

3-85-78

Craft Apprentices Chosen

Four employees will leave their present jobs at the end of March and will head in a new direction. The four have been selected to fill the apprentice openings for an electrician and three heavy equipment mechanic operators.

Peter Eterno, currently a Helper B in the Office Machine Repair Shop, Supply and Materiel, will become an electrical apprentice. Eterno, who is 23, attended Suffolk County Community College and joined the Laboratory on January 12, 1976. He lives in Lake Ronkonkoma.

Those who were selected for the openings as heavy equipment mechanic operator apprentices are:

James Durham, four-year Marine Corps veteran and a Technician in Photography and Graphic Arts. Durham, who is 26, has been in his present position since April 25, 1977. He was first employed at the Laboratory in the summer of 1969 and again from 1970-71. He has attended Suffolk County Community College and is certified as an EKG technician by BOCES. He is a resident of Center Moriches.

Ralph Giordano is a Stock Clerk in Supply and Materiel and joined the Labora-

tory June 2, 1975. Age 24, he has taken BOCES courses in welding, carpentry, cabinet shop and framing. He lives in Holbrook.

Richard Kayte, age 26, is a Residence Custodian in Staff Services. He came to the Laboratory on May 17, 1976. He completed the BOCES auto mechanics course and is a Chevrolet certified technician. He is a resident of Riverhead.

Of 23 applicants for the apprenticeships, seven applied for the electrical opening and 16 for the heavy equipment mechanic operator spots. This is the first time that the latter trade has had apprentice opportunities. On March 27, when the new apprentices start work on their four-year programs, there will be a total of 18 employees training for various trades.

The Joint Apprenticeship Committee which makes the selections, is composed of three representatives of labor and three of management. Representing labor are Stephen Waski, Jr., Joseph P. O'Reilly and Stephen Gracia. For management are Edward C. Jackle, Alfred Mahlmann and William Fleischer.



Leonard Emma (left) and Albert Prodell on the ISABELLE site. Emma coordinated the preparation of the environmental statement and Prodell represented Project ISABELLE in the preparation of the draft.

ISABELLE And The Environment

In accordance with the National Environmental Policy Act of 1969, a draft environmental impact statement for Project ISABELLE has just been issued for public comment by the Department of Energy.

ISABELLE, the proton-proton storage accelerator, has been evaluated as to its environmental impact both during the construction phase and when in operation. In general, the draft report concludes that the \$275 million accelerator will greatly spur the national and international high energy physics programs (with the consequent positive impact on man's pursuit of knowledge), will stimulate the local economy, and will have no significant detrimental effects on the environment.

The accelerator will be constructed on 276 acres in the northwest section of the site over a period of seven years. Approximately 214 acres in the center of the ring will remain undisturbed and only 62 acres will be covered by buildings, paved roads and hard stands. Excavated earth, estimated to be one million cubic meters, will be stockpiled during the site development period for later use as earth shielding, eliminating the need for off site borrowing or hauling.

The disruption of the ecology due to construction will be temporary and post-construction restoration is planned so that the impact on the flora and fauna will be minimal. Other impacts of construction such as noise generation, dust evolution and hydrological disruption will also be temporary and suitable steps will be taken to mitigate the effects.

Among other materials needed for construction, Project Isabelle will require concrete in an amount equal to that used to build three miles of a six-lane highway, and steel sufficient to make 3500 standard sized automobiles.

In both the Nassau-Suffolk Bicoounty Master Plan and the Brookhaven Town Master Plan, the entire Laboratory site has been designated for institutional use and the proposed accelerator falls well within these land use policies.

During construction and operation, the project will require the services of persons from many different fields - physicists, designers, architects, engineers, technicians, carpenters, electricians, plumbers, mechanics, steam fitters, operating engineers, masons, steelworkers, inspectors, laborers and estimators. As much of the labor force will be recruited locally, it is not expected that more housing will be required in the area and, consequently, there would not be a call for additional tax-supported services such as schools and roads.

The greatest impact that ISABELLE will have is in the consumption of electric-

ity. The operation of the accelerator and its associated experimental apparatus is expected to double the Laboratory's current peak electrical demand. However, the total Laboratory demand will be only approximately three percent of the total power available for all Nassau and Suffolk customers of the local power utility. It should also be noted that a considerable portion of the power required by ISABELLE will be used during off-peak hours.

The accelerator will also require an estimated three percent increase in the Laboratory's present usage of fossil fuels. Strong efforts will be made to reduce the use of electricity and fossil fuels by such supplemental measures as solar energy and the recovery of waste process heat.

Although there will be a ten percent increase in the total projected daily use of water, this demand will not cause significant lowering of the water table because the bulk of the ISABELLE water usage will be recharged to the aquifer.

The super accelerator has been designed to have a minimal radiological impact on the environment. In fact, according to the report, it should produce much less environmental radioactivity than the AGS. In the last few years, the latter has contributed less than one percent of the total population dose equivalent attributable to all BNL operations.

ISABELLE is projected to have a useful life in physics well beyond the year 2,000. When this point is reached, all but the 62 acres occupied by the actual structures would be available for other productive use, and the facility itself could be easily decontaminated and decommissioned.

Copies of the statement are available for public inspection in the Research Library, in the Main Library(A) of SUNY at Stony Brook and in all local libraries. Single copies of the draft, for review and comment, may be obtained from Leonard Emma, Building 535. Comments on the draft statement should be sent to W.H. Pennington, Office of the Assistant Administrator for Environment and Safety, Mail Station E-201, Department of Energy, Washington, D.C. 20545, before April 24, 1978.

Lecture

"Heavy, Heavy [Water] Hangs Over Thy Head?" (Tritium - A Hazard in the Environment?), will be discussed by Arland Carsten, Medical Department, in a BNL Lecture on Wednesday, March 8, at 8 p.m. in Berkner Hall.



Four apprentices who will start working towards a new career on March 27 are (from left to right) Ralph Giordano, James Durham, Richard Kayte and Peter Eterno.

Anievas Piano Recital Closes Concert Series

A recital by the distinguished American pianist Agustin Anievas on Wednesday, March 15 at 8:30 p.m. in Berkner Hall will end the current concert season. The program will be devoted to two major works, the Diabelli Variations by Beethoven and the Sonata in B minor by Liszt.

Agustin Anievas was born in New York City. His mother, a piano teacher who had emigrated from Mexico's Yucatan province, gave him his first piano lessons when he was three-and-a-half years old. In six months he was ready to play publicly in a student recital. At eight he played at the Pan-American Union in Washington and four years later gave a recital at Mexico's Palace of Fine Arts, the first child ever to

receive this honor.

His orchestra debut came at eighteen, when he appeared as soloist with New York's Little Orchestra, under the baton of Thomas Scherman. By this time he was a Julliard student, working with Adele Marcus. The young pianist made headlines in 1961 as the winner of the First International Dimitri Mitropoulos Music Competition. He had already won the Michaels Award in Chicago, the 1959 Concert Artists Guild Award in New York and prizes in the 1960 Brussels and Bolzano competitions. A major career was soon under way with Anievas embarked on a global tour, playing recitals and concerts with orchestras.

(continued on page 2)

Summer Students

Summer student applications are now available for review at the Office of Academic Relations, bldg. 460. Scientific staff members desiring to have a student work with them this summer should make their selections and notify their departmental offices before March 10.

New York Train Trip

The Hospitality Committee is planning a group railroad trip to the city on Wednesday, March 15. Departure will be at 8:32 a.m. from the Patchogue LIRR station. Round-trip fare for adults is \$2.45, children under six years ride free.

Reserve a ticket by sending your fare through the U.S. mail to P.O. Box 322, Upton, New York 11973, no later than Thursday, March 9. Make checks payable to "Brookhaven National Laboratory." Your tickets will be given to you at the train station. Refunds will be made only if cancellations are received by the Friday preceding the scheduled trip.



National Audubon Society staff member, Dr. Stephen Kress, and friend. Kress will present a film and lecture on the bird life to be found on the ocean islands of the North Atlantic, on Thursday, March 9, at 8:00 p.m. in Berkner Hall. General admission is \$2; \$1 for persons under 18 and for senior citizens.

Service Awards March

Thirty Years

Richard T. Adams	Reactor
Arthur J. Beckwith	Central Shops
Paul Colsmann	Reactor
Ernest D. Courant	Physics
Lloyd O. Davis	Physics
George A. Schoener	Energy & Envir.
Joseph E. Smith	Energy & Envir.

Twenty-Five Years

Vernon J. Buchanan	Accelerator
Theodore R. Johnson	Medical
Helen J. Kelly	Biology
N. Blair Munhofen	Chemistry

Twenty Years

Robert P. Alvino	Accelerator
Walter F. Bigelow	Central Shops
Henry Boomer	Plant Engrg.
Chester J. Bubka	Central Shops
Stanton H. Cohn	Medical
Helen L. D'Ambrosio	Director's Off.
Madeline C. Kinney	Chemistry
Harold E. Knudsen	Accelerator
Robert I. Louttit	Accelerator
Joseph Mammina	Central Shops
Joseph W. Mead	Instrumentation
Carlyle Murray	Accelerator
Morton Rosen	Photog. & Graphic Arts
Arthur Schwarzschild	Physics
Elizabeth K. Shaw	Biology
Anthony J. Wisowaty	Accelerator

Ten Years

Norman M. Fewell	Accelerator
Junie I. Langhorn	Staff Services

Speakers Bureau February

February 1

Karen Schaich (Med.), John Glenn High School, E. Northport, **What is Junk Food?**

February 15

Marty Plotkin (Accel.), East Hampton High School Career Day, **Careers in Science**

February 16

John Humphrey (Accel.), Hampton Bays High School, **ISABELLE**

February 22

R.C. Anderson (DO), Westchester Chapter of National Society of Professional Engineers, **What programs are being planned by the Carter Administration to conserve energy, protect environment, and preserve natural resources?**

Radio Club

The Radio club will have a business meeting to schedule club activities, plan and organize a shack cleanup, and collect dues, at 12 noon, Thursday, March 9, in Berkner Hall, room A. Anyone interested in ham radio is welcome. The club will also have a VHF clinic in the radio shop in Bldg. 535 at 7:30 p.m. Wednesday, March 8. Club members can bring in 2 meter FM gear for tuneup and adjustment. Please contact the club secretary, Alan Bieber, Jr., at Ext. 2924 or Ext. 2928 for more information.

Rifle & Pistol Club

A meeting of the BNL Rifle & Pistol Club is scheduled for Wednesday, March 8, at 5:15 in the Recreation Building. All members are urged to attend.

Tune In!

Question:

I understand that Brookhaven is doing research about the effects of pollution on the lungs. And I understand it is the thinking of scientists in the field that it is detrimental to the health of an individual to be in a work area in which there are heavy smokers. Given the current thinking and as innovators in the field, would BNL provide me with a work area that is healthy and not polluted by cigarette smoke?

Answer:

BNL is committed to providing its workforce with an occupational environment that is safe and healthy. This commitment is shared via managerial lines from the Laboratory's Director to your immediate supervisor. One method of determining the safety and health conditions of a workplace is by comparison with situations which are recognized to cause adverse health effects. Present data are strong in indicating that smokers are at significant risk, but such data are weak or non-existent in suggesting that non-smokers in the presence of smokers are at significant risk.

Another method of determining safety and health conditions is to evaluate the compliance of the workplace to applicable occupational safety and health standards. Existing standards relating to smoking apply only to fire protection and sanitation/personal hygiene.

A third method is to assure that workers in any given workplace are at no greater risk than other members of society. Many pollutants that are generated from tobacco smoking are typical of other combustion activities such as heating homes, driving automobiles, barbecuing, etc. Society as a whole is exposed to these pollutants and workers whose workplaces do not involve direct exposure to combustion processes are not at a higher risk.

Consequently by use of the three methods, your workplace's safety and health status can be evaluated, and not solely from the presence or absence of pollutants from cigarette smoke.

If you are still convinced that your workplace is unhealthy, you should discuss the matter with your supervisor.

— Otto White

Safety & Environmental Protection Division

Some Words From The IRS

For the second year, child care expenses are handled as a tax credit instead of a deduction, enabling you to reduce your tax liability by the amount of credit you have coming. A credit is much better than a deduction, since it means you can effectively subtract the credit directly from your tax bill.

The credit for child care expenses is simple to figure: it's 20 percent of the first \$2,000 spent during the year for the care of one child, or 20 percent of the first \$4,000 spent caring for two or more children. The maximum amount of credit is \$400 for one child and \$800 for two or more. And, there are no more income limitations for eligibility.

The intent behind making child care expenses a credit is to give working parents some tax relief, but the credit also is applicable toward the care of a disabled spouse or other dependent while the taxpayer is at work.

There is very little in the way of formal requirements for the child care credit. The Internal Revenue Service says you must:

- have paid the expenses to enable you to be gainfully employed and you must have been employed or actively seeking employment during the period the expenses were incurred;
- file a joint return, if married;
- have maintained a household that included at least one child under 15 or a disabled dependent;
- have made payments to persons other than dependent relatives.

You also qualify for the credit if you pay someone to care for your child or disabled dependent so you can work part-time or go to school full-time. But there is one condition placed upon such situations; your spouse must be gainfully employed. You can even pay a relative to care for your dependent and the services of the relative qualify as employment subject to Social Security tax.

To claim the child care credit, file your

return on Form 1040 and complete and attach Form 2441, "Credit for Child Care Expenses."

Here's an example of how the credit would be figured for a working couple who spent \$2,400 during the year for a daytime babysitter for their two children. Their credit would be 20 percent of the first \$4,000 spent—in this case, 20 percent of \$2,400. That comes to \$480. They would then enter \$480 on line 40 of the Form 1040, lowering their tax obligation by that much. The child care credit is limited to your tax liability. It is not refundable.

Suppose your disabled father lives with you and qualifies as your dependent. While you work, a neighbor cares for your father and is paid \$100 a week for doing so; that comes to \$5,200 for a year's care. Here you would be entitled to a credit of \$400, the maximum allowed for a single child or disabled dependent (20 percent of the first \$2,000 up to a maximum credit of \$400).

There are a few things that cannot be counted as child or disabled dependent care expenses. Transportation costs between your home, school, babysitter, or day care center cannot be included. If you pay a flat fee for care which includes transportation, you will have to identify that portion of the charge and subtract it from your claim.

The cost of school beyond kindergarten also is not considered a child care expense in the eyes of the IRS.

For example, your third-grader attends a private school that provides extended care before and after school. The public school in your neighborhood does not provide extended care, so the private school is a better arrangement since you and your spouse work. The part of the private school tuition which covers the extended care is a legitimate child care expense, but the school tuition is not.

If you need more details, the IRS has a free publication on the subject. Contact your nearest IRS office and ask for Publication 503, "Child Care and Disabled Dependent Care."

Anievas Concert (Cont'd)

tras in Australia, Japan, Hong Kong, India, Pakistan, Afghanistan and Lebanon, as well as in the musical capitals of Europe, in North, South and Central America. He has played concerts under the batons of such conductors as Antal Dorati, Alain Lombard, Thomas Schippers, Lorin Mazel, William Steinberg, Eugen Jochum and Rafael Fruehbeck de Burgos. He is



Agustin Anievas

now artist-in-residence at the School of the Performing Arts at Brooklyn College.

One of the main reasons for Agustin Anievas' solid success is his method of study. He spends long hours practicing — interrupting his playing occasionally to criticize himself out loud — a proceeding he finds highly satisfactory. He spends additional hours studying the life and works of any composer he performs. "I try to relive some of the events around the time when the work was composed, correlating them to the experience in my own life. This helps me to interpret the music as the composer intended." Because of his musical preferences, these studies are extremely complex. Though Anievas plays all the great masters of the keyboard, his favorites are Beethoven, Chopin, Liszt and Rachmaninoff.

Admission:	\$4.00
Students with ID and persons over 65:	2.00
Persons under 18:	1.00

Hospitality Committee

A morning coffee will be held in the Brookhaven Center on Tuesday, March 14, from 9:30 to 11:30 a.m.

Please come and bring the children. It is suggested that you bring along a toy or two for your child to play with.

Arrivals & Departures

Arrivals

Robert M. Brady	Plant Engrg.
Robert N. Bright	Energy & Environ.
Michael J. Carroll	Physics
Thomas C. Cromer	Physics
Robert A. Christianson	Plant Engrg.
Walter R. Ducoing	Central Shops
Daniel M. Hughes	Personnel

Departures

David J. Behling, Jr.	Energy & Environ.
Linda Klöser	App. Math.
Laurie H. Rhodes	Adm. Sys. & Data Proc.
Manfred J. Seeberger	Physics
Hidehiko Watanabe	Biology

BROOKHAVEN BULLETIN

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Reflections On A First Run

She comes out from the gym, bright togs, bright mood. Muscles sit happily, not fearing their destruction. First jog ever, she reflects, and turns down the road. The first yards make no mark on her neglected body. Soon, though, sensation increases and further along she ponders that taking a spill on the soft ice would probably bring no extra pain. So she pays no mind and somehow the newfound spunk averts a slip. Up the hill toward the Guest House. Good for the face of things to maintain the pace uphill, she thinks, but on the flat again, she feels the effects.

There is an unfamiliar pressure now. Fellow jogger assures that this is expansion against the diaphragm, quite normal until one builds up. The pace is now a walk (read rest) but the jog soon resumes. Use the stomach muscles for easier breathing is the advice, but too late. That unfamiliar pressure has turned to stitch. Exhale with vigor. More advice . . . land with the back and sides of the foot. This is not a sprint. Roll the toes inward. She finds she copes better with eyes ahead and imaginary Mercury wings help too. This had better push me to three-set tennis and 35-point badminton, she thinks. The end of the route looms. Now it's exercise at the gym wall, designed to further wrench the anatomy but pay off in the future.

Once inside she lies supine. Maybe five minutes pass; the pounding passes and the eyes open. The pattern on the acoustic ceiling comes into focus and thoughts turn to a shower. How can I get there without actually moving? But it happens, and then the reward: senses sharpen, the body lifts off, and thoughts turn to, "what time tomorrow?" — Gail Williams

Bridge

The BNL Bridge Team made it three in a row with a win over the current leaders in the Long Island Industrial Bridge Leagues qualifying rounds. This, however, was not without some anxious moments. The team, consisting of Barclay Jones (Chemistry), his wife Pat, Bill Sampson (Accelerator) and his wife Joanne, survived a first half deficit of 2-18 victory points to snatch a come-from-behind victory in the second half of 19-1 victory points to score an overall win by the narrow margin of 21-19.

The statistics, in addition to the victory point totals above, were:

	First half	Second half	Total
Boards won	3	9	12
Boards tied	1	1	2
Boards lost	8	2	10
IMPS won	16	45	61
IMPS lost	45	13	58

There are three more rounds in the Swiss System qualifying stages before the eight qualifying teams contest the final knock out stage.

Concert Tomorrow

Viennese chamber music is the theme of the final concert in the Sea Cliff Chamber Players series, Saturday, March 4, at 8 p.m. in Berkner Hall. Tickets \$5 adults; \$3.50 for students under 21.

Come To The Ball

Carolina Varga Dinicu, who will headline the entertainment at the 2nd Annual Cricket Ball, is not only considered one of the best Mideastern dancers in the world, but can speak numerous languages and has her master's in political science from Columbia University. She is also a member of Mensa.

Billed as Morocco on the stage, she is a full blooded gypsy, who first mastered the art of flamenco before she turned to so-called "belly dancing." Apparently, the term belly dancer was coined by a publicity man who was promoting the 'Street in Cairo' exhibit at the 1893 World's Fair and the name has stuck since then. In actual fact, it is one of the oldest forms of dance originating in religious rites celebrating motherhood and was also used to prepare women for the stresses of childbirth. The current Lamaze system of natural childbirth uses two of the dance movements in its exercises.

Morocco has performed and lectured on this ancient dance form at concerts and seminars in the United States, Europe, and Russia. She has appeared both on and off-Broadway, in movies, and on many television programs. In Germany, a 60-minute TV special was devoted to her.

The critics who have reviewed her shows are uniformly enthusiastic: "strong and effervescent Morocco is in a class by herself. I've never seen anyone quite like her." . . . "lifts the roof clean off the theater." . . . "Morocco, I hasten to add, should not be termed a belly dancer. She has an extraordinary grace, control and sense of theatre that makes her act a first class one."

In addition to the performance of this top Mideastern dancer, the well-known Trinidad Serenaders Steel Band will play for dancing at the Cricket Ball on Saturday, March 11, at 8 p.m. in the Brookhaven Center. Tickets at \$7.50 per person, which includes open bar and hors d'oeuvres,



Morocco, who will highlight the Second Annual Cricket Ball.

may be obtained from the following:

	Building
Gail Thompson	490
Gail Williams	460
Grahame Williams	555
Sharon Smith	510
Don David	510
Debu Majumdar	130
Ken Batchelor	911-C
Helen Keeley	911-A
Madeline Windsor	477
Ed Beardsworth	475
John Mills	463
Linda Moreno	535
Carolyn Eterno	129
Maurice DuBois	134

Volleyball

Employees' League

On February 15, Easy Aces forfeited three to Biology. The Cool Tools spiked the Atom Spikers: 21-19, 21-17, 21-19. The Spikers bumped the Bumps: 21-14, 21-11, 21-11.

On February 22, Easy Aces forfeited three to the Cool Tools. The Spikers swept Phoenix: 21-17, 21-12, 21-19. The Bumps aced the Atom Spikers: 21-8, 21-4, 21-12.

Standings			
Cool Tools	6	0	1,000
Spikers	6	0	1,000
Biology	3	0	1,000
Bumps	3	3	.500
Phoenix	0	3	.000
Atom Spikers	0	6	.000
Easy Aces	0	6	.000

Mixed League

Division A

On February 27, the Popovers forfeited three to the Nads. No Names swept the LeMufs: 15-2, 15-1, 15-6. Lookin' Good baked the Assorted DO-E-Nuts: 15-4, 15-9, 15-9.

Standings		
Lookin' Good	9	0
No Names	9	0
Nads	5	4
Popovers	3	6
Assorted DO-E-Nuts	1	8
LeMufs	0	9

Division B

Riffraff took Cowturkey: 15-13, 11-15, 15-9. Oceanography left the Leftovers: 15-2, 15-8, 15-2. Nuts & Bolts beat the Diamonds: 15-4, 2-15, 15-11.

Standings		
Oceanography	8	1
Diamonds	6	3
Nuts & Bolts	5	4
Leftovers	4	5
Cowturkey	2	7
Riffraff	2	7

Selected Reading

Eng. Sci. 41, January-February 1978

Nature 271, February 9, 1978

Letter to the Association for Computing Machinery; to US scientists and engineers in computer technology. A. Sakharov and N. Meiman. 499

Phys. Today 31, February 1978

Physicists and the revolt against science in the 1930's. D. J. Kevles. 23-30

Cooking Exchange

On Wednesday, March 8, from 12:30 to 2:30, in the Recreation Building, the Cooking Exchange will present a program of authentic Mexican cooking. No tortillas or tamales, but regional dishes from around Mexico City.

Judy Fuller, who lived in Mexico several years, and Gail Bird, will present this exceptional demonstration featuring soup to salad to main dishes. Bring your curiosity and appetite and join us.

There is an admission charge of 75¢ per adult and 25¢ babysitting charge for each child.

If you wish to demonstrate a recipe please call Judy Fuller at 744-4965.

Tournament Winners

Congratulations to the following winners of the Scotch Doubles.

George Speidell and Jane Cerny	857
Ed Ohanian and Ruth Cohen	826
Ed and Mary Grace Meier	825
Al and Joyce Pinelli	809
Bernard and Marjorie Belligan	805
George Langley and Karen Alberico	804
Frank Coppola and Alice Alberico	798
Lenny Kalmar and Audrey Bangel	792
Dick Lingg and Pat Oster	791
Bob and Colleen Holland	791

Special thanks to Audrey Blake the official scorekeeper.

Bowling

Pink League

Marge Stoeckel had a very successful night bowling a 169/164/171 for a 504 series.

Other good games were Lindora Boyd 186, Cath Van Noy 184/168, Helen Keeley 172, Ellie Adams 170, Carol Beckner 163 and Jo Gazzola 160.

High pins over average went to Ellie Adams 71 and Ann Roddy 61.

Red League

Congrats to E. Meier (213/205) for his 603 scratch, 681 gross (102 pins over average). He led the Sandbaggers to an 11-0 win over the Pinball Wizards. Great team bowling by R. Jones (560 scratch), G. Bohnenblusch (556 scratch) and A. Dick (624 gross) gave the Sandbaggers 3163 pins for the night. The Anachems won 11-0 over the Blue Jays. P. Klotz (531 scratch, 639 gross) and L. Newman (509 scratch, 635 gross) had their best night of the year. The Old Timers downed the Bubble Boys 8-3. R. Adams had a 204 game. A steady night for H. Frei with a 620 gross. W. Kollmer had a 211.

The Freon Loaders took the Dyno-Mites 8-3. F. Stahman (215) had another good night and J. Pringle (up 2 pins) a very steady evening. The Designers won their match with the 76'ers 8-3. In the final match, the Cosmos came out on top 7-4 with the Trouble Shooter team. N. Fewell up 6 pins in the last 6 weeks.

Purple & White League

Congrats to Dave Penoyar, with a 142 average he rolled a 254 scratch game, 112 pins over average, giving him a 300 gross game and a 704 gross series.

Bob Jones had high series for the men with a 582 and Sharon Smith for the ladies with a 516. High game for the ladies was Marie Brenner with a 194.

Other good games were Bob Jones 230, Jim Griffin 229, Jim Petro 204, Dick Murgatroyd 201, Sharon Smith 187, Gail Thompson 177.

The Stir Ups are in first place with the Sea Gulls one point behind.

Green League

The Sparks moved into first place as they took seven points from the Got-A-Hit-Ums. For the Sparks, J. Carroll had a 208 game and B. Kristiansen a 208. For the Got-A-Hit-Ums, N. Parrinello had two 202 games and M. Punda had a 210. The Pinball Wizards dropped to third as the Old Times II moved into second place by taking six points from the Pick-Ups. For the Old Timers, B. Galen had a 202 and G. Fales a 212 game. The Blue Jays got bombed by the Anachems who took eleven points from them. The Dyno-Mites could only salvage three from the Freon Loaders while the Trouble Shooters could only take four from the Cosmos.

Soccer

AGS-CHEM were knocked from the top of the table 2-1 by Port Jeff. The margin of victory was two goals by John Mills in the second half which overcame a 0-1 halftime deficit. Tight markings by Mills and K. Lister prevented AGS-CHEM Torjaeger O. Gurewitz from getting a good shot on goal. Gurewitz had previously knocked Physics from the table top three weeks ago by two last minute goals (4-3) and found the range last week against Energy-MED for a 1-0 triumph. Stony Brook gets a chance to tighten the table when they meet Port Jeff tonight.

Standings (including 2/24)

Team	W	L	T	Pts.
Port Jeff	5	1	2	12
AGS-CHEM	5	2	1	11
Stony Brook	3	3	4	8
Physics	3	3	2	8
Energy-MED	2	5	1	5
Shoreham	1	7	0	2

Cafeteria Menu

Week Ending March 10, 1978

Monday, March 6

Corn chowder	
Beef chop suey on rice	1.20
Scrambled eggs, sausages & fr. fr.	1.10
Hot Deli - Pastrami (on bread)	1.15
(on roll)	1.25

Tuesday, March 7

Beef noodle soup	
Knockwurst & sauerkraut	1.10
Sauerbraten & potato pancake	1.40
Hot Deli - Veal pattie & peppers hero	1.25

Wednesday, March 8

Cream of potato soup	
Braised meatballs a la mode w/buttered noodles	1.20

Special

Davy Jones Fish Fry w/cup of soup, pie or plain jello and small beverage \$1.87 plus tax	
Hot Deli - Corned beef (on bread)	1.25
(on roll)	1.35

Thursday, March 9

Chicken vegetable soup	
Cheese ravioli w/1 veg.	1.05
Roast chicken w/stuffing & 1 veg.	1.20
Hot Deli - Italian sausage & peppers hero	1.25

Friday, March 10

Fish chowder	
Spaghetti w/clam sauce	1.10
Breaded pork chop & 1 veg.	1.40
Hot Deli - smoked tongue (on bread)	1.15
(on roll)	1.25

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.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all nonscientific 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, as indicated below. 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.

LABORATORY RECRUITMENT: Opportunity for present Laboratory employees.

512. **ADMINISTRATIVE ASSISTANT** - Requires experience in budget formulation, resource management, cost accounting, planning, and preparation of written and statistical reports. Technical background desirable. ISABELLE Project.

513. **ACCOUNTING ASSISTANT** - Requires proficiency in recording of costs, preparation of financial and status reports, analysis of cost data, and familiarity with computer accounting systems. ISABELLE Project.

514. **TECHNICIAN (WEEKLY OR MONTHLY)** - Requires AAS in electronics technology or equivalent and demonstrated ability in the design, development, construction, and testing of instruments as well as repair of a wide variety of instrumentation. Safety and Environmental Protection Division.

515. **MATERIAL HANDLER** - Supply & Materiel Division.

516. **HELPER B** - Supply & Materiel Division.

OPEN RECRUITMENT: Opportunity for present Laboratory employees and outside applicants.

517. **MANAGEMENT INFORMATION SYSTEMS SPECIALIST** - Requires experience in design, development, and implementation of cost and schedule control systems for larger projects. Familiarity with computerized systems such as Dept. of Defense cost/schedule system criteria is desired. ISABELLE Project.

518. **FACILITIES ENGINEER** - BSME or equivalent with experience in design of HVAC, power and process piping systems and their ancillary equipment, including instrumentation and control systems. PE license highly desirable. Plant Engineering Division.

519. **LIAISON ENGINEER** - Requires BS or equivalent in mechanical, marine, or civil engineering. Must have substantial experience in plant or liaison engineering, particularly in project evaluation and coordination. Background in installation and maintenance of high energy physics experimental equipment would be advantageous. Accelerator Department.

520. **SR. STANDARDS INSPECTOR** - Must have proficiency in the use of inspection equipment, optical tooling and NDT with good knowledge of metals, machining, welding, and sheet metal fabrication. Central Shops Division.

521. **SR. DESIGNER** - Must have experience in design of precision components, mechanical structures, vacuum systems, and shop practices. NSLS Project.

522. **TECHNICIAN (WEEKLY OR MONTHLY)** - Requires background in chemistry laboratory, vacuum technology, evaporators, and sputtering techniques. Tandem Van de Graaff, Physics Department.

523. **TECHNICIAN** - AAS degree or equivalent in electronics technology. Background in digital logic, computer subsystems and peripherals and good mechanical ability helpful. Applied Mathematics Division.

524. **EXPERIMENTAL MACHINISTS (2 POSITIONS)** - Central Shops Division.

525. **COMPUTER OPERATORS (2 POSITIONS)** - Rotating shifts. Applied Mathematics Division.

526. **SECRETARY** - Requires excellent secretarial skills including dictaphone, and strong background in office procedures. Part-time positions. Director's Office.

Autos & Auto Supplies

72 HONDA - 350 cc, very good cond, new clutch, fast, used strictly for road. Mark, 878-1790.

73 DODGE - Coronet, 4 dr sedan, p/s, automatic, excel cond. \$1800. Alan, Ext. 2252.

69 MGB - Runs well, needs body work, etc. \$600. Steve, Ext. 3100.

65 HARLEY DAVIDSON - 900 cc, sportster, custom seat and paint, very clean. 924-8264 eves.

4 TIRES - 9.50 - 16.5 Firestone Highway tires for ¾ ton pick up. Low mileage. 924-8264 eves.

68 MERCURY - Montego, 2 dr, p/s, 8 cyl, good mech cond. \$475. 924-4749 after 6 p.m.

REBUILT STARTER - For Chrysler, never used. \$25. (2) 15" Ford, Mercury rims, like new. \$10. Nick, Ext. 4810.

71 CHEVY NOVA - 8 cyl, 3 spd on floor shift, new tires and snows, new clutch (1 mo old), am/fm, mech excel. Must sell. \$900. FIRM. Deena, 589-0461.

72 CADDY - Coupe DeVille, all power, am/fm, 8 track, 56,000 mi, excel cond. \$2500. Bailey, Ext. 3260.

74 BUICK - Century, 9 pass wagon, 58,000 mi, excel running cond. \$2550. 924-4785 after 6 p.m.

75 VEGA - Very good cond, 29,000 mi, steel belted radials, electric rear defogger, good gas mileage, just tuned. \$2,250. 286-9390.

73 PLYMOUTH - Duster, new brakes, tires, shocks, \$1,650 or will trade for small station wagon. 727-1617.

65 DODGE DART - 4 dr, auto, good second car, reliable transportation. Ext. 4688 or 924-8213 after 5.

61 DODGE LANCER - 4 dr, p/s, auto, excel running cond. Ext. 4688 or 924-8213 after 5.

69 MUSTANG - 6 cyl, auto, for parts, radials ER78x14 (1.85x14) steel belted, set of 4, good tread. 289-8212.

SNOW TIRES - (5) 7.50x16 mounted on GM 8 hole rims, \$25 ea. John, 744-4386.

VOLKSWAGON - Engine and transmission, excel cond, mounted on roll bar body, meant for beach, never finished. \$150. Chuck, Ext. 2350 or 698-1463.

64 DODGE DART - 6 cyl, auto, R/H good running cond. \$75. 399-1553.

72 FORD - F100, good cond, V-8, 58,000 mi. \$1,250. 924-3997.

VW ENGINE - 1200 cc, dismantled, also misc, VW mech parts. Mike, 281-3460.

67 FORD - Galaxie 500, convertible, V-8, auto, p/s, radio, snows. Ted, Ext. 4163 or 4126.

65 MUSTANG - Automatic transmission broken, best offer over junkie's. Don, Ext. 2026.

72 BUICK - Riviera, power windows, a/c, sunroof, tilt wheel, power seats, etc., excel cond, low mi. \$1,750. 286-1108.

73 CHEV - Luguna, white, black vinyl top, burg int, p/s, p/b, 38,000 miles, radials, excel cond. \$2,000. C. Horn, 281-0173 after 4:30.

68 TRIUMPH SPITFIRE - Needs top and some work. \$500. 821-9235 eves.

74 JEEP - Custom Wagoneer, automatic, 4 whl drive, 33,000 miles, a/c, p/s, luggage rack, excel cond. \$4,500. Mike, Ext. 3324 or 643-4897.

64 VW VAN - Set up for camping, new brakes, muffler, gen, rebuilt engine, good running cond. Don, Ext. 4551 or 281-3093.

68 BUICK - Wagon, runs, needs work. \$100 firm. Ben, Ext. 3305 after 4 or 473-7681.

66 DODGE DART - Runs well, good battery, new exhaust system. \$200. Jeff, Ext. 3785 or 281-8401 after 6 p.m.

77 CHEV - ¾T 4 spd, 4 wh-pick up, lockin hubs, many options, 1200x16.5 tires, white spoke wheels. Must sell. 289-3598 after 7.

68 CHEVELLE - (Shell) custom white w/fancy design striping, rear end, trans, and unfinished 427 engine. Emil, 928-3088.

67 OLDS TORONADO - Mech very gd, p/s, p/b, a/c, power windows, 6-way power seat, tilt and teles wheel. \$350. Ext. 4247 or 928-0297.

70 CHEVY - 9 passenger wagon, low mileage (54,000), loaded, Class II hitch and wires. \$1,000. Ext. 2484 or 732-0974.

69 COUGAR - 8 cyl, hi mileage, needs new exhaust system, good transportation. \$250. L. Morrison, Ext. 4208.

68 VW - Reliable, new tires, battery, brakes, rebuilt engine. \$350. Ext. 2493.

67 PONTIAC - Catalina, new tires, battery, starter, p/s, good cond. \$325. 281-5412.

73 HONDA - ST90, road and dirt bike, low mileage, excel cond. \$375. 286-8448 after 5.

68 BUICK - Skylark, 17,093 miles, excel cond. \$850. Kathy, Ext. 2915 or 924-6877.

Boats & Marine Supplies

73 MERC - 40 hp, like new, less than 100 hrs, elec start, long shaft, needs controls, must see. Harry, Ext. 4722 or 727-1827 after 6.

20' LARSEN - Cuddy cabin, navy top, 120 hp Mercruiser, rebuilt in 1977, 1975 Shoreline galvanized tilt-trailer, extras. Scott, 283-0888 or 727-5168 after 6 p.m.

22' TONG BOAT - 3 sets of tongs, 55 hp, glassed from top to bottom, excel cond. Steve, 968-9185 after 6.

16' FISHING SKIFF - W/navy top, steering wheel and cable, good cond; 12' Runabout w/6 hp evinrude, good cond. 325-0447 after 5 p.m.

Miscellaneous

TOASTER - Sunbeam 4 slice, \$20; Sunbeam Mix Master, \$20; Sunbeam drip coffee maker, \$25; Sunbeam 10 speed blender, \$20. All new in boxes. Commercial microwave oven 15KV, \$350. Ext. 3156 or 281-6130 eves.

GARRARD ZERO - 92 automatic changer w/new Shure M91-ED cartridge. Mint cond. \$60. Ext. 4701 or 271-2877.

FREE - (3) golden ret and shep mix, females, have been wormed, 8 weeks old. 325-8193.

BROILER OVEN - Toastmaster DeLuxe with white enamel stand, \$25; brown top table, 24x36x28 ht, \$5. 744-3784.

POCKET WATCH - 14 kt gold, 21 diamonds, value \$600, sell for \$200; opal pendant on gold chain, value \$250, sell for \$125. 473-9180 after 4.

MINK STOLE - Dawn pastel, 10 male skins, beautiful cond, top quality. Best offer. Ext. 2065.

COMPRESSOR - 1 HP, 2 cyl, Sears best, paint sprayer, 6 mo old, gun never used, 5.8 cfm @ 90 psi, \$200. Walt, Ext. 4597 or 475-4935 eves.

PLUMBING TOOLS - Stock and dies ¾"-2", 2" cutter, reamer, cast cutter, vise stand, all for \$75; Singer operator sewing machine, excel cond. \$110. Chuck, Ext. 3254 or 929-4413.

TABLES - Smoke glass and chrome, 2 end tables and 1 coffee table, \$85; also 2 lamps 39" tall, \$30. 928-4511.

CRIB - Baby, w/mattress, good cond, \$50; Sears elec adding machine, \$50; new candlecraft kit, \$4.50. Ext. 3609.

ALUMINUM SCREENS - (4) 34"x34", \$4 ea; (1) 58"x46", \$7; child skis and poles, \$7; kiddie skis, poles, \$2; 2 speakers 3", \$1.50 ea. Frank, Ext. 4581 or 981-2529.

SKI BOOTS - Nordica Astral, size 7½ med, like new, \$50. Orig \$110. Ext. 4204 or 878-1817.

YORKSHIRE TERRIER - AKC, 18 wks, vet certificate, personality plus devotion! Alyce Daly, 475-2627 after 6.

CAR RADIO - AM, \$10; Motorola 8 track stereo, auto, \$15. Hank, Ext. 3935.

GE WASHING MACHINE - Portable, excel cond, \$90; GE dryer, 1 year old, service contract still in effect, \$145; Coppertone kitchen cabinet, almost new, \$40. 289-7187 after 5 p.m.

SNOWMOBILE SUITS - (2) color blue, large mens, small ladies (size 10-12), \$20 ea. A. Campbell, Ext. 3354.

SKIS - Rossignol Strato 102's, 195 cm w/Salomon heels, marker toes, \$100; Lange comp ski boots, size 11, \$50. 286-0384.

X-MAS LIGHTS - 50', outdoor, \$4; Odyssey TV game, \$30; hairdryer, \$2; 7 white coffee cups, \$2. Sue Norton, Ext. 2907.

DINING ROOM SET - Mediterranean, moving, must sell. Pedestal table, 4 chs, china closet; redwood picnic table w/4 benches. Best offer. Julian Aguilar, Ext. 3280.

LIVING RM SET - Moving, must sell. 4 pcs Spanish gold and 2 corner black slate tables; bed rm set, 5 pcs, king size Spanish, 2 end tables, 79" dresser and men's dresser. Best offer. Julian Aguilar, Ext. 3280.

TV - RCA 21" color, very good cond, \$100; medium sized refrig (6 ft. 3) \$40. 751-7824 eves.

STORM DOOR - Aluminum 32½x80¾, custom made, \$50; Sears 10 speed bike, good cond; refrig, cold spot 19 cf, avocado green, like new, \$275. Vinnie, Ext. 2951 or 475-2058.

DINING ROOM SET - Solid maple, 42" rd table w/2 lvs, 4 mates chairs, 42" hutch cabinet, like new, \$300. 286-0246.

AIR RIFLE - Crossman 766 pump, new, good cond, telescopic sight. \$45. Fred Paffrath, Ext. 4407.

PIANO - Spinet, beautiful polished fruitwood, excel cond, \$500; electric range, 42" wide, white, with deepwell burner and stove top griddle, very clean, good cond, \$40. M. Kinney, Ext. 4316 or 924-3783.

LADIES GOLF CLUBS - Bag and cart, \$35; baby carriage (converts to car bed) very good cond, \$35. Pete, Ext. 3868 or 878-1225.

TWIN BED - Night table and dresser, \$50; Bissell carpet sweeper, \$10; modern bathroom fixture, \$15. George, Ext. 4460 or 4453.

STAMPS - Mineral Heritage; Continental Congress; Universal Postal Union; Banking and Commerce. 10 sheets each, 20 per cent over face value. Ext. 4240 or 286-0295.

PLAQUES - Imitation jade and coral, oriental designs of spring rose and chrysanthemum, exquisite bird designs made with fine feathers. 924-3066.

BEDROOM SET - Italian provincial, hand carved, large armoire, triple dresser, 2 nite tables, headboard, 2 mirrors. \$1000. Tony, 924-3443

8' TRUCK CAMPER - a/c, water, stove, ice box, sleeps 4, good cond. \$495. 698-5701.

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

S SETAUKET - 3 bdrm ranch, fin basement, 5 appl, ½ acre, 3 Village School Dist. \$34,500. 331-1798.

MASTIC BEACH - Sale or rent, compact, 3 bdrms, near water, sell under \$20,000. Rent negotiable. 281-7531.

MASTIC BEACH - 4 yr old house, 6 rms, full bsmt, fence, 80x125. \$28,500. 281-5498.

N SHIRLEY - 5 min from Lab, 3 bdrm, den, w/w, s/s, large in ground swimming pool, to settle estate. Dick, Ext. 4313 or 929-4551.

SHIRLEY - Fully furnished, 3 bdrm, heated fin bsmt, w/w, storm windows, hot water heat. Must sell, will hold mortgage. \$25,000. 281-5328.

SHOREHAM - 4 bdrms, colonial, 2½ baths, cedar shakes, w/w carpeting throughout, 1 acre completely fenced. \$56,900. 744-2821.

BELLPORT VILLAGE - ½ acre, 3 bdrms, 2 car garage, screened porch, attached greenhouse, many extras. \$49,500. 286-2724.

RIVERHEAD - '71 Mobile Home Valiant, 12'x60', 2 baths, large kitchen, 2 bdrms, in park, nice location. MUST SELL. \$10,000. Harry, Ext. 4722 or 727-1827 after 6 p.m.

SHOREHAM - 5 min to Lab, 3 bdrm, contemporary ranch, treed ½ acre, low taxes, many extras. Must see. \$34,000. 744-6772.

For Rent

SHIRLEY - Furnished, 2nd flr apt, 1 or 2 bdrm, rent very reasonable, util incl, avail immed. Ext. 3773, 924-5966.

MASTIC BEACH - Roommate to share 5 room apt. \$125/mo. util incl. Ed, Ext. 3535/3516 or 281-2177.

HOLBROOK AREA - 3 rm apartment, full bath, eat in kit, priv ent, all util, cable TV. \$265. 588-3792 after 3:30.

PORT JEFFERSON - 3 bdrm, 100 yrs old, including util, garden and beach rights, walking distance to stores and LIRR, furnished, available in June, July and August. \$400/mo. 473-4471.

MASTIC BEACH - 1½ rm studio, furnished, private ent, rent negotiable, incl util, near water. 281-7531.

BROOKHAVEN HAMLET - 3 bdrm ranch on S Country Rd, fp, 2 car garage. \$350/mo. Ext. 4676.

ROCKY POINT - 2 bdrm apt, includes util, short walk to beach. \$325/mo. 744-9894 after 5.

SHIRLEY - 3 bdrm cape, carpeting, washer and dryer, dishwasher, fenced yard. \$300/mo. Ext. 3158.

YAPHANK - German Gardens, small 3 rm bungalow, unfurnished. 924-3946.

S JAMESPORT - (Riverhead) 3 bdrms, kitchen, liv rm, din rm, 25 min from Lab, near beach. \$200/mo + util. Palais, Ext. 2907 or 698-0576.

VERMONT - Cope, fp, fully equipped, cross country, down-hill nature trails, excel trout fishing. 732-6499 after 6 p.m.

ROCKY POINT - Near LI Sound, 3½ rms, studio apt. No pets. 744-9724.

EAST MORICHES - 3 rm apt, furn or unfurn. \$225/mo util incl. 878-2863.

Wanted

CAMPING EQUIPMENT - Stove, lamp, must be propane, also could use mirrors. Ext. 2333.

WHOEVER - Hit my gold '71 Ford Maverick which was parked on Lewis Rd by the parking lot of Bldg 130, or saw the incident, call me at Ext. 2386 or 924-3072 after 6 p.m.

SNAILS - Small, freshwater, for scavenging in well-balanced aquarium. Ext. 4451 or 589-3269.

CLEANING WOMAN - Reliable, good worker, 5 hrs every other week. 475-8658 after 6.

INDIVIDUALS - Join group to see Natalie Cole on March 9th, also Dakar and Senegal on Oct. 7th. Cathy, Ext. 4093 or 732-6262 eves.

PERSON - To share house, private rm, female preferred. \$140/mo. 281-8333 after 5.

GAS RANGE - Apartment size and refrig. Reasonable. 924-6021.

TO BUY - Automobile literature, shop owners manuals, tools. Mike, 281-3460.

TYPING - Lite, sewing, and babysitting. Medford area. 475-0144 after 6 p.m.

SKIS - 2 pair of cross country. Must be reasonable. J. Davis, Ext. 4504.

AUTO - Excel cond, low mi, '70-'74 Plymouth Valiant custom, prefer '73, prefer 6 cyl, 4 dr sedan, auto or similar Dodge Dart '72-'73 or Nova 8 cyl '72-'73 or Mercury Comet '73. 286-8724.

RELOADER - 12 gauge shot shell reloader, must be in good working cond. Art Rosenka, Ext. 2957 or 924-3553.

BLACK & WHITE TV - Dave, Ext. 3403 or 3226.

UTILITY TRAILER - Dropped axle, approx, 4x6 feet. I.D. Rino, Ext. 2012.

PIANO - Good cond, tuned, teenage learner who loves music and will enjoy it. 289-7618.

Car Pools

RIDGE - Old Saddle Rd, wants to join daily carpool for 8:30 to 5:00 shift. R. Miltenberger, Ext. 4210.

DRIVER - Bellport. Bookless, Ext. 4510.

BELLPORT - Need on time ride from S Country Rd, Bellport. Will pay or drive when I get my new car. Don, Ext. 2026.

Services

NEED A HANDYMAN - For any type work. 399-3314.

BASEMENT FLOODING - Let us raise your boiler now before next thaw. Day or night. 281-9884.

NEW & USED TIRES - Rims, repairs, Dunlop & Michelin snow, reg radial, free installation, balance avail. Lunchtime. Fred Usack, Ext. 4597 or 475-4935.

AUTO BODY - Repairs and painting, only serious callers. Ext. 2546, 744-4047 after 6 p.m.

TAXES - Prepared by tax consultant, your home or mine. Reasonable. John, 732-2472.

FURNITURE STRIPPING - Varnish and paint removed, chairs caned. 924-8547.

TAXES - Prepared in the convenience of your home Evening & weekend appointments. Reasonable. 665-5640.

BABYSITTING - On site. Anne, Ext. 3226.