BROOKHAVEN BULLETIN
Vol. 38 - No. 40 October 12, 1984
BROOKHAVEN NATIONAL LABORATORY

Reorganization Focus: AGS and Accelerator Development

The Accelerator Department, as such, faded into history on October 1.

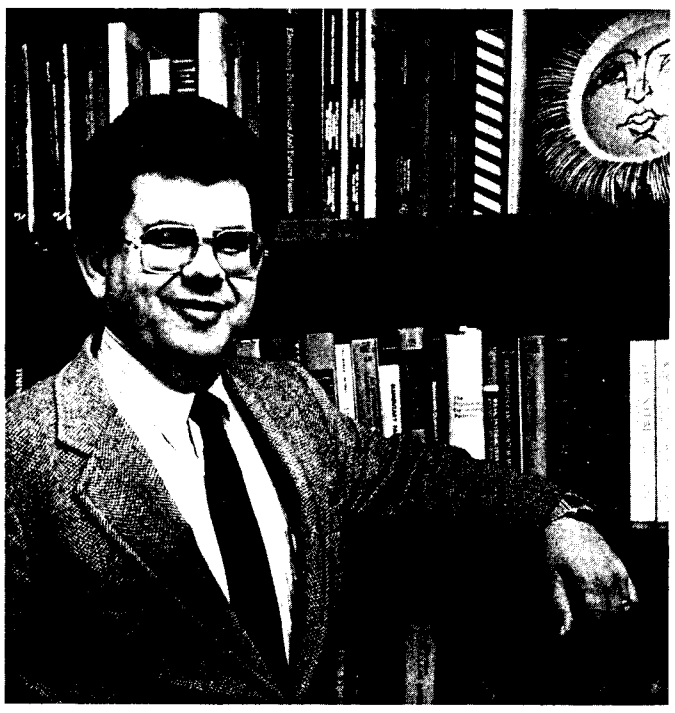
In recognition of the many important activities relating to the Alternating Gradient Synchrotron (AGS), a department dealing solely with the program and operation of that famous accelerator has been created. Named as chairman of the new Alternating Gradient Synchrotron Department is Derek Lowenstein, who has been deputy chairman of the Accelerator Department for the past three-and-a-half years.

To handle matters concerning other accelerator developments, a separate organization has been formed. Robert Louttit, as head of the Accelerator Development Branch, will oversee a coalition of former CBA magnet and cryogenic divisions and task forces working on accelerator physics and machine design for the Superconducting Super Collider (SSC) and the Relativistic Heavy Ion Collider (RHIC).

Both of the new organizations will report to Paul Reardon, associate director for High Energy Facilities.

As part of the reorganization, Reardon announced that Ernest Courant has been appointed Senior Scientific Advisor and Julius Spiro will be in charge of management and administration for High Energy Facilities.

The 24-year old AGS, far from slowing down, seems to have renewed vitality with age. Last year, it ran for 32 weeks and Lowenstein says they are aiming for from 30-35 weeks this fiscal year. A major happening in 1984 was the acceleration of polarized protons at 16.5 GeV, a world record. Among things to look forward to are the acceleration of heavy ions in the AGS as a result of the Tandem/AGS Heavy Ion Project, now under way. According to Lowenstein, they expect to start commissioning the beam in 1986. The intensity and quality of the present proton beam will be improved over the next three to four years with the addition of a new AGS booster injector which could be funded in FY 86. Also, a conceptual design for a high-duty cycle-beam stretcher ring will be started in the spring of 1985 for possible construction beginning in FY 88.


Alex Reben

Derek Lowenstein

Mort Rosen

Robert Louttit

Among the exciting experiments on the books over the next few years, are four rare kaon decay experiments, the results of which will have considerable impact on the physics models to be tested on the SSC; neutrino experiments will test the standard model and see whether neutrinos have mass; and at the MPS significant experiments continue to look for glueballs.

In 1973, Derek Lowenstein joined the Experimental Planning and Support Division of the Accelerator Department where he worked on computer control systems and pursued his particle physics research. In 1977 he was appointed to head the division. Concurrently, from April 1981, he was

(Continued on page 2)

BNL Lecture
A Noble Search

Power sources such as batteries and fuel cells convert chemical to electrical energy and are more efficient than heat engines in generating electricity. These electrochemical power sources show great promise as a means of utilizing hydrogen, methanol and other fluid fuels of the future. Physical chemist James McBreen is searching for appropriate and inexpensive non-noble metal catalysts to use in these rechargeable batteries and fuel cells.

To find them, he is studying the noble metals, the only effective catalytic materials now in use, and their behavior within batteries and fuel cells. McBreen is characterizing their interaction with the electrolytes which conduct electric current within the power sources, and will use this information to identify substitute catalysts for the noble metals.

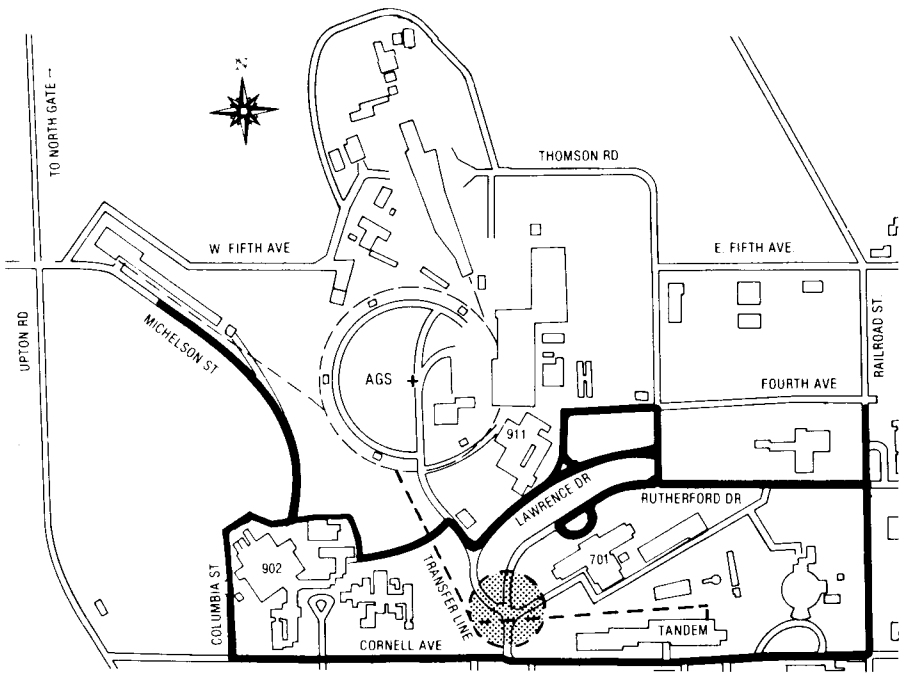
McBreen will review his work to date in a Brookhaven Lecture, "Fuel Cells: The Promise and the Problems," on Wednesday, October 17, at 4:30 p.m. in Berkner Hall. He will also outline his planned use of an NSLS x-ray beamline to study the nature of catalysts and electrolytes, and their interface in an operating power source.

James McBreen came to BNL in June 1977 to work at the Department of Energy and Environment (now DAS). From 1965 to 1977 he had been engaged in research and development on primary and rechargeable aqueous electrolyte batteries at Yardney Electric Corp., and on rechargeable ambient temperature batteries at General Motors Research Laboratories. He holds a Ph.D. in physical chemistry from the University of Pennsylvania and a B.S. in chemistry from University College, Dublin.

All those interested in getting together after the lecture are invited to go with the lecturer to a restaurant off-site. If you want to be part of this group, call George Rabinowitz, Ext. 7637.

Mort Rosen

James McBreen



In this map of the Lab site north of Cornell Avenue, the gray shaded circle indicates the area which will be completely closed to traffic during construction of the Tandem/AGS Heavy Ion Project. The roads marked in black are probably the quickest ways to bypass the construction site, although there are other routes.

Tunnel In, Roads Out

For the purpose of heavy ion research at the Alternating Gradient Synchrotron (AGS), the Tandem/AGS Heavy Ion Project will join the Tandem Van de Graaff accelerator and the AGS via a 2000-foot-long transfer tunnel. The Balport Construction Co., Inc., of Hawthorne, New York, will begin work on the tunnel and other conventional structures later this month, following a groundbreaking ceremony on Wednesday, October 17. During the construction period, which is expected to last from nine to 12 months, the intersection of Rutherford and Lawrence Drives will be closed.

Primarily affected by this closing will be vehicular and pedestrian traffic from Cornell Avenue to the AGS complex and Bldg. 701 (the old Graphite Reactor). "We know it's an inconvenience to the general population," says Paul Mohn, head of construction for High Energy Facilities, "but we hope that it will be as painless as possible and that everyone will cooperate."

To help traffic move along without confusion, signs will be posted at key intersections suggesting alternate routes. The accompanying map may also be helpful in choosing detours.

An Invitation

Everyone is welcome to attend the groundbreaking for the Tandem/AGS Heavy Ion Project on Wednesday, October 17. The ceremony will begin at 11 a.m., rain or shine, just northeast of the intersection of Cornell Avenue and Rutherford Drive.

Accelerator (Continued)

also deputy chairman of the department.

Robert Louttit sees his branch as strictly a research and development organization. "We will not be involved in any new construction projects," he says. Currently, their greatest effort is directed toward magnet R&D for the SSC, for which significant funding has been received through FY 85. A smaller R&D effort on RHIC magnets is also under way. The cryogenic experts are at work on conceptual designs for SSC refrigeration systems, and overseeing the CBA refrigerator installation which must undergo an acceptance test early next year. This installation could be used in SSC R&D, as well as for RHIC. Louttit's branch is also involved in other design elements for RHIC.

When he arrived at Brookhaven in 1958, Louttit went directly to work on bubble chambers and high energy physics research in the Physics Department, where he stayed for the next 12 years. In 1971 he joined the Accelerator Department and was head of the Particle Detector Division until 1979. He then became deputy head of the Accelerator Division of CBA and, in 1982, he took over the Cryogenic Division of High Energy Facilities.

Reports Available

The following reports are now available to the Laboratory staff and to affiliates of DOE, AUI and NRC. Others may purchase the reports from the National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Rd., Springfield, VA 22161. Staff members should call Ext. 5068.

BNL-51174
Metallurgical Studies of Hydrogen Alloys Surface Poisoning of $LaNi_5$, FeTi, and $Fe_{0.85}Mn_{0.15}Ti$ by CO, O_2, and H_2O. P.D. Goodell, G.D. Sandrock

NUREG/CR-2907
BNL-NUREG-51581
Radioactive Materials Released from Nuclear Power Plants. J. Tichler, C. Benkovitz

BNL-51638
Solar-Assisted Heat Pumps: Impact of Evaporator Characteristics on Performance. M. Catan

BNL-51662
The Study of Strange Nuclei. R.E. Chrien

BNL-51693
Development of Low-Cost Polymer Film Solar Collectors: Annual Report. J.W. Andrews, P. LeDoux, P.D. Metz, W.G. Wilhelm

NUREG/CR-3520
BNL-NUREG-51718
Vol. I & II
Long-Term Research Plan for Human Factors Affecting Safeguards at Nuclear Power Plants.
Vol. I: Summary and Users' Guide
Vol. II: Development of Detailed Analyses
J.N. O'Brien, A. Fainberg

Midterm Report on Semester Students

Four students from two predominantly black colleges arrived at the Lab on September 4 for the 1984 Fall Term of the Brookhaven Semester Student Program. This is the 32nd consecutive term of the BNL Semester Student Program, which began in 1969.

Gina Rivers (left front), a senior computer science major at Hampton Institute, Hampton, Virginia, is working with programmer/analyst Nancy Fallon, Safety & Environmental Protection Division, to transfer a system 2000 database used for the environmental monitoring of water quality to a SIR database. To accomplish this, Rivers will write a Fortran program, and she will also investigate the difference between the two database management systems involved.

Carmela Edmunds (right front), a Hampton Institute senior majoring in mathematics, is helping oceanographer Gilbert Rowe, DAS, create a carbon model of deep-sea organisms. She is writing a Fortran program on a VAX to solve a system of differential equations to obtain results of the carbon model in a steady state.

Karen Lexing (left back), a junior computer science major at Jackson State University, Jackson, Mississippi, works with nuclear engineer Gregory Van Tuyle and computer analyst Thomas Nepsee, DNE, to simulate the thermal hydraulics of a nuclear power plant. Lexing is converting a 10,000-line computer code written in Fortran 4 to Fortran 5.

Fran Leason, a Jackson State junior majoring in computer science, helps assistant physicist Steven Hulbert, Physics, with the modification of a computer program used to run photoemission experiments at the NSLS. Leason is converting the program from one written in Fortran, which runs on a DEC LSI 11/23, to one written in the computer language C, which will run on an IBM PC.

In addition to their research, the semester students are taking "Topics in Computer Science," taught by programmer/analyst Ron Wittlock, AMD. As well, Leason and Lexing are studying "Calculus II" under physicist Glenn Price, head of the Office of Scientific Personnel. Edmunds and Rivers are learning "Numerical Analysis" from programmer/analyst Leonard Slatest, AMD.

F Horton

Winner's Circle

Savings by the Copy

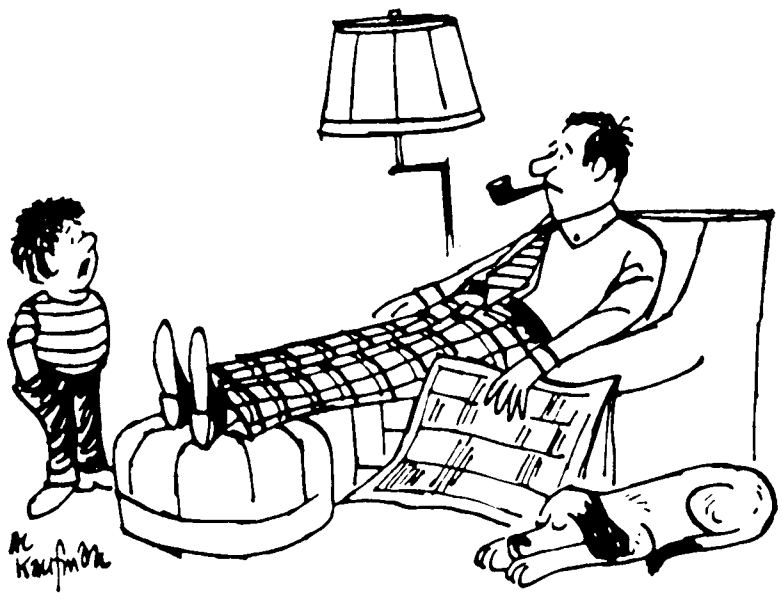
Cost vs. convenience — beginning next week, employees will be prompted to weigh these factors each time they step up to use one of the numerous convenience copiers scattered about the Laboratory site.

Doing the prompting will be a small sticker stating the cost per copy of using the convenience copier (3-1/2 cents, on average) compared to having the job done by the Quick Copy Service Center of the Photography & Graphic Arts (P&GA) Division (less than 1-1/2 cents). For suggesting this way to make employees aware of potential cost savings, Edith Thornhill, a senior executive secretary in the Office of Scientific Personnel has received a $50 award from the Employee Suggestion System.

Quick Copy now handles about 12,000,000 copies a year. The fully automated equipment that makes this volume possible has also lowered the cost per copy. The cost differential of two cents between convenience copiers and Quick Copy may seem small, but if the eight million copies Lab employees make each year on convenience copiers were made instead by Quick Copy, the savings would be substantial: $0.02 × 8,000,000 = $160,000.

No one expects, or even hopes, that all eight million copies will go through Quick Copy. In fact, there's no way to say how many of those copies should go to P&GA or to estimate the amount of future savings. But this is certain: for each copy that is properly transferred to Quick Copy, there will be a 2¢ savings, and, with enough such transfers, that could add up to a tidy sum.

Jack Laurie, manager of P&GA, cautions that it is neither practical nor economical for all reproduction needs to be met by Quick Copy. Most unbound originals in reasonable shape, where multiple copies are needed, are ideal candidates for Quick Copy. There are, however, some jobs that can be done best on convenience copiers, including those involving bound material, oversized originals which cannot be reduced, ragged originals and other customized work which does not readily adapt to Quick Copy's automated equipment. For more information about choosing cost vs. convenience, call Jack Laurie on Ext. 7640.



"ALL THE OTHER KIDS HAVE NUCLEAR REACTORS!"

STOP!

Why spend 3½¢ for your copy when Quick Copy Service can deliver for 1½¢

Use Quick Copy whenever practical
Call Ext. 2900 for information

Minor operation: one performed on someone else.

Zoo: a place devised for animals to study the habits of human beings.

Return Your Empties

Pallets, cable reels, drums and cylinders are not scrap materials and should be turned back to Supply & Materiel when they are no longer in use. Just don't leave them lying around, as money is lost in the form of deposits, rentals, demurrage and in unnecessary procurements.

For example, pallets are used every day to move materials and equipment around the site and, when stocks are completed, additional pallets must be purchased just to keep things going. Empty drums are sometimes used as waste receptacles, and can result in the loss of revenue from returns or sale to drum reconditioners. Cylinders can be a double expense, as we pay monthly rental on the empty cylinder, as well as on the cylinder in use.

Take a few minutes to do a little housekeeping in your work and storage areas and see if any of the above items are empty. If so, call Supply & Materiel on Ext. 7238 for pickup.

Arrivals & Departures

Arrivals

Jakob Bohr ..... Physics
Jose L. Martinez ..... Physics
Joseph Scaduto ..... Plant Eng.
Paul S. Stein ..... AGS
Edward M. Traboulski ..... Physics
Yi-Cheng Zhang ..... Physics

Departures

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

Luc Cinotti ..... Medical
Kazutaka Yamamoto ..... Medical

Stony Brook Events

Concert: October 17, 8 p.m., Main Stage. University Concert Band.
Dance: October 20, 8 p.m., Main Stage. Eleo Pomare Dance Company.
Concert: October 24, 8 p.m., Main Stage. Stony Brook Symphony Orchestra.
Concert: October 30, 8 p.m., Main Stage. Northern Sinfonia of England.

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Safety Glasses

The on-site optician, John Seffert, will be on vacation the week of October 15. Normal operations will resume Wednesday, October 24.

WIS Party

The Brookhaven Women in Science are hosting their annual Wine and Cheese Party on Wednesday, October 24, from 4 to 6 p.m. at the Recreation Building. Both members and prospective members are encouraged to attend.

Consumer Alert

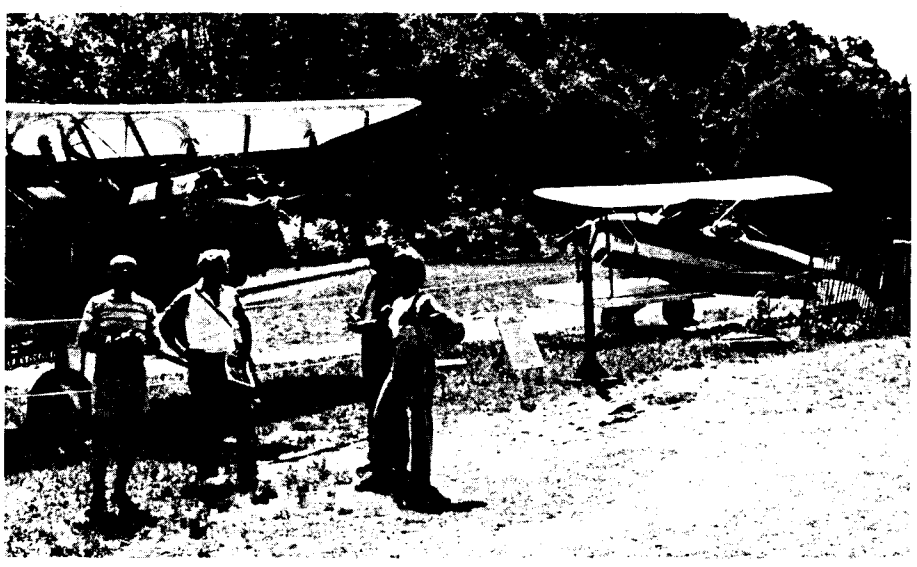
The Consumer Product Safety Commission warns of a fire hazard with microwave ovens manufactured by Microtronics Ltd., Inc. The Minneapolis, Minn., firm is no longer in business and therefore unable to recall the product. The units, sold in the last three years under the brand names Astro Chef, Classic and La Chef, cost about $300 each. The Commission believes that the unit may allow the microwaves to concentrate due to the failure of a stirrer mechanism. If the unit self-starts while unattended, these conditions could allow the unit to generate sufficient heat on the cabinet to ignite combustible material that may be stored on top or adjacent to the unit. The CPSC urges consumers who have one of these units to unplug it when not in use and store combustible material away from the microwave oven. For further information, call the CPSC's toll-free hotline at 800-638-CPSC.

Cafeteria Menu

Week Ending October 19

Monday, October 15		
Cream of mushroom soup	(cup)	.65
	(bowl)	.85
Breaded pork chop w. sliced apple & veg.		2.10
Beef stroganoff over egg noodles		2.15
Hot Deli: Roast turkey breast	(bread)	2.05
	(roll)	2.20
Tuesday, October 16		
Beef barley soup	(cup)	.65
	(bowl)	.85
Swedish meatballs over rice		2.10
Fish & chips & 1 veg.		2.00
Hot Deli: French toasted ham & cheese		2.00
Wednesday, October 17		
Canadian cheese chowder	(cup)	.65
	(bowl)	.85
Beef & broccoli stir fry on Spanish rice		2.10
Barbecue spare ribs & 1 veg.		2.05
Hot Deli: Pastrami	(bread)	2.05
	(roll)	2.20
Thursday, October 18		
Minestrone soup	(cup)	.65
	(bowl)	.85
Baked Italian lasagne & 1 veg.		2.20
Braised liver & onions & 1 veg.		2.05
Hot Deli: Grilled Reuben		2.00
Friday, October 19		
Seafood chowder	(cup)	.65
	(bowl)	.85
Western-style chili on rice		2.10
Tuna noodle casserole & 1 veg.		2.00
Hot Deli: Top round of beef	(bread)	2.05
	(roll)	2.20

BERA News



Admiring the antique planes at Rhinebeck are, from left, Lou Addessi, Ed Schwaner, Carolyn Dobert and Jenny Addessi.

Come Fly With Me

It's the large features you notice first — William Floyd Parkway, the bridge at Smith Point, Great South Bay. Then you begin to pick out golf courses and shopping centers. Duck farms look like cotton fields, swimming pools are shimmering blue, and cars creep along like caterpillars. People? They can't be seen from 2,000 feet up in the air.

This reporter is taking a ride with Lou Addessi in his single engine Cherokee. The ground below is whipping by at 120 miles an hour. The day is hazy, with visibility only six or seven miles — not a perfect day for flying. But for this passenger, the view is exciting no matter what the weather.

Addessi is a member of BNL's Aviation Club. Formed in 1978, the group boasts about 20 members, 13 of which are licensed pilots. The club's treasurer, Addessi is unusual in that he flies his own plane. The rest rent planes, mostly from Mid-Island Air Service at nearby Brookhaven Airport.

Everyone flies for different reasons. What Adessi likes most is the feeling of being in control. Club president Ron Dobert likes the independence and the feeling of being on top of the world. Vice-president Ed Schwaner enjoys the navigational chores that go along with flying.

Club secretary Audrey Karzenski is not a pilot, but is an enthusiastic passenger. She grew up next to Kennedy airport and admired Amelia Earhart. Piloting a plane was her dream. Unfortunately, she developed an inner ear problem that disqualified her from getting a pilot's license. What Karzenski likes best about flying is the thrill of taking off and landing.

They all agree that a good pilot is a careful person. Before takeoff, the pilot makes a methodical check of the aircraft exterior, peering at bolts and hinges, jiggling the ailerons, checking for water in the gas tanks, poking at the tires, looking for nicks in the propeller. Inside the cockpit, an even more extensive check list is followed. In the air, the pilot concentrates on the job at hand, keeping a constant eye on the instruments that monitor the engine and the plane's course.

Club members Larry Leipuner, Mike Cardarelli, Len Chimienti, Pat Thompson and Gerry Morgan are instrument rated. That means they can fly by instruments when visual flying is not possible. Because the FAA will be installing an instrument landing system at the Brookhaven Airport, these pilots will be able to land there in bad weather.

Another improvement is also under way at that airport. Leipuner was successful in having a VOR checkpoint, a navigational aid, put in.

The club's favorite activity, of course, is to fly. They have made trips to Block Island, Nantucket, Martha's Vineyard, Plattsburgh and Rhinebeck. As Kazinski says, flying in a small plane lets you see things you miss by car or jumbo jet.

Some members, like Dobert and Schwaner, have flown as far away as Florida and the Bahamas. For the ones who are pilots, trips to visit relatives are routine.

The club welcomes people who are interested in aviation. If you want to become a pilot, you can profit by their experience and support. If you love flying, but only in the passenger seat, doing it with the club reduces the cost.

The club plans a trip this fall. If you wish to participate in this trip or join the BNL Aviation Club, come to the monthly meeting Wednesday, October 17, at noon in Berkner Hall. For information, contact Lou Addessi at Ext. 4758, or Ron Dobert at Ext. 7696.

—Mona S. Rowe

On a recent trip to Rhinebeck Air Museum, members of the BNL Aviation Club gathered at the picnic ground. From left are: (kneeling) Mike Carroll and Vic Scotto; (seated) Audrey Karzenski and Ed Schwaner; (standing) Lou Addessi, Jenny Addessi, Larry Leipuner, Carolyn Dobert and Ron Dobert.

Volleyball

A referees' clinic will be held at the gymnasium in the exercise room at 5:15 p.m. on October 15. Informal playing afterwards. Money is due to the treasurer by October 15. Fee is $60.

Tickets

A number of Islanders hockey and Metropolitan Opera tickets are still available at the BERA Sales Office. Call Pat Manzella, Ext. 3347, for specifics.

Theater Group

The Theater Group will meet at 8 p.m. on Thursday, October 18 in the North Room of the Center. We will have reports on the status of the current production, "Morning's at Seven," and will read several one-act plays. Anyone who is interested in theater activities is welcome to attend.

Runners Corner

The BNL Roadrunners will host their annual 5 km, 10 km and 30 km run on Sunday, October 14. The 30 km starts at 8:30 a.m. and the 5 and 10 km at 9:30 a.m. The 30 km is a pace race and a tune-up for the N.Y. Marathon.

Volunteers are still needed to help with the races. Bagels, fruit and hot and cold beverages will be available for all participants. For further information, call Jean Penoyar, Ext. 2614, Bernie Silverstein, Ext. 4934, or Judy Ferrero, Ext. 2145.

Quilting Club

The Quilting Club has resumed evening meetings. Members can work on their own projects or participate in group projects. New members are always welcome. For the schedule of upcoming meetings call Jane Shero, 286-0925, or Bernie Benz, 928-1068.

Bowling

Purple League

High games were bowled by Bob Jones 233, Ed Meier 216, Sharon Moore 195, Mary Eggert 176.

Red/Green League

John Connelly rolled a 227, Bob Jones 222, Ed Sperry 220, Lou Jacobson 210/203, Jim Petro 204, Ken Asselta 202.

White League

Paul Callegari had games of 223/192, Caryl MacDougall 200, John Connelly 199, Ed Sperry 198, Steve Gushue 196, Gail Schuman 190, Joyce Pinelli 177.

PSI

The monthly meeting of Professional Secretaries International will be held on October 15, at 6 p.m. in Berkner Hall, Room C.

The program will be entitled "Women in Politics." Southampton councilwoman Patricia Newman will be the guest speaker for the evening.

Guests are welcome. For more information, please call Juanita Heyliger at Ext. 3490 or Audrey Blake, Ext. 5382.

NBI Users Meeting

The next meeting of the NBI SYSTEM Users will be on Friday, October 19, at 10:30 a.m. in Bldg. 535A. "What's New in NBI?" will be addressed by NBI reepresentatives. For further details, call Sandra Dozier, Ext. 4933, or Mary Cooper, Ext. 4105.

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, 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 Personnel Placement Supervisor, Ext. 2882.

SCIENTIFIC POSITIONS OPEN: The following staff positions are open. Candidates may apply directly to the department representative named, or through the Office of Scientific Personnel, Ext. 3338.

SCIENTIST: Seek Ph.D. in geochemistry or related field to join an NRC-sponsored research program to develop a data base on the source term for low level nuclear wastes; required to study and quantify radionuclide interactions in mineral/water systems related to waste form leaching and leachate migration specific to the disposal of low level nuclear wastes. Contact: R. Dayal, Department of Nuclear Energy.

Autos & Auto Supplies

79 OLDS DELTA-88 ROYAL - all power, a/c, $3,000. 924-1038.

78 HONDA ACCCORD LX - hatchback, p/s, p/b, a/c, 5 spd., am/fm stereo, new exhaust & brakes, $3,200. 422-1846 after 7 p.m.

73 VW SQUAREBACK - good running cond. Ron, Ext. 2189 or 281-6630 after 5.

81 FORD ESCORT L - a/t, air, am/fm, good cond., $3,200. John, Ext. 5279.

79 FORD FAIRMONT - 55,000 mi., 4 dr., a/c, p/b, p/s, must sell, $2,800. Ext. 3637.

73 OLDS 88 - good eng., trans., needs body work, best offer over $100. 360-7841 after 6:30 p.m.

TIRES - steel belted radials, mud/snow, P255/75 R-15 on rims (5-hole). 265-1072.

76 FORD GRENADA - a/c, p/s, p/b, good cond., $1,900. 325-0225.

80 TOYOTA CELICA - G.T. coupe, p/s, p/b, a/c, stereo, mint cond. Paul, Ext. 4156.

69 FORD MUSTANG - $1,000. Maria, Ext. 7692.

83 HONDA SHADOW - 750, excel. cond., low mi., maint. free, garaged. Ext. 4173 or 281-6125.

TIRE - G78-14, Firestone, $20/pair. Ext. 3293.

70 CADDY ELDORADO - new motor & trans., low mi., a/c, all power, new paint, $1,300. 281-4646.

79 FIAT - 128 Sport, $1,500. 821-1915.

73 VW BUG - mech. excel., orig. owner, reliable transp., $1,000. 473-3151.

72 OLDS 98 - 140K, new tires & other new parts, reliable transp., $300. Marian, Ext. 3999 or 3129 eves.

HONDA SHOP MANUAL - for 1976-1977 Accord, CVCC, $5; 1984 Ford truck shop manuals, 1 set (4 books), $30. Gordon, Ext. 4095.

70 DODGE CHARGER - runs well, no dents, body rust, $600. E. Harris, 475-8504 after 5 p.m.

66 CORVETTE 427 - 390 HP, stock, 2 tops, extras, immaculate, $15,000. Ext. 4095 or 751-0628.

RIMS - (4), lug-mag, 5-1/2-JJx14, $50/pair. 231-7750, Ext. 400 days or 751-6418 weekends.

PICK-UP CAMPER - 11', slide-in, self contained, sleeps 6, alum., step bumber, excel. cond., $2,395. 821-1081.

77 TOYOTA COROLLA - very good cond., new brakes, tires, alt., clutch and battery, $1,950. Ext. 4768 or 2512 after 6 p.m.

78 AMC GREMLIN - a/t, 4 cyl., new radials, a/c, 68K, clean, 25 mpg. 669-1431.

77 PONTIAC ASTRE - 2 dr., 4 cyl., $725. 331-1718.

76 BUICK CENTURY - V6, a/t, p/b, p/s, p/w, a/c, stereo/tape deck. 728-0462 after 6 p.m.

STEP BUMPER - fits GM pickups, new tow bar, universal, HD. Tony, Ext. 2462 or 269-9510 after 7.

76 HORNET - 2 dr., hatchback, auto., 6 cyl., white, good cond., $1,075. 261-7825.

71 DODGE DART - V8, p/b, p/s, a/c, excel. running cond., asking $650. Ext. 4935 or 928-5737 eves.

GERMAN AUTO PARTS - for VW and Porsche, at whole sale prices. Augie, 821-0379.

79 HONDA CIVIC - a/t, trans., reg. gas, excel. cond., cass. w/equalizer booster, 4 spares, $2,750. 821-0137.

PARTS - for 1972 Duster, 6 cyl. eng., right fender, windshield; slant 6 engine w/carb, power steering unit, $100. 727-3608 after 5 p.m.

CHEVY PICKUP - front bumper, bumper guards, stainless mirrors, wheels w/tires, LR78-15. Tony, 269-9510 after 7 p.m.

74 DODGE DART - std., low mi., good running cond. Ext. 2590.

73 OLDSMOBILE - good run cond., $700. Ext. 2058.

71 DUSTER - engine and trans., sell together, will demonstrate, asking $200. Ext. 2476 or 751-2149.

72 FORD LTD - new tires, brakes, carb., rad., runs very well, $500. Gene, Ext. 5293.

68 PONTIAC TEMPEST - 6 cyl., 50K original mi., clean, $700. Ext. 3158 or 727-7075 eves.

74 PINTO - 2 dr., runs well, looks and sounds bad, $150. Ted Erickson, Ext. 2243.

79 CHEVY MONZA - 4 spd., V6, p/s, p/b, a/c, am/fm stereo, vinyl top, Rusty Jones, $3,000. 878-0012.

77 FORD LTD II - wagon, a/t, new brakes, new tires, a/c, f/m stereo, clean, $1,950. 289-8323 after 6 p.m.

72 VW BUG - w/roof rack, runs well, make offer. Ext. 3059 or 744-7242.

78 FORD LTD - loaded, new brakes, tires, very clean, $2,500. Ext. 2957 or 289-4081.

78 CHEVY - Malibu Classic, station wagon, excel. cond., asking $2,450. George, Ext. 2597 or 475-6090 after 6 p.m.

72 BMW 2002 - 4 spd., am/fm cassette, minilite mags, near mint cond., orig. owner, must see, best offer. 286-4652 after 6:30 p.m.

74 DATSUN - runs well, 4 spd., $800. 286-9051.

Boats & Marine Supplies

FLOATING DOCK - three sections for small boat. Bill Espensen, Ext. 3992.

28' OWENS - very good cond., fully equip., sleeps 4, winterized, asking $2,200. 281-0360 after 6.

SEARS ELDEN OUTBOARD - 3 HP, runs, good cond., $65.

23' O'DAY - 1982, 7.5 HP Mercury, 4 sails, VHF, cradle, excel. cond., many extras, asking $14,500. Ext. 2080 or 473-1067.

MUSHROOM ANCHOR - 600 lbs., $300. Gordon, Ext. 4095.

20' SEA OX - 1980, 115 HP Evinrude, trailer, many extras, $5,550. 821-9296 after 5:30.

13' SAILBOAT - daysailer, main, jib, spinaker, hiking straps, $800. Joe, Ext. 5233 or 369-0432 eves.

27' BRISTOL - weekender, 5 good sails, inboard, diesel, auxiliary, all in excel. cond. Kuper, Ext. 3311 or 941-9423.

14' ALUMINUM BOAT - 18 HP Evidrude, w/trailer, excel. cond., many extras, $1,250. Larry, Ext. 2012 or 734-5234.

Miscellaneous

BIKE - girl's, 10 spd., Columbia, $50. 924-1038.

DINING ROOM SET - rectangular table w/leaf, 4 chairs, buffet, china closet, blonde wood, moving, must sell, $250. 669-9482.

BABY CARRIAGE - old but excellent quality, complete with custom pet shield, $35. Tom, Ext. 4084 or 878-1060.

TRS-80 MODEL III - 1 double sided, 40 TK DR, 3 double sided, 80 TK DR, RS232 port, amber eze screen, $1,600, cash or restore to 2 single sided 40 TK DR, $1,100. Jay or Bob, 585-4217.

QUILTED BEDSPREAD - red/white & blue, for twin size bed, like new, $15. Les, Ext. 2920.

BABY CRIB - high chair; infant car seat; changing table; potty seat, $135. Ext. 2386.

CHARMGLO TWIN BAR-B-QUE - tennis ball machine; electric typewriter; electronic calculator; Epicure speakers. Paul, Ext. 4156.

KNITTING MACHINE - double bed, 400 needles, instruction & pattern books, Japanese instruction book, $250. 878-8458.

MACHINE TOOL BOX - wood, $15; super 8 film editor, $8; (2) maple captain's chairs, $25/ea. or $45/pair; steel Hollywood bed frame, $7; other misc. items. 281-3686.

GE WASHER - 14 lb., heavy duty, white, $200; baby's bassinet, complete, new $80, used 2 mos., $40; Westinghouse 30" elec. range, gold, $150. 929-4840.

CHIFFONIER - walnut, 5 drawers, 19"x40"x47", $125; 2 marble tables, 36" and 24", $50 & $35; (4) Danish teak chairs, $20/ea. 265-0501.

SPANISH OAK STEREO - 7 ft., with hutch & bar, excel. cond., $500; air gun compressor, $50. 281-6944.

WING CHAIR - brown & yellow flowered print, $75. Louisa, Ext. 4207 or 286-0466.

CELLAR STAIRS - 8' high x 3' wide, $50. Don, Ext. 4821 or 286-2267.

GIBSON UPRIGHT FREEZER - 19 cu. ft., excel. cond., $100. Don, Ext. 2043 or 499-4855 after 6 p.m.

TRUMPET - Bach/Stradivarius, $375; Olds/Ambas coronet, $125. Jim, Ext. 3372.

WOOD STORM WINDOWS - 19, natural finish, like new, 27-1/2x47", some screens, asking $10/ea. 929-8725.

INTELLEVISION - w/15 tapes & case to hold unit and tapes, $150. Ext. 2939.

PANASONIC MICROWAVE - excel. cond., $75. 286-8554.

FIREPLACE SET - convection, tubes with blower motor, screen and andirons, must see. 924-6582.

GE CHEST FREEZER - 9 cu. ft., excel. working cond., $150. Linda, 286-1268.

ELEC. HOT WATER HEATER - 40 gal. tank, 6 mos. old, $75. 281-1862.

DARKROOM EQUIPMENT - Omega enlarger, timer, trays, tanks, many extras, $300. 732-4714.

FREEZER - 15-1/2 cu. ft.; 3 modern sofas; chandeliers; headboards; 2 bikes for 8-12 yrs. old; 25' slant fin radiators, 100 amp circuit box; guitar & amp. Ext. 4532.

55 GALLON FISH TANK - w/new stand, $30. Ext. 2951 or 281-5827 after 6 p.m.

WOOD STOVE - Upland model 207, $200; Koppe coal stove, new, $1,100, still new, $650; GE Carry-Cool air conditioner, $60. Gordon, Ext. 4095.

SKI BINDINGS - never used. Ext. 2081 or 878-9384.

STOVE PIPE - 8" dia., triple wall, total length over 16', $125; 275 gal. oil tank, $75. 331-2228.

AIREQUIPT CARTRIDGES - 3 for $2.50 or $1.00 ea.; carousels, $1.25. 929-4326.

ENCYCLOPEDIA - Brittanica Junior, complete set, excel. cond., $15. 751-3551.

LOOM SET - place mats, hot plate, coaster, w/instructions, $12. 744-9677.

REFRIGERATOR - apt. size, 2'x2'x5' excel. running cond., $75. Joe, Ext. 5233 or 369-0432.

COLOR TV - 1983 Toshiba, 19", push button tuning, like new, to settle estate, $275 firm. Al, Ext. 2160 or 273-5574 after 4 p.m.

TV ANTENNA - outdoor, Radioshack model VU90, plus mast mount, UHF/VHF amplifier, $20. Ext. 3175 after 6 p.m.

SONY WALKMAN - WM1, good cond., $15; running shoes, New Balance 555, woman's size 7B, asking $30. Jack, Ext. 4054.

TABLE - dining room, walnut, 58"x40", w/two leaves, (4) matching chairs, excel. cond. Ext. 4449 or 751-8403 after 6 p.m.

BASS AMP - Baldwin Professional, (2) 12" speakers, 4 inputs, loud, excel. cond., $300 neg.; mini bike, no motor, $40. 281-3149.

CAR BIKE RACK - holds 2 bikes, $10; avocado green snack trays, 4 w/stand, $15. 744-9677.

HUMIDIFIER - Sears, automatic, 15 gal., 24 h. 744-4611 after 6 p.m.

SHOPLIGHT - w/two 48" fluorescent tubes, $5. Ext. 3175, after 6 p.m.

MARTIN GUITAR - 7/28 model, 3/4 size, excel. cond., w/lifetime guarantee, and case.821-0137.

BIKE - Panasonic tourist type, 10 shifts, 3 yrs. old, $250. Hidenori, Ext. 8617 or 246-9327.

BRAIDED RUG - green and white, 8-1/2' x 5-1/2'; wooden swivel desk chair, captain's type; adult wooden crutches. Ray, Ext. 7509.

WOOD BURNING STOVE - Earthstove, perfect cond. Ext. 4635 or 751-2860.

WICKER BASSINET - white, eyelet cover, $35; baby clothing for boy, $30. Ext. 4444.

WOOD/COAL STOVE - blower kit, air tight, never used, "Wondercoal" model 2607, US stoves, $525. Helen, 924-8861 after 6 p.m.

WASHER AND DRYER - Frigadaire, approx. 5 yrs. old, mint, hardly used, $150 each. 588-9452 eves.

TENNIS RACKET - Davis classic, gut strings, w/press, $30. Georgia, Ext. 2342.

BICYCLE - man's, Vista, 10 spd., 27" rims, yellow, good cond., $40. Paul, Ext. 2476 or 751-2149.

FIREWOOD - full cords, split and delivered, $135. 399-0168.

BICYCLE - woman's 10 spd., excel. cond., white, $50. Trish, 732-1722 after 6 p.m.

BEDROOM SET - Mediterranean fruitwood, 7 pc., excel. cond., $195. Vini, Ext. 4592 or 744-1408.

DISHWASHER - like new; free standing kitchen cabinet; large desk; sturdy bookshelves. 246-5686 days or 732-4851 eves.

ORGAN - Conn, double keyboard, rhythm sections, show chord, Leslie speakers, bench, like new, $800. 588-6539.

BEDSPRINGS - red maple, head/foot boards, (2) single size, $30/pr. Tom, Ext. 4664 or 929-3566 eves.

PINE BEAMS - 13' long, 6" x 12", 4" x 12", 4" x 6". Ext. 2081 or 878-9384.

ENGAGEMENT RING - new, excel. cond., .3 carats, appraised value, $700, asking $350. Larry, Ext. 4821 or 727-1412.

REFRIGERATOR - Admiral, custom dual-temp., working cond., $50. 924-3066.

RETICULATED PYTHON - 15', very healthy, moving, sacrifice, best offer or consider donation to nonprofit organization. 543-4293.

BEDROOM SET - 2 sets of drawers, 2 end tables, bed, $125 or best offer. 325-9590.

Yard Sale

WADING RIVER - Dogwood Dr. off 25A, near dead-end, Oct. 13-14, 10 a.m. to 4 p.m.

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

MILANVILLE, PA. - 1 room cabin, refrigerator, stove, misc. furniture incl., on 7-1/2 acres, hunting, white water. (717) 559-7857.

SOUTH SETAUKET - expanded 5 bdrms., Colonial, cul-de-sac, Three-Village Schools, 3-1/2 baths, 1/2 acre, low gas heat, assum. 7-1/2% mortgage, possible mother/daughter, owner anxious, must sell. Ext. 3293 or 698-6437 eves.

ALBANY AREA - large house newly renovated, on 97 acre farm, 3 bdrms., l/r, eik, den, util. room, pool, 2 story barn, 3 ponds, panoramic view, 7 mi. to Schenectady, 19 mi. to Albany, $95,000. Walt, 698-0576.

MILLER PLACE - Colonial, 4 bdrms., formal l/r, d/r, country kitchen, fam. room, w/brick wall fireplace, $158,000. 331-1718.

For Rent

BERSHIRES CHALET - 3 hrs. from NYC, 3 bdrms., 2 baths, fully equipped kitchen, elec. heat, deck w/spectacular view, near lake, hiking trails, avail. weekends or weekly. 929-6946 after 6 p.m.

GORDON HEIGHTS - newly renovated, furn./unfurn., 1 bdrm. apt., private, many extras, ideal for working single/couple, no children/pets, $550 includes all. 698-1362 after 5:30 p.m. or wknds.

EASTHAM, CAP COD - Oct.- Nov., 4 bdrm. house, sleeps 8, 2 baths, washer/dryer, dishwasher, deck, near beaches. 722-3865 eves. and wknds.

BELLPORT - studio apt., new full bath, newly decorated, $475/mo., utilities included. 286-1171.

SELDEN - studio apt., eik, private entrance, near transp. and stores, single only, $475 includes all. 732-5408 after 7 p.m.

MT. SINAI - furnished room, new carpet, desk, bed, etc. $250/mo., two meals available w/additional $250/mo. Shoko, 331-4648.

SHAWNEE-ON-DELAWARE - villa apt., w/count club privileges, everything provided except food, sleeps six, one wk., Oct. 21-27, $150. John, Ext. 3651 or 929-3352 or Kristin, Ext. 3372 or 744-6287.

FLORIDA - west coast, Spring Hill, 2 bdrm. house, Nov.-Dec. $300/mo., furn., telephone, washer, near Gulf, lakes, golf. Ext. 4530 or 261-2719 after 5 p.m.

Lost and Found

FOUND - German Shepherd, less than one year old, near Pt. Jefferson, female. Dick, Ext. 4329, 751-6820.

Free

BLACK OUTDOOR CAT - young, affectionate, needs caring home. 281-8625 eves.

REFRIGERATOR - full size, working cond., you pick up. Walt, Ext. 2907 or 698-0576.

CHILD'S SKIS - Rosignol, 160 cm., w/bindings. Ext. 2081 or 878-9384.

Car Pools

BABYLON/W. ISLIP - driver needed for on-time car pool, 8:30-5:00. M. Tesla, Ext. 2705.

NORTHPORT/FT. SALONGA - need 4th person for on time pool, 8:30-5:00, door to door. Walter, Ext. 4986 or 757-5478.

Wanted

VINYL COVERED RECLINER - in good cond. Bill Espensen, Ext. 3992.

BREEDER - for Siamese cats, on Long Island. Lois, Ext. 2959 or 751-0023.

OPERA GLASSES - reasonable. Don, Ext. 4821 or 286-2267.

TYPEWRITER - student, good cond.; trombone intermed. student. Ext. 4243.

ROOMMATE - female to share condo, Calverton Hills, 10 min. E. of Lab, $295 incl. all. Sandy, 369-0433.

GOLF CLUBS - for a female beginner. Garry, Ext. 5289.

SWIMMERS - interested in forming BNL/US Masters swim club. Marsha, Ext. 3327.

GARDEN TRACTOR - w/mower deck, in useable or repairable cond. Ext. 7590 or 878-1790.

ARCHITECTS SERVICES - for remodeling a small house; 8" radial saw, for rent/sale. Bill Sanchez, Ext. 3848 or 281-6498.

KITCHEN CABINETS - white metal, 7', top only. Leola, Ext. 3725.

ROOM - to rent, near Lab. Ext. 2058.

ENCYCLOPEDIA - recent, complete, reasonable. Helen, Ext. 5158.

VENDORS - for Nov. 17 crafts fair, Kreamer St. School, Bellport, sell your homemade crafts, Christmas items, etc. Pat, 286-9390.

HOUSEMATE - to share lg. house, 8 min. from Lab., nice property, $200/mo. plus 1/4 util. Roland, Ext. 3969.

BOY'S BICYCLE - 16", good running cond., w/brakes. 751-6781.

Classified Ad Policy Deadline is 4:30 p.m. Friday for publication Friday of the next week.