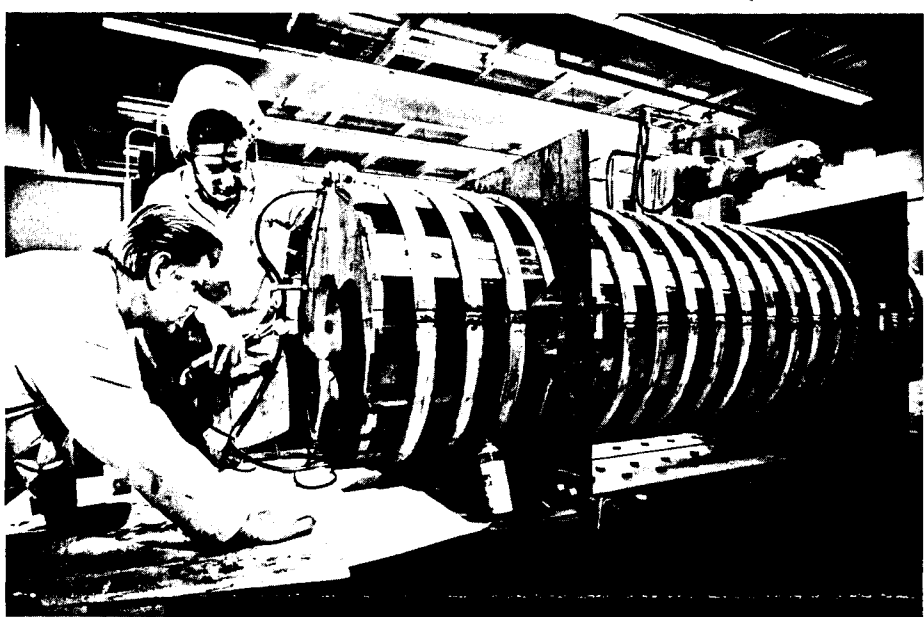




One of the pole tip pieces of the Electron Spectrometer and Jim Plastiras who did most of the machining.



From left, Laurie Pollard who was responsible for the honing of the superconducting magnet and Joseph Caraba who assisted.

Ingenuity Is Their Byword

"We create what we don't have," says Enrique Jimenez, supervisor of the Heavy Machine Shop.

He was referring to a project they have in hand - honing a superconducting magnet for the High Energy and Beam Separator. They are using a planer and a portable milling head to do the honing of the bore. Using a horizontal planer to do honing is unusual in itself, honing a large bore such as required is more often done vertically. But that particular equipment is not available, so the men use their ingenuity.

The bore is honed for three or four days to a very smooth finish - known in the trade as 32 microfinish. Instead of the conventional honing oil, trichloroethane is used because it evaporates and leaves no residue between laminations of the 10-ton magnets.

The honing of the magnets by the Heavy Machine Shop is just the next step "in striving for perfection in superconducting magnets," said Robert Lehn, Manager of Central Shops. The Heavy Machine Shop has been involved in making these magnets and others associated with ISABELLE.

Having such a versatile shop on site is a boon to the scientific groups. Changes can be made in specifications and when something unusual is required, "well, the unusual is usual for us," says Jimenez.

The Heavy Machine Shop is one of seven shops that make up the Central Shops Division. It is located in what was once a gymnasium of Camp Upton. Although there have been additions, the main building is the same that countless G.I.'S used. Only the maple floors are gone, thanks to a hurricane which tore a hole in the roof and rain ruined the floor. Now differing depths of concrete serve as a floor, as much as three feet deep in some areas.

Two-thirds of the big machines were selected by Lehn from government surplus stores, thus saving the Laboratory a bundle of green ones. Lehn estimates that at today's

prices, to purchase the machinery new would cost in the realm of two million dollars.

A beautiful piece of equipment, now in process of production, is an Electron Spectrometer which will be used by Walter Kane, Physics Department and other nuclear physicists at the HFBR, in a series of experiments on the structure of nuclei and the properties of their energy levels.

Working from specifications provided by Stanley Ulc, the project engineer, the men at the shop are machining the Spectrometer's two-pole tip pieces out of 22-inch thick silicone steel and the flux ring, a very large cylinder, of the same material. This particular steel is cast only in Austria and was ordered two years ago at a cost of \$90,000. The whole job is expected to take about 2500 hours of shop work to complete.

The pieces are machined on a profiling vertical lathe which, when purchased about five years ago from Japan, was the largest traveling column vertical lathe in the United States. The lathe weighs about 70,000 pounds and is capable of handling a piece of metal 13 feet in diameter weighing as much as 30,000 pounds.

The Spectrometer is just one of sixty jobs the shop has on hand at the present. Responsible for getting the work done are two group leaders, fifteen tool and instrument makers, five experimental machinists, a quality control inspector, two helpers, a tool crib attendant and an apprentice, as well as five equipment maintenance men.

Enrique Jimenez, the supervisor of all this activity, was born in Spain and has been working in the trade since he was 14 years old. He worked for many years as a tool and die maker in Brooklyn and New York before coming to the Laboratory 13 years ago. According to Jimenez the craftsmen at the shop like the diversity of the work so much that "the only time they leave is when they retire."

Report On The Transport Ban

At a meeting on December 18, the New York City Board of Health signified its intention to proceed with a proposed amendment to the Health Code banning the transport of certain types of radioactive materials through the city. The City Board of Health first proposed the ban at the beginning of last August.

Nassau County Executive Ralph G. Caso has announced that he has appointed a committee to consider whether a ban should be imposed in Nassau County. Suffolk County Executive John Klein has been quoted in the press as being similarly concerned.

These actions pose potentially serious problems for the Laboratory affecting the operation of the reactors and of other programs requiring large amounts of radioactive or fissionable materials.

Since the embargo was introduced, Brookhaven and ERDA officials have been making every effort to impress upon city and county officials the consequences of such an act. They have appeared at hearings before the New York City and Nassau County Boards of Health, have presented detailed written arguments on the subject and have invited city and county officials to visit Brookhaven for first-hand briefings.

ERDA has also taken the position in discussions with the City that Federal regulations govern interstate transport of radioactive and fissionable materials and that New York City is without legal authority to ban them.

In a strongly-worded protest dated 30 December to Dr. Lowell Bellin, the New York City Commissioner of Health, Laboratory Director George Vineyard emphasized the safety of the shipments. He stated that "the regulations governing the transportation of radioactive materials have been developed by knowledgeable national and international bodies after extremely detailed studies and analyses. They have been reviewed by independent scientists, including committees of the National Academy of Sciences."

"The national safety record, now extending over more than three decades during

which large amounts of radioactive materials have been transported, clearly demonstrate that the handling of these materials is a safe operation. Indeed, over a period of some 25 years Brookhaven has made, without incident, more than 1,000 shipments of the type subject to the ban. Thus we see no technical justification for a position that such shipments pose a threat to the health and safety of the citizens of New York City."

In stressing the scientific impact, Dr. Vineyard stated that "the imposition of the ban being considered in New York City would seriously impede the operation of reactors at Brookhaven, and that nuclear reactors are vital tools in much of the Laboratory's research. The High Flux Beam Research Reactor (HFBR) is unique in the Western Hemisphere; there is only one other reactor in the world, the French-German-British research reactor located in Grenoble, France, that approximates its capabilities."

"Our reactor program not only is providing a stream of new knowledge in physics, chemistry, and engineering, but it also is providing important new information on key biological molecules and cells, for example, the structure of ribosomes and cell membranes. The unique nature of the HFBR and associated specialized facilities is such that most of this medical research work, directly relating to the health of human beings, and other research, cannot be done anywhere else in the world."

Dr. Vineyard pointed out in his letter that the proposed action would have serious economic effects. Closing down Brookhaven's reactors, for example, would mean a direct loss of \$6.5 million per year in federal support for Laboratory research programs, with a correspondingly greater impact on the surrounding region.

In view of the demonstrated safety of the shipments and the severe impact of the proposed ban on science and on the economy of the region, Dr. Vineyard asked the Commissioner of Health most seriously to reconsider the proposed action.

Lab Site Inspected For SERI



The big bird that settled down in the field opposite the Physics Department on Monday carried a group of officials appointed by Governor Carey to select for New York State the site of the proposed Solar Energy Research Institute. The Laboratory site is one of those being considered.

Official & Special Events

Wednesday, January 14
Princeton University Tour
Navy Meeting
AUI Board of Trustees - Berkner Hall
(Jan. 14-15)

Thursday, January 15
Polytechnic Institute of New York Tour
Long Island Bone Metabolism Meeting - Berkner Hall
Medical Depart. Visiting Committee

Monday, January 19
Magnet Safety Studies Group Meeting - Berkner Hall (Jan. 19-21)

Wednesday, January 21
Hastings College Tour

Attention Aliens

Each year immigrant and non-immigrant aliens who are in the United States on January 1, must report their addresses to the U.S. Immigration and Naturalization Service during the month of January. This regulation applies even though there has been no change of address.

Any alien who is temporarily absent from the country must report his address within ten days after his return to the United States.

The parent or legal guardian of alien children under fourteen years of age must report for these children.

Alien address report forms are available from any U.S. Post Office. When completed the card should be stamped and mailed to the address indicated.

FICA Change For 1976

Effective January 1, 1976, Social Security taxes will be deducted on the first \$15,300 of each wage earner's income. In 1975, the Social Security base was \$14,100. This means the maximum Social Security tax a wage earner pays in 1976 will be \$895.05 compared with \$824.85 in 1975, an increase of \$70.20.

For those employees whose annual salaries are in excess of \$14,100 there will be a longer period of Social Security deductions from their paycheck in 1976 than there was in 1975. The impact of this change is reflected in the table below:

Weekly	
If your salary is:	FICA Annual Tax Increase
Less than \$271.15	No effect
\$280.00	\$26.91
285.00	42.12
290.00	57.33
294.23	Maximum 70.20

Monthly	
If your salary is:	FICA Annual Tax Increase
Less than \$1175	No effect
\$1200	\$17.55
1225	35.10
1250	52.65
1275	Maximum 70.20

SUNY Math Registration

Final registration for the Stony Brook/BNL extension courses will be held from 10:00 a.m. to 12:00 noon, Monday, January 12, in the Radiation Division Conference Room (Bldg. 318 opposite the bank). Dr. Daniel Dicker, Director of the Stony Brook Postgraduate Extension Program, and Mrs. Esther Weitzman will be present to enroll and counsel students.

Courses to be offered at BNL in the spring term are: MSA 505, Applied Algebra 1, Mondays, Professor H. Schreiber; and MSA 504, Foundations of Applied Mathematics, Thursdays, N. Grynspan. Both courses will be held from 5:30 to 8 p.m.

These courses are available to BNL employees, guests, and collaborators, and to a limited number of persons not affiliated with the Laboratory. Persons who did not preregister should call Mrs. Weitzman, 246-5967.

Selected Reading

- Nature 258, December 11, 1975
Naming the Loch Ness monster. 466-8
- Phys. Today 28, December 1975
The need for basic research in industry. J.E. Goldman. 23-5
- Science 190, December 12, 1975
The controversy over peer review. T. Gustafson. 1060-6
- Bulletin of the Atomic Scientists: Thirty years of clockwatching. B. Nelson. 1070-3
- Sci. Gov. Rep. 5, December 1, 1975
ERDA hires National Academy for vast energy study. 1-3
- United Kingdom Atomic Energy Authority
Annual Report 1974/75 (Pamphlet File)

Baby, It's Cold Outside



In preparation for any nor'easters that may come howling down on the Island, snowplows are inspected by Associate Director Vincent O'Leary, Site Superintendent Herman Haller and Roy Barone, Supervisor of Roads and Grounds.

ERDA Visitors



Discussing energy modeling systems at DAS with (from left) Kenneth Hoffman, head of the Engineering and Systems Division, DAS Chairman Joseph Hendrie, and Laboratory Director George Vineyard, are ERDA officials Dr. Richard W. Roberts, Asst. Administrator for Nuclear Energy and Donald L. Vieth, who visited here December 23.

Arrivals & Departures

Arrivals

Randy G. Abramowitz	Accelerator
Lois J. Baranosky	Applied Science
Moon-Hyun Chun	Applied Science
Bruce T. Cleveland	Chemistry
Ellen K. Cobb	Applied Math.
Edward S. Dale	Plant Engrg.
Thomas K. Gaisser	Physics
Lamar Gardner	Plant Engrg.
Gary A. Goldstein	Applied Science
Robert Gremme	Accelerator
David W. Grill	Applied Science
Mitchell A. Hoselton	Chemistry
Steven O. Howe	Applied Science
John H. Kelczewski	Plant Engrg.
Kenneth A. Kowalski	Plant Engrg.
Tien Quang Le	Applied Science
Willy Lin	Biology
Rea-Tiing Liu	Applied Science
Charles J. Marr	Central Shops
Annette J. Mazzeo	Applied Math.
Joan A. Murray	Tech. Info.
Hideki Okuno	Instrumentation
Jack G. Reffling, Jr.	Applied Science
Andrei L. Schor	Applied Science
John Scrofani	Accelerator
Andrew Stoddard	Applied Science
Loretta A. St. Pierre	Biology
Kathleen K. Taylor	Chemistry
Patricia A. Webster	Purchasing
Creighton D. Wirick	Applied Science

Departures

Shen-Maw Lin	Chemistry
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Reminder

By now '76 vehicle stickers should be attached to the left bumper of cars of employees and official guests. If you have not yet done so, stickers and registration cards are available from your department representatives, or at Police HQ. All other vehicle stickers are invalid.

University Research At BNL's Tandem

New evidence for nuclear structure, believed to be a "nuclear molecule," has been observed by bombarding a carbon-12 target with a carbon-12 beam using the Tandem Van de Graaff facilities at Brookhaven and Argonne National Laboratories.

The experiments were conducted by a group from the Massachusetts Institute of Technology. Professor Eric R. Cosman headed the team of M.I.T. physicists which included A. Sperduto, K. Van Bibber, T. Comier and G. Young. Also involved were J. Erskine and L. Greenwood from Argonne and O. Hansen from the Niels Bohr Institute. The initial experiments were conducted at Brookhaven's Tandem Van de Graaff during which an unusually strong resonance in the carbon on carbon bombardment was seen. The experiments were then moved to Argonne, where the other resonances were isolated.

The structure indicated by the resonances is an intermediate state between separate and fused carbon nuclei. It is formed when two carbon nuclei are joined at their surfaces, causing the rearrangement of their outmost neutrons and protons. The result is a highly deformed, excited magnesium-24 nucleus. It has been described as cigar shaped, or prolate, but further observations could prove it to be shaped more like a pear or dumbbell. The deformed nucleus exists for 10^{-21} seconds before it disintegrates into an excited sodium-23 nucleus, emitting a proton in the process.

By looking at the emitted protons with a high resolution spectrometer, the scientists deduced the "signature" of a deformed rotating nucleus. At certain bombarding energies, they found that the yield of protons associated with specific highly excited sodium-23 nuclear states increased markedly. These resonances are manifestations of enhanced fusion of two carbon-12 nuclei to form the unusual excited states in the nucleus magnesium-24. So far, they have isolated five different resonances which fall into a characteristic pattern which could be interpreted as a rotational band spectrum.

A rotation band is a unique sequence of energy states plotted as a function of their spin or angular momentum, and is a strong indication for the existence of a deformed rotating nucleus. The band appears to have a very high "moment of inertia" which is in agreement with the hypothesis that it resembles two carbon nuclei merged at the surface and rotating about each other. Such a pattern of intermediate structures has never been clearly identified in heavy ion reactions: such patterns have been sought for the 15 years since the early Chalk River experiments of Almquist, Bromley and Kuehner that led to the postulation of molecular states in the $C^{12} + C^{12}$ system.

The finding is expected to shed light on the behavior of the nucleus when highly deformed, and the understanding of the basic process by which two nuclei collide and fuse to form a new nucleus.

The M.I.T. group will continue looking at carbon-carbon bombardments for further proof that the new structure exists. They will also propose to start similar experiments at BNL with oxygen-oxygen collisions and collisions of heavier nuclei such as magnesium and silicon.

The M.I.T. group responsible for the new



Dr. James S. Kane (left), newly appointed Deputy Assistant Administrator for Physical Research, discusses research programs with Laboratory Director George Vineyard during a visit on December 18. He also spoke before the High Energy Discussion Group and stopped in at several departments.

BERA Election Candidates

The election of two new BERA Board members is scheduled during the week of January 19 through January 23.

In-person voting will take place at designated polling stations (listed below). No ballots will be sent to employees.

Eligible voters include BNL employees, guests, and full time employees of on-site facilities.



Robert Brown
(Medical)



Helen Keeley
(Accelerator)



John Elmore
(Medical)



C. Lewis Snead
(Applied Science)

Polling Stations and Time Schedules

- Cafeteria Lobby**
Monday through Thursday, 1/19 - 1/22
11:45 a.m. - 12:45 p.m.
- Biology (Reading Room)**
Tuesday, 1/20
2:30 p.m. - 3:30 p.m.
- AGS Lobby**
Wednesday, 1/21
2:30 p.m. - 3:30 p.m.
- Cashier's Office**
Thursday, 1/22
3:00 p.m. - 4:00 p.m.
- Bank**
Friday, 1/23
10:00 a.m. - 1:30 p.m.

Trip To New York City

The Hospitality Committee is planning a group railroad trip to the City on Wednesday, February 4.

Departure will be at 8:45 a.m. from the LIRR station in Patchogue. The round-trip fare for adults is \$2.45; children under 6 years ride free.

In addition, 25 tickets are available for a visit behind the scenes at the Costume Institute of the Metropolitan Museum of Art at a cost of \$2 on a first-come, first-served basis.

Sign up for the museum trip by sending your payment within two weeks to Ruth Dimmler, BNL Hospitality, P.O. Box 322, Upton, N.Y. Deadline for the train trip is January 28, 1976.

findings has been a user group at Brookhaven since 1969. In 1972 the group collaborated with physicists at BNL in experiments which led to structures similar to the "nuclear molecule" by colliding an oxygen beam with a carbon target.

BROOKHAVEN BULLETIN

Published Weekly for the Employees of Brookhaven National Laboratory

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DOUG HUMPHREY, Photo-Journalist

CAROL GOLDSTEIN, Copy Preparation

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Telephone 516 345-2345

CARL R. THIEN, Public Relations Officer

Letters To The Editor

To the Editor:

I wish to thank all employees and friends for forwarding me their empty cigarette packages for use in helping obtain a dialysis machine for a nine year old boy. The response and volume was just great. The present drive is over, but I know now, any future requests will not go unanswered. Thanks again, to all.

Rosalie Piccione,
Purchasing

To the Editor:

I would like to express my thanks and appreciation for the wonderful New Year's Eve party Mrs. Ruth Dimmler of the Hospitality Committee organized and ran at the Recreation Hall. Sincerely yours,
George Hrabak

Rambling Around

These are bits and pieces picked up from here and there with occasional observations by the Editor:

• This could never happen at Brookhaven, of course, but a cartoon in a recent issue of *The New Yorker* shows two men working back to back in a laboratory and the caption reads: "I see by the current issue of 'Lab News,' Ridgeway, that you've been working for the last twenty years on the same problem I've been working on for the last twenty years."

• The \$2 bill is coming back. Discontinued nearly ten years ago, the new note will be reissued on April 13, 1976. It is not only a Bicentennial gesture, but is expected to produce substantial savings in the gradual replacement of approximately one-half of the existing \$1 notes. The \$2 bill originated in 1776 when the Continental Congress authorized issuance of \$2 denominations "bills of credit for the defense of America."

• In case you didn't know it, the turkey you ate over the holidays may have been what they call the "All-American" - so named because it has white plumage with a red crest and a blue throat. It apparently not only looks better than its Plymouth Rock predecessor but has much greater nutritional value.

• From the following ad which appeared in a national magazine it would seem that Personnel is overlooking a good bet:

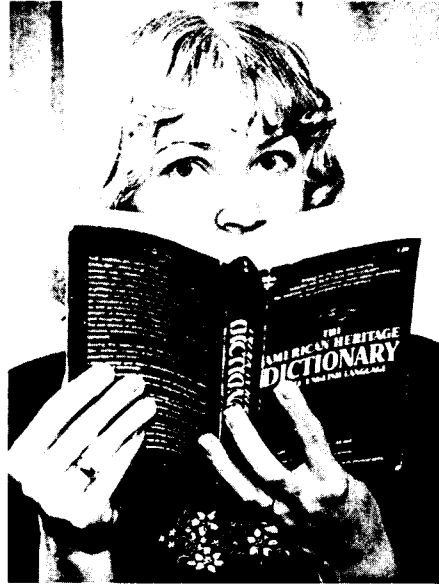
HYPERSENSITIVE CREATIVE Dinamye and highly talented young man is looking for any position as to develop his personality to the utmost systematically. Actual available schedule from 1 p.m. to 10 p.m. Positions I can perform: world information chemist, chemistry and mathematics teacher, food technologist (additives), movie radio television script writer, advertising agent, marketing and publicity manager, chemicals salesman, airline ticket agent, tourist agent, stewardess supervisor, restaurant administrator, hotelery, secretary, typewriter, tennis and swimming teacher, English teacher, etc. Let's forget details such as salary, etc! Still you find out what a wonderful and productive individual I am. Are you interested in an honest, hardworking and responsible individual...? Hurry up and communicate with Diego Guevara Banegas!

Emergency Numbers

If these numbers are not already in a prominent spot on your telephone, please put them there. Under the receiver is the usual place.

2222 - Medical Emergency
3333 - Fire Emergency
4444 - Police Emergency

Learning English Can Be Fun



English classes resumed on January 5 and Donna Coleman, wife of Patrick Coleman in Biology, joined Terri Pittenger in teaching classes. The group meets informally on Mondays from 9:30 a.m. to 11:30 a.m. in the Recreation Bldg. Anyone who either wants to learn or to practice English is welcome. Babysitting help is available. Call Terri Pittenger at 286-9471 if you need further information. The teachers and some of the students are: (clockwise from lower left) Donna Coleman; Miyako Iizumi (Japan), Girija Chikkappa (India), Terri Pittenger, Yoneko Ido (Japan), and Riitta Kukkonen (Finland).

Lab Energy Program

BNL is now undertaking an ambitious Energy Management Program. The purpose of this program is to utilize the available energy resources in the most efficient manner and still maintain our high level of research performance. As part of this program BNL has engaged the firm of Dubin-Mindell-Bloome Associates as consultants. Dubin-Mindell-Bloome Associates will do an energy conservation analysis and program study of the Chemistry Building. They will also produce a pre-feasibility study for a five-year energy conservation program of the site. The study will assemble and analyze building operation, mechanical and electrical data for each existing building and system. They will also review BNL's overall Energy Conservation Plan and design plans for projects in construction or nearing construction.

Nets Discount Tickets

Tickets for game #4 of the LIIRA Group Discount Series are now on sale at the BERA Sales & Services Office in the Cafeteria. Sales deadline will be January 15. The game will be played at the Nassau Coliseum on Sunday, January 18, at 7:05 p.m., between the Nets and Utah. Tickets are priced at \$3.00 each. The BERA Sales & Services Office, Ext. 3347, is open from 7:30 a.m. to 2:30 p.m. Monday through Friday.

Upton Nursery School

Upton Nursery School has resumed its classes for three and four year old children of Lab employees. All class spaces are currently filled. Any parents interested in enrolling their child should contact the enrollment chairman Linda Lynn 924-8329. The tuition is \$32 per month for three days and \$22 per month for two days. If there is sufficient interest an afternoon class for three-four year olds, not currently enrolled in the school, will be formed.

Slo-Break Basketball

by Dr. K.

In the first game of the double-header on December 11th, The Persuaders, although weakened by injuries and flu, defeated The Condors 61 to 53 in overtime. The Condors were always in foul trouble and two of their key players fouled out. The Persuaders had four players with double figures, Wayne Smith (15 points), Brent Johnson (16 points), Leroy James (13 points) and Reggie Clark (11 points). Mike Dags and Jim Vaughn paced The Condors with 18 and 13 points respectively.

In the second game The Spuds beat The Browns 50 to 47, despite the fact Ed Brown scored 38 points. The Spuds had 3 people with double figures, Jeff Gaffney with 16 points, Dennis Nordstrom with 15 points and Bob Doty with 11 points.

On Thursday, December 18, The Browns defeated The Condors 58 to 52. The Moose again went on the loose for 39 points this time. For The Condors scoring was provided by Jim Vaughn with 16 points and Mike Dags with 13 points. Dr. K. also operated for 16 points.

Free USPS Class

Enroll now in the next U.S. Power Squadron class for more fun from safe boating.

Patchogue - Classes began on January 5, 8 p.m., Saxton Street Middle School, Patchogue. It's not too late to register.

Old Field - Registration and first class on January 27, 8 p.m., Rocky Point High School; JFK High School in Port Jefferson Station; New Field High School in Centereach.

Moriches Bay - Registration and first class on February 3, 8 p.m., Center Moriches High School.

Judo Classes

Judo classes will resume on Tuesday, January 20, at 5:00 p.m. in the gym. All interested, members or new comers, are invited to participate.

Harriers Complete 3000-Mile Run

Eight and a half weeks after the start of the BNL/LLL 3000-mile challenge run, the BNL runners (25 in all) finished with the fine average of 7.47 minutes per mile.

Compare this with the 41 runners from LLL, who in the same period covered more than 6000 miles with an average time of 7.55 minutes per mile.

Based on the original ground rules - i.e. the lab with the best average would be declared the winner, the BNL runners have met the challenge and won.

However, it should be noted that 21 LLL runners, 16 of whom were training for an upcoming marathon ran more than 5000 miles in about five weeks, with an average of 7.52 minutes per mile, slightly slower than the average for all BNL runners and is most commendable considering the distances run per week.

Both teams are to be congratulated for a fine performance. The original intention to inspire more people to participate certainly has been realized as the number of BNL runners increased by at least 50% and those at LLL increased by a factor of two.

Special mention should be given to the female participants, four from BNL (Jean Burt, Fran Caruso, Gail Waite and Wen-shi Yu) and one from LLL (Ruth Anderson).

Ms. Yu started at six miles per week with an average of about ten minutes per mile and eight weeks later was up to close to fifty miles per week for a 205-mile total and approaching an amazing 7.5 minutes per mile (dig that you male chauvinists!). Of course, Ms. Anderson from LLL (a marathon record holder) topped all females with a total of 296 miles with an average of 7.88 minutes per mile.

Special thanks again to Bob Powell for keeping all the records.

BNL 3000-Mile Runners

Participant	Distance (mi)	Rate (min/mi)
Gail Waite	82.7	8.99
Art Harris	105.6	7.82
Peter Adams	65.0	8.16
Bob Bari	128.75	7.16
John Beerman	105.5	7.24
Haresh Bhagat	118.0	7.19
Jack Brennan	56.6	7.41
Jean Burt	59.6	7.32
Fran Caruso	52.5	8.44
Jack Detweiler	117.6	8.45
Frank Endres	101.0	9.03
Bill Kropp	101.1	7.46
Don MacKenzie	147.2	6.91
Dan Cornish	115.0	7.38
Boyd Osgood	46.1	7.46
Jack Phillips	176.0	8.02
Bob Phillips	53.4	8.36
Bill Piel	97.5	7.84
Gus Prince	236.8	6.86
Bill Thomlinson	179.7	6.94
Bob Tucker	90.7	7.65
Ron Weider	118.3	7.50
Ernie Warburton	127.3	6.47
Wen-shi Yu	204.5	7.96
Andy Mc Nerney	267.07	6.86

Save Fuel

When leaving the Lab at the end of the day, turn down the thermostat to 60 degrees.

In the morning, set the thermostat to 68 degrees maximum.

Cafeteria Menu

Week Ending January 16, 1976

Monday, January 12	
Corn Chowder	
Beef Liver & 1 veg.	1.05
Scrambled Eggs, Sausage, fr. fr.	1.05
Tuesday, January 13	
Beef Noodle Soup	
Knockwurst & Sauerkraut	1.05
Baked Lasagna & 1 veg.	1.15
Wednesday, January 14	
Cream of Potato Soup	
Beef Chop Suey on Rice	1.05
Davy Jones Fish Fry Special	
\$1.25 plus tax	
Thursday, January 15	
Chicken Vegetable Soup	
Cheese Ravioli & 1 veg.	1.00
Roast Chicken w/ Stuffing & 1 veg.	1.10
Friday, January 16	
Clam & Celery Soup	
Spaghetti w/ Clam Sauce	1.00
Pork Chop & 1 veg.	1.25

Classified Advertisements

Placement Notices

Each week the Personnel Office lists personnel placement requisitions, currently being processed. The purpose of these listings is, first, to give notice of all non-scientific staff positions being filled and, second, to give employees an opportunity to request consideration for themselves through the Personnel Office. In filling vacancies, the Laboratory's objective is to give first consideration to present employees, as follows: employees within the immediate group having the vacancy, employees within the department or division, employees within the Laboratory as a whole.

For further information regarding a placement notice, or to request consideration for an available position, contact Supervisor, Personnel Placement & Development, extension 2874 or 2882.

1. COMPUTER SCIENCE ANALYST - Minimum BS degree or equivalent in mathematics or related field and at least three years' experience in scientific programming and system development. CDC SCOPE operating system experience very desirable. System Development Group. Applied Mathematics Department.
2. RESEARCH SERVICES ASSISTANT - Medical Dept.
3. SECRETARY - Temporary position. Department of Applied Science.
4. CHEMISTRY TECHNICIAN - Minimum AAS degree or equivalent in chemistry with experience in electrochemical measurements analysis and construction of lab equipment. Department of Applied Science.
5. MECHANICAL DRAFTING ASSISTANT - Temporary part-time position. Plant Engineering Division.
6. GROUNDS OFFICE CLERK - Application deadline: January 14, 1976. Plant Engineering Division.
7. RIGGER'S ASSISTANT - Application deadline: January 14, 1976. Plant Engineering Division.
8. DEVELOPMENT ENGINEER - BS degree or equivalent in engineering and 3-5 years' experience in electronics. Assignment involves administration of electronics pool of CAMAC, NIM and other equipment, technical liaison with experimenters, and some engineering design. Accelerator Department.

Autos & Auto Supplies

- 69 FORD RANCH WAGON - 302 engine, ac, ps, new tires, eng & body excel. Ext. 4308.
- 71 MAVERICK - 6 cyl, 4 dr, auto, r&h, extra rims & snows, 1 owner, excel cond. \$1250. Lou, Ext. 4605, 283-6989.
- 2 VW BUG SNOW TIRES - W/rims. \$5 ea. 924-8742.
- 64 VW BEETLE - White, sunroof, runs well. \$350. Ext. 4761, 924-3556 eves.
- 75 DELUX CHEVY 1/2 TON TRUCK - 4 spd six, radio, snow tires, dual side mirrors, step bumper, h.d. springs, 9600 mi. \$3100. 728-6440 after 6.
- 70 CHEVY WAGON - 9 passenger, needs work, call for bargain price. 878-4383.
- 70 FORD MOTOR - Engine size 250, 6 cyl, in good cond. Ext. 2345, 286-2373 after 6.
- 74 FORD VAN - Customized inside and out, 6 cyl, standard, 26,000 mi. \$2700. Carey Wilson, 728-3175.
- 66 CHEVELLE - 4 dr, 6 cyl, auto. \$175. 744-2083.
- 2 SNOW TIRES - W/w, Firestone, Town & Country, 8.55x14 (H) on GM rims, balanced, 5 hole, 5" bolt circle, excel cond. \$40 firm. Vinny, Ext. 4285, 281-8928.
- 2 SNOW TIRES - Plymouth/Dodge D735-14, w/rims. \$30. John, Ext. 4634/4667, 727-4515.
- 2 STEEL WHEELS - 14x6", \$15. J. Olson, Ext. 3382, 289-8629.
- 67 OPEL CADET - R&h, snow tires, very economical, mechanically good, but body rough, hence asking only \$225. David, Ext. 3501.
- 72 CHEVY MONTE CARLO - Ps/pb/ac, 34,000 mi, new radials, new front shocks. \$2595. Ken, 473-3766.
- 73 JEEP WAGONEER - V8, 4 dr, pb/ps, tinted glass, luggage rack, deluxe interior & exterior, excel cond. 20,000 mi. Paul, 654-0863 after 6.
- 74 MONTE CARLO - Swivel bucket seats, ac/ps/pb, wire spoke rims, rear defogger, new snow radials, full vinyl roof. \$3500 firm. Jim, Ext. 3840.
- 68 HONDA - 350cc, custom paint, king & queen seat. \$450. Frank, Ext. 4581, 588-3565.
- 2 RIMS - 15" Ford w/new valves, 2 1/2 center hole. \$5 each. Geor, Ext. 4612.
- 67 CADILLAC - Sedan de Ville, ac/ps/pb, auto, stereo, snow tires, very good cond. 70,000 mi. \$850. Ext. 3078.
- 68 VW FASTBACK - \$600. 473-8716.
- 73 DUSTER - V8, ps/pb/ac, tinted glass, space saver pack, very good cond. 878-0130 days, 878-2215 eves.
- 71 FORD STATION WAGON - Excel cond, 10 pass, ps/ac, priced to sell. Don, Ext. 2022, 878-2215.
- 68 FORD WAGON - Country Squire, V8, auto, ps/pb, good running cond, good tires. \$475. 286-8256 after 5.
- 63 DODGE DART - Slant 6, good local trans. Asking \$150. Ext. 4241, 732-8877.
- 64 DODGE DART - 225 slant 6, excel mech cond. Asking \$300. Joe Bush, Ext. 4241, 732-8877.

Boats & Marine Supplies

- 9' SAILING PRAM - W/gaff rigged mast, sail, etc. \$175. Bill Espensen, Ext. 3992.
- 15' MFG - 25 hp Johnson motor, contrals & speedometer, motor in mint cond. \$475. Bill Espensen, Ext. 3992.

DEPTH FINDER - Columbian #Ch-323, 60 & 120', like new, \$80. John, Ext. 3354.

30' CRISRCRAFT - Labstrake hull, twin screws, fresh water cooled. \$5100. 585-2047.

Miscellaneous

- ICE SKATES - Canadian Flyer, boy's size 1, never used. \$4. Ron Manning, Ext. 3887, 286-0353.
- FREE TV - Old RCA TV, needs work. Fran, Ext. 4167.
- STEREO CONSOLE - Am/fm radio record player & 8 track tape, new \$250. 567-4230 after 5.
- SNOW THROW - 4 hp Ariens, 2 yrs old, elec start, chains, grease kit, new cond. \$200. 475-8211 after 5:30.
- 2 TENNIS RACKETS - Scazenger w/press. \$8 each. Ext. 3078.
- SKI BOOTS - Lace, size 6, good cond, \$3; buckle type, size 5, good cond, \$5. 286-8256 after 5.
- ARTLEY FLUTE - Silver mouthpiece, very good cond. \$150. 286-8256 after 5.
- ICE SKATES - Men's figure, size 6, excel cond. \$5. 286-8256 after 5.
- 2 SNOW MOBILE SUITS - Ladies small 12-14, girls teenage small. \$20 each. Al Campbell, Ext. 3354.
- ASHLEY WOOD BURNING STOVE - Thermostat controlled, like new. \$180. Frank, Ext. 4581, 588-3565.
- 38" MOWER - Mott Hammerknife, pull behind rider, 8 hp, Briggs & Stratton engine, \$80 sharpening tool incl. \$325. 286-3377 after 6.
- JOHNSON CB - Messenger 2, crystals for 4 channels incl. \$100. 286-3377 after 6.
- STEREO - Dual 1229 turntable w/base, Pickering XV15/750 cartridge, \$140; Sony ST1130 integrated amp & ST5130 tuner, \$475. 924-5018.
- 2 METAL BED FRAMES - Adjustable single-full. \$5 each. Irene Steele, Ext. 3415.
- SIBERIAN HUSKY PUPS - AKC registered, champion lineage, black/white, silver, blue eyes, beautiful markings, 8 weeks old. Ext. 3481, 751-7140.
- ALL WEATHER COAT - Misty Harbor, women's size 10, poppy color, full length rain coat, zip-out lining, worn once, cost \$75, will take \$40. Linda, 698-9121.
- DINING RM TBL - W/6 chairs, pad to match, matching glass top server, dark wood. \$100 for both. 363-6845.
- DRESS FORM - Size 12, new \$15. 289-6692 before 4.
- ELEC RANGE - Admiral, good working cond, 4 burners, \$25. 289-6692 before 4.
- MUSIC STAND - Folding metal. \$2. 589-3269 after 6.
- ICE SKATES - Figure skates, Riedel shoe, black, size 5. \$8. Fred, Ext. 4407, 864-1214 after 6.
- BASSETT PUPS - AKC registered, born 12/3/75, tricolor, males & females. \$150. firm. Jim Beck, 289-0833 after 5.
- WICKER PORCH FURNITURE - 2 couches, 6 chairs, 3 tables. L. Suydam, Ext. 4228, 286-1295.
- BEDRM CHESTS - 1 men's, 5 drawer, light walnut, \$45; women's dark mahogany, \$30. 727-4515.
- COLOR TV - Zenith 25" console, colonial maple cabinet, excel cond. \$100. Richie, Ext. 4254, 734-7342 after 6.
- SKI BOOTS - Men's, size 10, Nordica, \$15. Ext. 4228 286-1295.
- TAPPAN ELEC RANGE - 30" avacado, corning ware top, timer, clock, continuous clean oven w/window & light, rotisserie & drawer, \$650 new, selling as have converted to gas. \$150. 363-7620.
- MEN'S SKI BOOTS - Leather w/laces, size 9 1/2, worn only once. \$10. Ext. 3583.
- 25" EMERSON COLOR TV - Completely re-wired, 8 months ago. \$150. 473-4740 after 6.
- WHITE UNIFORM DRESSES Sizes 9 & 10, one new, \$5; one used, \$1. Gordon, Ext. 4613.
- MAJORETTE BOOTS - White, size 6. \$5. Gordon, Ext. 4613.
- BAND SAW BENCH & MOTOR - \$125; 62 Chevy pickup truck, 45,000 mi, auto trans, \$275. 475-5611.
- CHAIN SAW - 14", ranger, \$50; chain saw, 14" electric, \$50. Jean, 727-0063.
- COMPOSTER - Sears, 5 hp, used twice, cost over \$200, sell \$160. Jean, 727-0063.
- DISHWASHER - Kitchenaid built-in, 2 yrs old, avacado, very good cond. 924-6392.
- MEN'S SKATES - Hockey size 9, \$5; figure, size 10, \$6. Ext. 3380, 286-1454.
- ELEC STOVE - Frigidaire, 40", white, oven timer, deep well, storage drawers. \$30. 286-0880.
- DIGITAL CLOCK RADIO - Am/fm, doze button, wake up to music, like new. \$25. 589-3269.
- RADIO - Push button, am, for automobile. \$10. 589-3269.
- GAF SUPER 8 - Movie camera, ST602, used twice, like new, switching to sound, orig \$225, sell \$125. Naomi, Ext. 3699.
- TWIN CARRIAGE - Good cond. \$30. 265-0369.
- GARAGE DOOR - 9'x8', 4 sections w/key & lock. Beerman, Ext. 4076.
- STAIR WELL GLIDE - Accommodates 16' of stair, elec chair operated. \$300. Neilson, 688-2048.
- FIGURE SKATES - Black, size 3, like new. \$8; white, size 3, \$5. Ext. 2318.
- 35 MM REFLEX CAMERA - Zeiss Ikon Contaflex Super B w/f 2.8 lens, lens shade, case, set of 4 Zeiss close-up lens in case & Citation electronic flash. \$95. Jim Hallock, 878-0222.
- PIPE SMOKERS - Pipes for sale. \$3 each. Mike, Ext. 3198, Ira, Ext. 4203.

SPEAKERS - Fisher 55, Bookshelf type walnut cabinet, like new. \$70/pair. Ext. 3120, 286-0626.

ADDING MACHINE - Olympia, nine key, like new. 265-8685.

GIRL'S FIGURE SKATES - White, size 2 & 4, hardly used. \$4/pair. Ron Manning, Ext. 3887, 286-0353.

CAMERA - Nikon F w/F1.4 lens, 74 model, like new, Asking \$400. Mike, 878-2486.

AKC LAB RETRIEVER PUPS - Yellow, blacks, male & females, 6 weeks old. \$125 & up, champ lines, Mrs. Jablonski, 473-5089.

ELECTRIC STOVE - 30" Hotpoint, good cond. \$75. C. Kramer, Ext. 3941, 744-8632.

ENCYC BRITANNICA - 28 beautiful leather vol w/ custom made bookcase, lifetime of knowledge. Al, 273-5574 after 6.

BAR CHAIR - Wood & metal, 30", \$3.50; oak table w/2 leaves, excel cond, \$40; GM loveseat, \$3.50. Lucy, 924-8742.

VIOLIN - Full size, needs pegs, good for beginner, \$35; girl's ice skates, size 1 1/2, very good cond. \$5. Pete, Ext. 4326.

CUSTOM JEWELRY - Silver, turquoise, heishi, etc. very reasonable. Nat Greenhouse, Ext. 4207, 928-1644.

ANTIQU BOTTLES - Many over 100 yrs, medicine, ale, others. 751-0835.

SKI BINDINGS - Cubco Jr w/boot plates, runaway straps & mounting instructions, used but serviceable. \$5. Larry, Ext. 3825.

ROLLER RINK SKATES - Ladies Arrow, size 8, leather uppers & soles, padded 2 piece tongue, like new w/ case. \$25. Steve, Ext. 3469.

OSCILLOSCOPE - EICO 460; Heathkit EF-2 test chassis & all manuals. All for \$145. D. Vail, Ext. 2046.

GIUITAR - Brand new, won in raffle. \$25. Ext. 3268.

ADULT TRICYCLE - 3 spd, basket, hardly used. Courant, Ext. 4609, 472-0510.

BOY'S ICE SKATES - Size 3, \$4. Children's ski set, wood, 4', \$4. aux car heater, \$5. Levine, Ext. 4212, 929-8725.

REFRIGERATOR - Old style GE, good working cond. \$25. Levine, Ext. 4212.

B&W TV - A-1 cond, 25", set works well, \$50; A-1 air cond, 13,000 btu, works great. \$75. 588-4703.

N GAUGE TRAIN LAYOUT - 4 engines, approx 30' track, switches, many freight & passenger cars. J. Gaffney, 744-1132.

SKIS - 190 cm Fischer fiberglass 707, good cond, orig \$130, now \$40; Boots, 11 1/2, \$15. 286-0384.

GIRL'S ICE SKATES - White, size 3 1/2, high quality Riedell. \$8. Andy, Ext. 2424.

GE COUNTER TOP RANGE - & built in oven, stainless steel, \$25; matching couch & chair, \$25. 286-1855.

BICYCLES - 20" boy's/girl's, \$15; 20" girl's \$30; Royce Union. Ext. 2913, 698-0576 after 7.

HOCKEY SKATES - Boy's size 1, worn twice, in very good cond. \$7. 878-1731.

KENMORE WRINGER WASHER - Pink & white, good. \$20. 727-1329.

HOOVER CANISTER - Portable vacuum cleaner w/ attachments, A-1 cond, just serviced, \$20; women's power hair detangler, in orig box, sells \$24, asking \$11. Richard, Ext. 4134.

BIKE - Boy's 26". \$5. 589-3269 after 6.

Real Estate

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

For Sale

- SHIRLEY - 3 bedrm ranch, on 1 acre, w/w carpet, refrig, washer, dryer, barn shed, fully landscaped, patio, util rm, eat-in-kitchen, dining rm, swings. 281-1458 anytime.
- TOWNHOUSE - 3 bedrm, 1 1/2 baths, w/w carpet, central air, 15 min to lab, maintenance free. \$27,000. Ext. 2978, 369-2526 after 6.
- NORTH SHORE - 3 bedrm, 1 1/2 baths, partially finished cellar, knotty pine interior, fireplace, 20'x30' garage w/pit, 23,000 btu ac, appl, 15 min to lab. \$246 taxes, \$30,000. 744-3312.
- CUTCHOGUE - 1 acre bldg lot, water view, beach rights, near schools & shopping. Asking \$15,000. Ext. 4068, 928-5092.

Classified Ad Policy

Deadline is 12 noon Monday for publication Friday of the same week.

1. The Brookhaven Bulletin's classified section may be used only by active and retired Laboratory employees.
2. All items for sale or rent must be the advertiser's property.
3. Ads for material acquired for resale in association with a full or part-time business cannot be accepted.
4. Firearms offered for sale or trade may not be brought on site.

5. Ads not carried because of space restrictions will be held for publication in the next issue.
6. Ads are run only once and must be resubmitted if they are to be repeated.
7. Ads should be restricted to 20 words or less and typed or printed on the form provided, and must bear the employees signature.

- For Sale: Auto & Auto Supplies
 For Sale: Boats & Marine Supplies
 For Sale: Miscellaneous

- Wanted
 Carpools
 Lost & Found
 Services

Check the heading applying to your ad. Print or type your ad in 20 words or less.

Ads concerning property for sale or rent cannot be accepted on this form. Special Real Estate Ad forms are available at the Office of the Brookhaven Bulletin, Room 111, 40 Brookhaven Avenue.

Employee's Signature..... Life No..... Ext.....

Send to: Brookhaven Bulletin, Building 460, 40 Brookhaven Avenue (Ext. 2345).