bennett, BNL, organizing committee co-chair; (seated, from left) John Galayda, BNL, invited speaker; Marvin Johnson, Fermi National Accelerator Laboratory (FNAL), invited speaker; Olin Van Dyck, LANL; James Hinkson, LBL; Richard Witkover, BNL, organizing committee co-chair; and Robert Weber, FNAL. Missing from the picture is Joan Depken, BNL, workshop secretary.



Roger Stoutenburgh

## Parallel Computing

The current state of parallel computation will be discussed next week in two lectures by Ronald Peierls, who heads the Mathematical Sciences Division in the Department of Applied Science.

The one-and-one-half hour sessions will take place on Tuesday and Thursday, December 5 and 7, from 10:30 a.m. to noon in the seminar room of the Computing & Communications Division, Bldg. 515.

Peierls's two lectures will review types of parallel architectures currently in use, as well as some of the considerations — and pitfalls — associated with using them.

Particular attention will be given to the shared-memory multiprocessor architecture that is now available to BNL users on the Encore Multimax, an eight-processor UNIX machine, and on the four-processor VAX 6340, and that will become available when an additional processor is added to the IBM 3090. Examples of parallel codes will be given.

If there is sufficient interest, a workshop on this subject may be established. To register for the lectures or for more information, call Ronald Wittlock, Ext. 4112.

## Suggest a Speaker

Brookhaven Women in Science would appreciate suggestions for speakers for their lecture series. Please send your suggestions, along with your name, and the name, address and speciality of the speaker to Jane Setlow, Bldg. 463. Also, note whether or not the person is known to be a good speaker.

## In Stormy Weather

### Listen to:

Station	Area	AM	FM
WALK	Patchogue	1370	97.5
WBAB	Babylon	1440	102.3
WBLI	Patchogue		106.1
WCTO/ WGSM	Smithtown	74	94.3
WHLI/ WKJY	Hempstead	1100	98.3
WLIM	Patchogue	1580	
WLIX	Islip	540	
WLNG	Sag Harbor	1600	92.1
WRCN	Riverhead	1570	103.9
WRIV	Riverhead	1390	
WSBH	Southampton		95.3

Or call: **282-INFO**

## Circulate Your Blood

A two-day blood drive will be held at the Lab on Wednesday and Thursday, December 20 and 21. Two pledge cards are being sent to each employee so that friends or relatives may join the BNL campaign. Please sign up as soon as possible.

If you need any more information, call Susan Foster, Blood Drive Chair, Ext. 2888, or contact the Blood Program Captain for your department or division (see list below):

Dept.	Bldg.	Captain	Ext.	Dept.	Bldg.	Captain	Ext.
ADD	1005	Pam Campbell	4072	DOE	464	Claire Appleton	3438
	902A	Cynthia Murphy	5459	Fiscal	134A	Doreen Hallinan	2456
	902A	Bill Carapezza	7145	Inst.	535B	Patrick Gilleeny	2836
AGS	930	Ron Clipperton	2467	Med.	490	Harry Ulyat	3450
AUI	134A	Elliott Levitt	2495	MIS	459	Joan Barrow	3290
Bio.	463	Richard Sautkulis	3386	NSLS	510E	Lynn Kelly	2297
Chem.	555A	Nancy Sautkulis	4304		725C	Judy Thompson	5257
CCD	515	Bridget Ramos	7796	OMC	490	Mickey Sacker	3671
CSD	903	Al Campbell	2043	PE	134C	Christine McEvaddy	7189
	462U	Christine King	5033		452	Pete Stelmaschuk	4669
	479	Frank Monroig	3499		326	Ron Mulderig	3084
	479	Steve Gracia	3498		422	Chris Frosina	3254
DAS	179A	Pat Taylor	2452	Pers.	185	Marsha Kipperman	2871
	526	Arlene Waltz	2537	P&GA	197B	Phyllis D'Avanzo	2950
	815	Lore Barbier	5125	Phys.	901A	Sandy Asselta	4550
	480	Corinne Messana	5415		510A	Liz Mogavero	3940
	426	Maggie Marsch	3275	Reac.	750	Randi Vogt	4043
	475	Arlean VanSlyke	2387		703	Eileen Kelly	2399
	318	Judy Giordano	3051		120	Julie Teuber	2513
	120	Lynanne Conroy	7918	S&EP	535A	Len Emma	3334
	51	Flo O'Brien	2265		599	Michael Carroll	2351
DGP	355	Karen Fiorvante	3888	SMD	211	Mike Guacci	2976
DNE	130	Kathy Nasta	2267	SSD	179B	Joan Perullo	2549
	129	Barbara Apuzzo	2746	S&SD	50	Colleen Magee	2238
	197C	Lois Marascia	4904		703	Alan MacIntyre	4058
DO	134	Janet Sillas	2345	TID	477A	Celeste Samuels	7692

## For Scientific Enrichment



Roger Stoutenburg

Eleven undergraduates are participating in the fall semester of BNL's Science and Engineering Research Semester (SERS) program, as the Department of Energy-sponsored program enters its third year. The SERS program is administered by the Office of Educational Programs (OEP), assisted by the Affirmative Action Office.

Pictured here with Robert Thomas (seated, right), OEP, these student collaborators are enriching their general scientific backgrounds, while training on major research instruments and working on individual research topics with BNL research advisors, whose names appear in parentheses: (standing, from left) Jennifer Herek, Lawrence University (Jack Preses, Chemistry); Stephen Rott, Jamestown College (Leonard Mausner, Medical); Rogelio Montalvo, InterAmerica University (Jeffrey Coderre, Medical); Lana Lall, Pace University (David Weber, Medical); Robert Monteleone, University of Cincinnati (Darrel Joel, Medical); Gregory Harry, California Institute of Technology (Laurence Littenberg, Physics); Michael Kowalok, Franklin & Marshall College (Sharad Saraf, Medical); Anne Suozzi, Canisius College (Benno Schoenborn, Biology); Barry Walker, Point Loma Nazarene College (Louis Di Mauro, Chemistry); and (seated, left) Catherine Taylor, University of Virginia (Toshifumi Sugama, Applied Science). Not shown is Varalakshmi Vegesena, State University of New York at Stony Brook (Richard Strand, Physics).

## Hospitality News

"Holiday Crafts" will be the theme of the next Hospitality Committee get-together on Tuesday, December 5, at 9:30 a.m., at the Brookhaven Center.

Spouses of Laboratory employees and guests are welcome. Refreshments will be served, and babysitting will be provided free of charge, so bring the children.

## Service Awards

The following employees received service awards during the month of November 1989:

- Thirty-Five Years**  
 Peter A. Montemurro ..... AGS  
 Daniel R. Oldham Jr. .... Reactor
- Thirty Years**  
 Yung Yee Chu ..... Chemistry  
 Ronald S. Doherty ..... Nuc. Energy  
 Vannett D. Pfeiffer ..... Instrum.  
 Ernest K. Warburton ..... Physics
- Twenty-Five Years**  
 Gilbert R. DeGregory ..... AGS  
 Peter Fennelly ..... Plant Eng.  
 Cernal Hobson ..... Plant Eng.  
 Patricia F. Meehan ..... Physics  
 James J. Roesler ..... S&EP  
 Richard S. Richard ..... S&EP  
 Joseph J. Zeneski ..... Cent. Shops

- Twenty Years**  
 Charles C. Dodt ..... Mgmt. Info. Sys.  
 Joseph A. Mazzarella ... Sup. & Mat'l.  
 Thomas L. Smith ..... Con. & Proc.  
 Morris Strongson ... Comp. & Comm.

- Ten Years**  
 Sandra L. Asselta ..... Physics  
 Roger W. Davis ..... Accel. Dev.  
 Ellen M. Fredrickson ... App. Science  
 Martin T. Kissen ..... Plant Eng.  
 Peter Kohut ..... Nuc. Energy  
 John D. Lara ..... NSLS  
 Gregory B. Mack ..... Mgmt. Info. Sys.  
 William H. Medeiros ... App. Science  
 Peter T. Murphy ..... Plant Eng.  
 Rolf E. Olsen ..... NSLS  
 Mark Shleifer ..... NSLS  
 Diana M. Votruba ..... Accel. Dev.  
 David S. Warburton ..... AGS  
 Dennis P. Weygand ... Comp. & Comm.  
 Craig L. Woody ..... Physics

## Search Under Way For Asst. Director

A search committee, chaired by BNL Deputy Director Martin Blume, has been established to select an individual to replace Gerald C. Kinne as Assistant Director for Reactor, Safety and Security. Kinne is retiring in May 1990, after 36 years of service to the Laboratory, the last four in his present position.

The Assistant Director for Reactor, Safety and Security is responsible for the Reactor Division, the Safety & Environmental Protection Division and the Safeguards & Security Division. The search committee is seeking someone who can continue the fine job that Kinne has done in leading these divisions and meeting the challenges they face.

Thus, the committee is seeking candidates with extensive management experience with reactor operations, substantial background in environmental and safety matters, excellent interpersonal skills, strengths in dealing with all levels of management and a degree in a technical field. Experience with Department of Energy procedures would be helpful.

Applications and nominations will be accepted by Blume until January 31, 1990.

## In Memoriam

Frank G. Heimroth, a senior technical specialist in the Alternating Gradient Synchrotron (AGS) Department died suddenly on Tuesday, November 28, at the age of 52.

Heimroth came to BNL in September 1962, to work as a technician at the Cosmotron. In August 1963, he began training as a Cosmotron operator, which he became in September 1964. In July 1966, he was named a senior Cosmotron operator.

In December 1966, when the Cosmotron shut down, Heimroth joined the Accelerator Department, which became the AGS Department in 1984. He was a member of the Beam Components Group at the AGS.

Heimroth, who was a resident of Jamesport, is survived by his wife Joan and three children: a daughter, Pamela Simon, and two sons, Frank E. Heimroth and David J. Heimroth.

Visitation hours will be held today, December 1, at the Tuthill Funeral Home, 406 East Main Street, Riverhead, 2-4 p.m. and 7-9 p.m. Funeral services are scheduled for Saturday, December 2, at 10 a.m., at Our Redeemer Lutheran Church, Route 25, Aquebogue.

## Arrivals & Departures

### Arrivals

- John C. Aybar ..... Director's Off.  
 Lori E. Bower ..... S&EP  
 Gerhart Friedlander ..... Chemistry  
 Steven D. Savatteri ..... AGS

### Departures

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

- Charles Bachsmith ..... DAS  
 Howard W. Bell ..... Sup. & Mat'l.  
 Edward P. Bihn ..... Physics  
 Donald J. David ..... Physics  
 Maryanne Gibney ..... S&EP  
 Sidney Heller ..... Comp. & Comm.  
 Edward C. Iberger ..... Plant Eng.  
 Alpina Seal ..... Biology  
 Edward D. Sperry III ..... Physics  
 Leola Wells ..... Physics

## Deadline Extended for FSA Enrollment

Because of the Thanksgiving holidays, the enrollment deadline for the Flexible Spending Account (FSA) program has been extended to Monday, December 4.

Both the Health Care and Dependent Day Care Reimbursement Accounts will be effective January 1,

1990, through December 31, 1990, and are available to all regular Lab employees who work 20 or more hours per week. Those not electing coverage at this time must wait until January 1, 1991, to participate.

Please direct any questions to Personnel Services, Ext. 2877 or 7516.

# Say Cheese and You're Done



Roger Stouenburgh

"It's quick. You don't waste time."

That's how Earle Dickerson, who was one of the first BNL'ers to be photographed, described the Lab's ID card renewal process now going on in Room D, Berkner Hall.

On Monday, October 12, when the new ID station first opened for business, Dickerson, a mason in the Plant Engineering Division, decided to "get it done" before he became involved in his first job of the day. With no lines, his card was checked in, he signed, he sat down in front of the camera — and in about six minutes, it was all over.

"The speed of this operation is due to the new system, the latest, state-of-the-art Polaroid ID 2000," said Hank Raimondo, Safeguards & Security Division (S&SD), who is running the ID renewal program with the help of Jane Hodgekinson and Jean Frejka, also of S&SD, who have been trained to use the new machine. Here, as Hodgekinson snaps Dickerson's photo, it is memorized by computer. The image is then printed on a new ID card, ready for pick-up a few days later.

Because the new process works so much faster than expected, all employees are encouraged to have their IDs renewed now, without following the timetable of alphabetized names originally suggested. From 9 to 11:50 a.m. or 1 to 3 p.m., just bring the card that was in the package sent to you, but do not sign it until you get to Room D at Berkner. After December 29, the service will move to Bldg. 50, which is less accessible. So, maybe you should snap to it! — Liz Seubert

## Volleyball

A League III captains' meeting will be held on Wednesday, December 6, at noon, Berkner Hall, Room C. Discussion and scheduling of the special events will take place at this time. For further information, contact Karen Savino, Ext. 3513.

### Standings as of November 24

Open League		League I	
GTEAM	17-1	Upfagrabs	19-2
Magnum	17-1	Dinkers	15-6
Jet Setters	9-9	Cannonballs	14-7
Me and the Boys	7-11	Xrayted	11-10
Dig It	6-12	Rude Dogs	6-15
Phoenix	4-11	Up-Setters	5-13
Penetrating		Network News	3-18
Vollies	0-15		
League II		League III	
Fossils	15-3	Lethal Women	14-1
Nuts & Bolts	14-4	MISfits	11-4
Pteropods	11-7	Nutcrackers	9-3
Chunga's		High Volley'em	9-6
Revenge	11-7	Good Timers	5-7
Net Wits	8-10	Bad Gnus	4-8
Sourcerers	5-13	Renegades	3-9
Upton-Ups	5-13	Spikes	3-12
Slammers	3-15	Turkeys	2-10

## Cafeteria Menu

### Luncheons:

**Monday, December 4**

Soup: Cream of chicken	(cup) .75
	(bowl) .95
Entree: Baked ziti w/garlic bread & 1 veg.	3.00
Entree: Chicken breast hoagie	2.95
Fitness fare: Beef stew & 1 veg.	3.00
Carvery: Hot pastrami sandwich	2.85

**Tuesday, December 5**

Soup: Bavarian lentil	(cup) .75
	(bowl) .95
Entree: Sausage & pepper hero	2.85
Entree: Fried flounder w/1 veg.	3.10
Fitness fare: Sweet & sour pork w/1 veg.	3.10
Carvery: Open-face roast beef sandwich w/gravy	2.85

**Wednesday, December 6**

Soup: Cream of mushroom	(cup) .75
	(bowl) .95
Entree: Veal stew over rice	3.10
Entree: Fried liver & onions w/1 veg.	3.10
Fitness fare: Vegetarian lasagna w/1 veg.	3.10
Carvery: Hot corned beef sandwich	2.85

**Thursday, December 7**

Soup: Minestrone	(cup) .75
	(bowl) .95
Entree: Salisbury steak w/gravy & 1 veg.	3.10
Entree: Cheese tortellini w/meat sauce & 1 veg.	3.00
Fitness fare: Chicken oregano w/1 veg.	3.10
Carvery: Baked Virginia ham sandwich	2.85

**Friday, December 8**

Soup: New England clam chowder	(cup) .75
	(bowl) .95
Entree: Top-your-own pizza	3.10
Entree: Braised short ribs w/1 veg.	3.10
Fitness fare: Fish Florentine w/1 veg.	3.10
Carvery: Hot turkey sandwich w/gravy & cranberry sauce	2.85

**Dinners:**

Monday: Beef fajitas	(three) 3.10
Tuesday: French dip sandwich w/fries	3.50
Wednesday: Grilled Reuben w/coleslaw	2.95
Thursday: Chicken tenders & mozzarella-stick platter	3.50
Friday: Catch of the day w/1 veg.	3.10

## Overnight Trips To Atlantic City

Due to popular demand, BERA has planned two overnight trips to Atlantic City for early 1990: one on Sunday and Monday, January 14-15, 1990, at a cost of \$89 per person; the other on Saturday and Sunday, February 17-18, 1990, at a cost of \$109 per person. For a single room, the cost is an additional \$25.

Both trips will be to Resorts International Hotel & Casino and will include round-trip bus transportation, deluxe rooms, luggage and handling, room tax and bellhop gratuities, \$20 toward food and beverage, \$20 in coins, a welcome cocktail, and deferred coupons.

The bus will leave the Brookhaven Center promptly at 9 a.m. and return to the Lab the next evening at about 7 p.m. A stop will be made at the park-ride at LIE Exit 63 if requested.

Paid-in-full reservations are being taken weekdays, beginning today, at the BERA Sales Office in Berkner Hall, from 9 a.m. to 2 p.m. Reservations are nonrefundable, unless someone else wishes to purchase your tickets. A waiting list will be kept.

For more information, call Louisa Barone, Ext. 3347; M. Kay Dellimore, Ext. 2873; or Rosalie Piccione, Ext. 3160.

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

## Bowling

### Week of November 6

#### Red/Green League

R. Eggert had a 237, H. Arnesen 232, M. Guacci 217/200, H. Dawson 211, N. Combatti 211, T. Prach 203, E. Meier 201.

#### Pink League

Maryann Reynolds had a 192, Debbie Keating 188/174, Donna Cunningham 186, Tracy Ryan 179, Pam Meehan 177/176, Maria Apelskog 171.

#### White League

Ed Sperry had a 245, Mary Scheidet 212, Mary Grace Meier 199, Lynne Warkentien 197, Caryl MacDougall 193/185/181, Maria Apelskog 188, Renee Flack 187.

#### Purple League

Ben Belligan had a 234, Paul Callegari 206, Mickey Haller 210/181, Ed Sperry IV 201, Joe Ferrante 200, Betty Jellett 191, Pat Manzella 187, Ted Erickson converted the 4/7/9/10 split.

### Week of November 20

#### Pink League

Renie Rosati had a 186, Debbie Keating 182/174, Maryann Reynolds 180.

#### White League

John Niemczyk had a 257, Mary Scheidet 210, Gerry Riker 200, Bob Jones 200.

#### Purple League

Pat Manzella had a 241, Ed Sperry IV 225, Dick Adams 216, Mickey Haller 180, Cheryl Miezianka 180.

#### Red/Green League

T. Prach had a 221, R. Larsen 220, E. Sperry 212, P. Ouvrard 210, M. Guacci 208.

## Swim Club

Ron Wittlock set two new Empire State Masters Swimming backstroke records for men 55-59 at the first indoor meet of the 1989-90 swim season.

At the Flushing YMCA on Sunday, October 22, Wittlock swam the 100-yard backstroke in 1:15.00, a four-second improvement over the old 1:19.00 record; and his time for the 200-yard backstroke, 2:49.83, bettered the old record of 3:02.52 by nearly 13 seconds.

In addition, Wlodek Guryn finished third overall in the 50-yard and 200-yard breaststroke; Peter Heotis placed third overall in the 100-yard butterfly event; and the team earned 124 out of a possible 130 points.

<b>50-yard Freestyle</b>		
Peter Heotis	25.69	1st men 35-39
<b>100-yard Freestyle</b>		
Peter Heotis	57.69	1st men 35-39
<b>200-yard Freestyle</b>		
Peter Heotis	2:13.73	2nd men 35-39
Ron Wittlock	2:39.82*	1st men 55-59
<b>50-yard Butterfly</b>		
Peter Heotis	28.37	2nd men 35-39
<b>100-yard Butterfly</b>		
Peter Heotis	1:05.55	1st men 35-39
<b>50-yard Backstroke</b>		
Ron Wittlock	34.13	1st men 55-59
<b>100-yard Backstroke</b>		
Ron Wittlock	1:15.00	1st men 55-59
<b>200-yard Backstroke</b>		
Ron Wittlock	2:49.83	1st men 55-59
<b>50-yard Breaststroke</b>		
Wlodek Guryn	33.22	1st men 35-39
<b>100-yard Breaststroke</b>		
Wlodek Guryn	1:16.53	1st men 35-39
<b>200-yard Breaststroke</b>		
Wlodek Guryn	2:52.22	1st men 35-39
<b>100-yard Individual Medley</b>		
Wlodek Guryn	1:07.13	1st men 35-39

\* indicates personal record

## Toys For Kids

Though the 1989 Toy Drive organized by Brookhaven Town, and sponsored by BERA has been going on since November 13, the toy pile is still very small. Please help it grow by donating at least one new toy for a needy child. You can drop toys for children of all ages — infants through teens — at the BERA Sales Office, weekdays, 9 a.m. to 2 p.m.



## PSI December Social

The Upton Chapter of Professional Secretaries International (PSI) invites you to socialize with other professionals at the December Social, where magician Frankie Fane will provide the entertainment with magic and illusion. The social will take place on Tuesday, December 5, from 5 to 9 p.m., in the Recreation Building.

At the social, PSI will collect food, women's articles, toys, etc., for a local women and children's shelter. The cost is \$5, payable to Pat Oster, Bldg. 923. For more information, contact Sharon Jones, Ext. 2493.

## 1990 Holidays

Holiday	Day	Holiday Observed:	Date
New Year's Day	Monday		January 1
Floating Holiday (Martin Luther King Jr.'s Birthday)	Monday		January 15
Presidents' Day	Monday		February 19
Memorial Day	Monday		May 28
Independence Day	Wednesday		July 4
Floating Holiday	Friday		August 31
Labor Day	Monday		September 3
Veterans Day	Monday		November 12
Thanksgiving Day	Thursday		November 22
Day after Thanksgiving	Friday		November 23
Christmas Eve	Monday		December 24 (1/2 day)
Christmas Day	Tuesday		December 25

# BROOKHAVEN BULLETIN

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ANITA COHEN, Editor  
MARSHA BELFORD, Assistant Editor  
LIZ SEUBERT, Reporter

35 Brookhaven Ave., Upton, N.Y. 11973  
(516)282-2345

## Classified Advertisements

### Placement Notices

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

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

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

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

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

**SCIENTIFIC RECRUITMENT** - Candidates may apply directly to the department representative named, or through the Office of Scientific Personnel, Ext. 7813.

**STAFF POSITIONS** - (two), to develop independent research programs in macromolecular crystallography with emphasis on 1) x-ray applications; and 2) neutron applications or new techniques. Contact: J.S. Wall, Biology Department, Bldg. 463.

**STAFF POSITION** - in the area of protein biochemistry, structure and function. Contact: C.W. Anderson, Biology Department, Bldg. 463.

**POSTDOCTORAL RESEARCH ASSOCIATE** - position available for a psychiatry, neurology or nuclear medicine fellow to work in an established positron emission tomography (PET) program. Contact: Nora D. Volkow, Medical Department, Bldg. 490.

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

**4128 HEALTH PHYSICS TRAINER POSITION** - Requires BS/MS in health physics, environmental science or the equivalent. Previous instructional experience is necessary. Will develop and conduct new training programs in health physics and other safety related areas. Requires strong oral and written communication skills. Familiarity with instructional accreditation programs highly desirable. Safety and Environmental Protection Division.

**4129. SCIENTIFIC ASSOCIATE POSITION** - Requires a BS/MS in chemistry or equivalent and a minimum two years' laboratory research experience in analytical or physical chemistry. Knowledge of instrumentation and application of PCs and mainframe computers for data acquisition and handling is desired. Duties will include the study of chemical systems important to the environment with respect to budget of atmospheric species and potential climate modifications, and maintaining the laboratory. Department of Applied Science.

**4130. ENGINEERING POSITION** - Requires BS in fire protection engineering or related field and several years' experience in highly protected risk and life safety code evaluations (NFPA 101). Must be able to design, develop and conduct loss prevention programs. Excellent written and verbal communication skills a must. Ability to obtain DOE "Q" clearance highly desirable. Safety & Environmental Protection Division.

**4131. SENIOR TECHNICAL PHOTOGRAPHER** - Plans and executes all phases of highly skilled video photography. Coordinates work and provides technical experience. Photography & Graphic Arts Division.

### Motor Vehicles & Supplies

**88 HONDA EL GL** - 3-dr., h/b, red, 5-spd., p/w, sunroof, am/fm cass., 16k mi., v.g. cond., \$4,600. R. Meier, Ext. 4629 or 929-4258.

**86 BUICK** - has been in an accident, good motor, \$500. Feng Hsu, Ext. 7897.

**86 TOYOTA COROLLA** - 28,775 mi., \$6,500. 878-0955.

**86 CHEVY SPRINT** - 3-cyl., 5-spd., 2-dr., damage to front, best offer. Joe, pager 0925 or 728-1859 eves.

**86 VENTURE ROYALE** - loaded, 20k mi., excel. cond., \$4,800. Jim, 477-1381 after 6 p.m.

**85 PLYMOUTH HORIZON** - 5-spd., runs well, clean, asking \$2,100. Jack, Ext. 5565.

**85 RENAULT ENCORE** - 4-spd., 2-dr., h/b, 56k mi., good cond., \$2,750 or best offer. Ext. 2073 or 924-1383.

**85 HONDA CR125** - needs clutch, asking \$800. Ext. 4597 or 924-8213 after 5 p.m.

**85 NISSAN 200SX XE** - h/b, 29k mi., a/c, p/s, p/w, 5-spd., loaded, warranty, \$6,995. Bob, 744-4879.

**84 EAGLE 4wd, 4-dr., wagon, a/t, p/s, a/c, am/fm cass., 44k mi., clean, asking \$4,900. 473-2473.**

**84 FORD TEMPO** - a/t, 4-dr., a/c, am/fm, 70k mi., good cond., must sell, \$2,000 neg. Ohki, Ext. 3051 or 3111.

**84 OLDS OMEGA** - 67k mi., 2-dr., p/s, p/b, a/c, am/fm, good cond., \$3,100. Jim, Ext. 4606 or 654-5049.

**84 HONDA AERO 125 MOTOR SCOOTER** - good cond., new battery, 8k mi., rides two persons, must sell. Vita, 277-0464 or Frank, Ext. 7519.

**83 TOYOTA CELICA** - a/c, new tires, brakes, exhaust system & battery, very good cond., must see. Danny, 744-3027.

**83 PONTIAC SE2000** - p/s, p/b, a/t, a/c, good cond., sporty, 78k mi., ask. \$2,500. Xuan, Ext. 3677.

**83 NISSAN SENTRA** - 2-dr., good cond., must sell, \$800 neg. 727-7350 eves.

**82 PONTIAC** - s/w, 71k mi., V-6, p/w, p/b, p/w, am/fm cass., a/c, good cond., \$2,800. 751-8671.

**82 PONTIAC GRAN PRIX** - a/t, a/c, p/w, p/door locks, \$2,200. Bert, Ext. 5156 or 581-4436 eves.

**82 TOYOTA COROLLA** - 4-dr., a/t, p/s, p/b, a/c, am/fm cass., runs well, asking \$1,400. Ext. 4169 or 981-5696.

**82 DODGE ARIES** - wagon, p/s, p/b, a/t, am/fm cass., v.g. cond. in/out, ask. \$2,100. Tim, 727-7741.

**81 HONDA ACCORD** - 4-dr., 5-spd., good cond., \$1,500. Ext. 7939.

**81 FORD MUSTANG** - 110k mi., 6-cyl., a/t, radio, cass., \$700. Jean-Louis, Ext. 7797.

**81 TOYOTA STARLET** - runs well, any reasonable offer. Ext. 3784 or 582-3163 after 7 p.m.

**81 HONDA ACCORD** - 5-spd., 4-dr., p/b, p/s, am/fm stereo, new brakes, excel. running cond., \$1,500. Veronique, Ext. 3396.

**81 SUBARU WAGON** - 4-spd., 4wd, good cond., must see, \$2,000 neg. Lisa, 345-0326.

**81 PLYMOUTH TC3** - h/b, 5-spd., white/red, good cond., must sell, runs well, needs some work, \$800. Phil, 286-1348.

**80 VOLVO WAGON** - diesel, tan, good cond., \$3,200. Tom, Ext. 5275.

**80 PONTIAC SUNBIRD** - 2-dr. sedan, p/s, p/b, a/t, a/c, radio/tape, new tires, \$1,200 or best offer. Ext. 4672.

**80 BUICK SKYLARK** - a/c, p/s, 78k mi., good cond., 4-dr., \$1,000. John, Ext. 3821.

**79 TOYOTA DOLPHIN MOTOR HOME** - self-contained, sleeps 3-4, 4-spd., new paint, \$7,000 neg. 475-3415 after 6 p.m.

**79 HONDA CIVIC** - new tires & brakes, runs well, 97k mi., \$700. Fred, Ext. 7024 or 3178.

**79 FORD TRUCK F250** - many new parts, good work truck, runs well, custom wood bed, best offer over \$850. Mitch, Ext. 2372 or 751-8873.

**77 ALJO TRAILER** - 22' x 11', self-contained, a/c, new tires, excel. cond., \$3,450. Walter, Ext. 3848 or 281-9299 after 6 p.m.

**77 PLYMOUTH VOLARE** - s/w, runs, super 6, 6-cyl., recently rebuilt a/t, good winter transportation, \$250. Ray, Ext. 3536 or 289-7615.

**77 PONTIAC CATALINA** - 4-dr., a/t, p/s, p/b, am/fm cass., looks good, runs well, 17 mpg, high mi., orig. owner. Sandy, Ext. 3369 or 286-1022.

**77 PLYMOUTH FURY WAGON** - 360 engine, runs well, many new parts, new tires, body rust, high mi., \$500. Ext. 3185.

**77 OLDS WAGON** - 9-seater, 350 engine, a/t, a/c, needs muffler; 69 Chrysler, 442 engine, bad trans., good body. Skip, Ext. 3806 or 698-9820.

**75 VW BUS** - good transportation, good for parts, runs, needs work, best offer. Harold, Ext. 2022 or 286-9024.

**75 FORD ECONOLINE VAN** - raised roof, refrigerated, stove, sink, runs well, make offer. Ext. 7699 or 821-1435.

**75 MERCEDES 300D** - 4-dr., a/c, p/s, p/b, many new parts, new battery, asking \$800. Ted, Ext. 5555 or 286-0065.

**74 MERCURY COUGAR** - high mi., runs, \$75. 821-0250.

**70 DATSUN 240Z** - runs, needs work, new tires, restoration project, \$575. John, Ext. 2891.

### Tools, House & Garden

**MEDICINE CABINET** - 31" x 21", w/2 front sliding mirror doors, like new, \$30 or best offer. Ext. 2683 or 751-2469.

**SNOW BLOWER** - Toro #401, 4-h.p., \$100. 588-1251 eves & wknds.

**SNOW BLOWER** - Yardman, 5-h.p., 24", 2-stage, \$200. Ellie, Ext. 3395 or 325-1537.

**POINSETTIAS** - red, florist-quality, various sizes, low prices. Ray, 727-6818 after 3:30 p.m.

**COAL STOVE** - Surdiac Southport, 60,000 Btu, good cond., tan & brown, also 1/2 ton pea coal & bin, \$250/all. Sue, Ext. 3305 eves.

**SNOWPLOW** - 8', power angle, w/all hardware, fits 1973-79 Fords, can be adjusted to fit others, must sell, asking \$500. 474-5715.

### Sports, Hobbies & Pets

**SKIS** - K2, 610-FO, racing/recreational series, 180 cm, 4 yrs. old, \$50; Lange woman's ski boots, size 8, \$30. L. Kukacka, Ext. 3065.

**GOLF CLUBS** - Jack Nicklaus Golden Bear model, woods 1,3,4 & 5, irons 3-9&W, good cond. Tom, Ext. 5350 or 929-3298 after 6 p.m.

**ICE HOCKEY SKATES** - Bauer, worn once, boy's size 4, woman's size 6, \$45; Smith Corona manual typewriter, portable, Ext. 3699.

**WEIGHT FITNESS CENTER** - DP Gympac 1500, 110 lbs. of weights, excel. for presses, curls, legs & more. Don, 598-1783.

**CAMERA** - Minolta XL700 SLR, 25mm, 35-80mm, 80-250mm lenses, much more, \$350. Bob, Ext. 4551.

**CAMERA** - Nikon FG, 35mm, mint cond., manual & auto modes, \$300. Joyce, 475-8406.

**TELESCOPE** - 4" Schmitt-Cassegrain, equatorial mount, clock drive, \$500 or best offer. 472-1518.

**CLARINET** - student model, \$125; advanced, Signet, excel. cond., \$250. Jim, Ext. 3372 or 821-0250.

**CHILDREN'S SKIS** - 130cm, Rossignol, w/new bindings & poles, \$60. Leonard, Ext. 4457.

**WET SUIT** - woman's, 2-piece, size medium, like new, \$95. Barbara, Ext. 2886 or 929-4850.

**SKIS & POLES** - Lange, 170cm, man's, Solomon bindings, \$100. 281-8458.

**SLEEPING BAGS** - 2, \$10/each; bench & weight set, \$15. 543-7065.

### Miscellaneous

**BABY DRESSING TABLE** - \$50; Kolcraft stroller, \$15; Fisher Price girl's trike, \$15; boy's 20" bicycle, \$30; electric broom, \$20. 345-0326.

**CHRISTMAS TREE** - silver foil, \$20; stainless slicing machine, \$20; speaker, \$10; antique brass fireplace set, \$95; more. Kathy, 744-2203.

**CLOWN FIGURINES** - handmade, 2-2 1/2", fabulous. Bob, Ext. 2314.

**WHIRLPOOL FOOT BATH** - Songrond Thermojet, \$8; bookcase, old, dark, 2 glass doors, adjustable shelves, \$55. 878-6637.

**BABY PRAM** - Prego, brown velvet, good cond., \$25. 281-8458.

**AIRLINE TICKET** - to San Francisco, Dec. 10, \$120. Ron, Ext. 2527.

**BLOOD/GLUCOSE METER** - Exactech, w/strips, lancets, 3 mo. old, excel. cond., \$150 neg. Linda, 878-8847.

**MASON JARS** - about 3 doz., best offer. 286-3742 eves & wknds.

**MINERALS** - quartz, amethyst, crystals, geodes, pyrite, fossils, etc. Whitey, Ext. 2913.

**TICKETS** - New York Islanders, Jan. 6, 13 & 28, Feb. 17, 24 & 25, March 10, 18 & 27, 2 good seats, \$30/seat. Michael, Ext. 7909 or 325-0447.

**INFANTS' & CHILDREN'S CLOTHES** - sneakers, shirts, dresses, decorated w/rhinestones, lace & paint, great for Christmas. Donna, 563-1940.

**LEATHER COAT** - woman's size 11/12, rabbit fur collar, rust color coat, \$75. Donna, Ext. 2907.

### Audio, Video & Computers

**COLOR TV** - Scott 20", large screen, cable-ready, 1 year old, ask. \$200. Veronique, Ext. 3396.

**COLOR TV** - G.E. 25" console, excel. cond., \$150. Ken, Ext. 5110.

**CD PLAYER** - Citizen, compact, programmable, rechargeable battery, like new, \$125. Ext. 4153 or 732-5829.

**ATARI ARCADE** - Sears 2600 w/14 games, incl. Superman, Space Invaders. Breakout, more, \$150. Ext. 4619.

**RADIO/CASSETTE** - Emerson, \$20; 2 hair dryers, \$15/each. Carrie, Ext. 2073 or 924-1383.

### Lost & Found

**LOST** - in men's locker room, royal blue rain parka. Pat, Ext. 7635.

### Free

**CATS** - 2, gray, tiger-striped, brother and sister, six months young, neutered. Rob, 298-2166.

**CHAIN LINK FENCE** - 200', 5' high, you remove, 929-4850 or Ext. 2886.

### Car Pools

**BOHEMIA-OAKDALE-SAYVILLE** - need 2 more drivers for car pool, also can meet at Exit 59 LI Expressway. Frank, Ext. 2314.

### Real Estate

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

### For Rent

**BAITING HOLLOW** - contemporary, 4 bdrm., new house, \$1,550 + util. 751-4539 or 821-2002.

**BAYPORT** - large, upstairs studio, furn., carpet, priv. ent., single preferred, nonsmoker, no pets, refs., \$495/mo. includes util., 1 mo. sec., avail. Dec. 1. 472-1734.

**CENTER MORICHES** - 1 bdrm. apt., furn., w/d, \$550/mo. includes all util. and cable. 878-0331.

**CORAM** - Bretton Woods condo, 2-bdrm. 2 baths, l/r, d/r, eik, w/w, cac, 5 appl., golf, tennis, i/o pool, clubhouse, no pets, \$875 + util. sec. 289-0413.

**HOLBROOK** - huge 1 bdrm., l/r, full bath, eik, refrig., d/r, w/w, vertical blinds, 1st floor, priv. ent., yard, patio, walk to stores, \$700/mo. includes util., sec. Margaret, 588-7989.

**LAKE RONKONKOMA** - cozy, 2-bdrm. house, eik, d/r, \$850/mo. 737-2842 or 286-3231.

**MIDDLE ISLAND** - Coventry Manor, 3-bdrm. condo, 2 full baths, all appl., a/c, fenced patio, tennis, pool, avail. Nov. 15, \$950/mo. + util. Ext. 3922 or 878-2604 eves.

**MILLER PLACE** - 1-bdrm. apt., full bath, \$550/mo. incl. util. Don, Ext. 2808 or 331-9424 after 6 p.m.

**NORTH SHIRLEY** - 2 1/2-rm. apt., furn., bdrm, l.r, kitchen, w/w, priv. ent., util. incl., single person, nonsmoker, no pets, 5 min. from Lab & stores, \$500 pays all. 281-8044.

**PATCHOGUE** - 1-bdrm. house, gar., \$650/mo. + sec. 475-4199.

**PORT JEFFERSON STATION** - 3-bdrm. house, 2 baths, eik, l/r, d/r, near BNL & SUNY Stony Brook, \$1,300/mo. including util. 737-2842.

**QUIOGUE** - furn. studio apt, kitchen, bath, l/r-bdrm. combo, w/w, 30 min. from Lab, nonsmoker, \$575/mo., 1 mo. sec. Ext. 4960 or 288-5576.

**ROCKY POINT** - small house suitable for one person, l/r, kitchen, bdrm., bath, walking distance to town, 20 min. from Lab., \$450/mo. + sec. J. Depken, Ext. 4679.

**SELDEN** - 3-bdrm. ranch, fin. bsmt., avail. mid-December. Skip, Ext. 3806 or 698-9820.

**STONY BROOK** - studio, full bath, kitchen/bdrm., priv. ent., sep. heat & a/c, w/w, nonsmoker, \$550/mo. includes all, sec. required. 751-8873.

**WADING RIVER** - cozy 3-bdrm. apt., eik, full bath, one person, no pets, nonsmoker, \$500/mo. incl. util. Janet, Ext. 2345 or 929-3910.

### For Sale

**MASTIC** - 3-bdrm. ranch, 1/2 acre, 1 1/2 baths, den, fin. bsmt., deck, appl., house fan, 3 ceiling fans, shed, fence, near school, shopping, 15 min. to Lab, ask. \$115,000. 265-2366 after 6 p.m. wknds.

**MASTIC** - 3-bdrm. ranch, 1 bath, den, d/r, 1 car gar. on 0.375 acre, new windows, w/w, lots of extras, immac. cond., ask. \$128,000. Ext. 2253/3046 or 399-3303.

**MASTIC** - 3-bdrm. ranch, carpeting, a/c, full bsmt., fenced, six appl., more, \$99,200. 281-5752.

**MIDDLE ISLAND** - 3-bdrm. ranch, 18' x 24' great room, l/r w/fp, d/r, eik, 1 1/2 baths, skylights, ig pool, sprinklers, deck, more, 5 min. to Lab, \$144,990, mint. 924-8426 eves.

**MIDDLE ISLAND** - Lake Pointe, 2-bdrm., wood deck outside master bdrm., l/r/dr area, gas heat, w/d, pool., tennis, on a cul-de-sac, ask. \$78,500 neg. Bob, 924-7316.

**PORT JEFF VILLAGE** - 4-5 bdrms., l/r w/fp, d/r, eik, f/r, study, cac, 2-car gar., priv. beach club, near harbor, excel. schools, wooded 1/2+ acre, cul-de-sac, red. \$269,000. 331-3846 eves.

**SELDEN** - Village in the Woods, 1-bdrm. co-op, upper unit, eik, d/r, l/r, pvt. balcony, ask. \$75,000. 696-5386.

**SETAUKET** - 9 rms., 3 baths, 2-car gar., beautiful 1/2 acre, mint cond., N. of 25A, \$299,000. 751-1401.

**SETAUKET** - 7 rms., 2 baths, custom-designed, built for owner, 0.86 acre, quiet, scenic, passive solar energy, deeded beach rights. 473-4666.

**SHIRLEY** - 4-bdrm. center hall Colonial, M/D, eik, bsmt., gar., ig pool, woodburning stove, fd/r, oak floors, fam. rm. & den, no money down, \$150,000 or \$1,200/mo. 399-1868.

**STONY BROOK** - 4-bdrm., 2 baths, 9-rm. ranch, many extras, reduced, \$209,000. 751-7023 after 5 p.m.

**WEST SAYVILLE** - 3-4 bdrm. ranch, 2 full baths, gar., cac in all rms., full bsmt., eik, d/r, l/r, w/w, fam./rec. rm., pvt. patio, Sayville School Dist., walk to Bay, \$150,000. 589-2681.

**WEST SAYVILLE** - high ranch, 8 rms., l/r, m d/r, eik, 1 1/2 baths, 4 bdrms., a/c, 2-car gar., Sayville School Dist., \$152,000. Meade, Ext. 3452 or 499-8816.

**YAPHANK** - Whispering Pines, 3-bdrm. townhouse, d/r, l/r w/fp, 5 appl., part. fin. bsmt., gar., tennis, clubhouse, pools, 1 mile to Lab, \$129,900. Jane, Ext. 5406.

### Wanted

**PERSONS TO SKI** - or shop Quebec and Montreal, Feb. 16-19, \$309 includes trans., meals, lift tickets, tours, hotel. Bea, Ext. 3642 or 732-2472.

**RACQUETBALL** - health enthusiasts wanted for east end activity. Noreen, Ext. 4470 or 728-8771.

**REPAIR PERSON** - for old electric percolator, will pay up to \$20. Ext. 5502.