

Booster and AGS Go for the Gold

A number of golden moments were observed from the main control room at the Alternating Gradient Synchrotron (AGS) last week — culminating this past weekend in AGS experiments being done with the world's highest-energy gold ions.

With an atomic weight of 197, gold is one of the heaviest elements in the periodic table. By accelerating gold ions to 11.7 billion electron volts per nucleon (GeV/n), the AGS brought them to by far the highest energy ever attained by the heaviest ions used in research.

This Olympic-sized achievement marks the completion of the heavy-ion phase of commissioning for the AGS Booster. It also marks the start of a whole new physics era at the AGS and points the way to successful operation of the Relativistic Heavy Ion Collider (RHIC), now under construction at BNL.

Said AGS Department Chairman Derek Lowenstein, "The nearly flawless execution of the acceleration of gold ions was a textbook case of coordination and execution by key personnel in the Tandem Van de

With AGS Operations Coordinator Kevin Brown (far left) at the Booster control console at AGS Main Control, are (standing, from left) Kenneth Reese, Mike Brennan, Leif Ahrens, Thomas Roser, Kip Gardner; (seated, from left) Ed Gill and Woody Glenn.

Photos on this page by Roger Stoutenburgh



Graaff and the AGS Accelerator Division."

Coordinating the commissioning effort was AGS Physicist Leif Ahrens. "Too many people were involved to mention them all individually," Ahrens said, "but without all of their outstanding efforts, frequently while

under considerable pressure, this success would not have been achieved."

Beginning on the morning of Monday, April 20, Tandem Senior Technical Supervisor Charles Carlson supervised the Tandem's operation of its gold source. Then, at 9 a.m. on

Tuesday, he oversaw the delivery of gold ions to the Tandem-to-Booster (TTB) transfer line hand-off point.

AGS Physicist Kip Gardner had established TTB/Booster injection parameters that would allow a gold beam to be spiraled in the Booster —

(continued on page 2)

Coming Up

Maurice Goldhaber, AUI Distinguished Scientist Emeritus, will deliver the last of three lectures in the 21st Pegram Lecture Series "A Physicist's Journey," on Thursday, May 7. His concluding talk on "Tests of Conservation Laws and the Search for Proton Decay" will begin at 8 p.m. in Berkner Hall.

Dirk van Bikkum of The Netherlands' Institute of Applied Radiobiology and Immunology, returns to BNL for his second stay as a Haworth Distinguished Scientist. On Tuesday, May 12, at 4 p.m., in Berkner Hall, he will give a lecture of Labwide interest on "Risks and Limits of Radiation Exposure: How Low Can We Go?"

Davis Becomes Acting Associate Director

Effective today, M. Sue Davis has become Acting Associate Director for Reactor, Safety and Security, replacing Gerald Kinne, who retired yesterday (see story inside).

"A few years ago, we had announced Jerry's intention to retire," noted BNL Director Nicholas Samios, "but due to the increased demands on the Lab in this area, we prevailed on him to postpone that decision. He has performed an extremely difficult task during these last years with care and sensitivity. We finally agreed with his strong request that it was time for him to enjoy his sailboat.

"I am pleased to announce that Dr. Sue Davis has agreed to be the Acting Associate Director for Reactor, Safety and Security while we have a search committee conduct the required

national reconnaissance," Samios continued. "Sue brings to this position several years of experience as the assistant to that Associate Director, with whom she has been closely involved in the whole range of complex problems that comprise that field. We are fortunate indeed that she has agreed to accept our offer."

Davis came to BNL in 1974 as a research associate in the Porphyrin Chemistry Group in the Chemical Sciences Division of the Department of Applied Science (DAS). She had received her Ph.D. in physical chemistry from the University of Rochester in 1975.

In DAS, Davis worked on various aspects of photosynthesis and was promoted to Associate Scientist in 1978. In 1980, she moved to the

Department of Nuclear Energy, where she was concerned with the technical evaluation of problems associated with the management of radioactive wastes. She was named Scientist in 1981 and became Deputy Head of the Nuclear Waste Management Division in 1982.

Davis took the leap from research to administration in 1985, when she was appointed Special Assistant to the Associate Director for Applied Programs. In 1990, she became Assistant to the Director. In that capacity, she worked side by side with Kinne, helping the Laboratory respond to the increased emphasis that U.S. Department of Energy (DOE) Secretary James Watkins has placed on safety and environmental protection at DOE facilities.



Organizers of the Workshop on Neutron and Synchrotron Radiation Studies of Materials: (from left) Rae Greenberg, Director's Office; Robert Thomas, Office of Educational Programs; John Axe, BNL Associate Director for Basic Energy Sciences; Stephen Shapiro, Physics Department; and Jerome Hastings and Steven Hulbert, National Synchrotron Light Source Department.

Learn to Use HFBR and NSLS

The High Flux Beam Reactor (HFBR) and the National Synchrotron Light Source (NSLS) are two of BNL's big machines — facilities available to outside users to perform research that they cannot do at their home institutions.

Both the HFBR's neutrons and the NSLS' photons are ideal for characterizing the nature of materials, biological, chemical and physical. But these machines cannot yield information unless researchers understand how their respective beams are produced and know hands-on how to use their different instruments.

To be held at the Lab May 4-15, the "Workshop on Neutron and Synchrotron Radiation Studies of Materials" is a two-week how-to school on using the HFBR and the NSLS. It will feature one week of lectures on the likes of powder diffraction and inelastic scattering, and a second week of experiments at the HFBR and the NSLS using the techniques that were talked about the week before.

All from North America, 20 students, primarily graduate students completing their Ph.D.s and recent Ph.D.s with postdoctoral positions at industrial labs, were selected to participate in the workshop, to enlarge their knowledge of material science to include the many techniques of characterizing materials using neutrons and synchrotron radiation.

In addition, interested members of the Lab community are invited to attend; see the Weekly Calendar for the workshop schedule.

"With the HFBR and the NSLS, BNL has two of the most sophisticated machines for material studies, and Brookhaven is one of the few labs in the world with these two complementary facilities on one site," explains John Axe, BNL's Associate Director for Basic Energy Sciences.

"We are particularly interested in attracting chemists and solid-state physics who are expert in making

(continued on page 2)

Leaving the Lab — After 35 Years or More

When Jerry Kinne signed on at BNL on December 1, 1954, he didn't know how hard it was going to be to leave.

"I made up my mind to leave before, but, instead, I got a new job," Kinne joked, adding, "I am definitely going this time!"

True to his word, Kinne retired yesterday, ending a 37-year career that saw him rise from Reactor Shift Supervisor at the Brookhaven Graphite Research Reactor (BGRR) to the Lab's Associate Director for Reactor, Safety & Security.

When Kinne came on the BNL scene in 1954, the BGRR — the first chain-reacting atomic pile ever built specifically for peacetime research in atomic energy — had been running for over three years. In 1956, he joined the Research Coordination Group of the BGRR and stayed until 1960, when he became an engineer on the High Flux Beam Reactor (HFBR) Project.

With a substantial increase in



Roger Stouvenburgh

Jerry Kinne

neutron intensity over the BGRR, the innovative HFBR first achieved a self-sustaining chain reaction in October 1965. In 1964, Kinne was made Assistant Group Leader of the HFBR Operations Group, becoming its Leader in 1967.

Kinne first took his reactor background to the Director's Office in 1969, when he was named Assistant to the Director, working on reactor and safety matters. But he returned to the HFBR in 1980 — as Head of the Reactor Division.

In 1986, Kinne was again called to the Directorate, this time as Assistant Director for Reactor, Safety & Security. Though he had announced his intention to retire as of May 1990, he was persuaded to stay on in March of that year as Associate Director, to help the Lab respond to the increased emphasis on safety and environmental protection at U.S. Department of Energy facilities.

Though Kinne has now retired, he has one constant reminder of the Lab that would not let him go: his wife Lucy, whom Kinne met on site in 1954, when she was Lucy Duke, a medical technologist in the Medical Department.

Now, Jerry and Lucy Kinne will follow through with the plans they put on hold two years ago — to travel on their 44-foot, center-cockpit sailboat, the *Kestyll*. "We'll keep our Strong's Neck home as our base," said Kinne, "and we'll visit our kids and not come to work!"

He may not work, but he won't forget it. "I think the thing I am going to miss most is the interaction with good friends and the staff," Kinne said. "It's been fun." — Anita Cohen

Interns Available for Summer Science

BNL's Community Summer Science Program (CSSP) offers both a morning lecture series and afternoon laboratory internships for local high school juniors and seniors with strong science credentials. CSSP interns spend afternoons in research-related activities under the direction of Lab staff advisors. Internships run for six weeks and ordinarily carry a stipend, at no cost to the sponsor's department. The 1992 program will begin July 8 and end August 14.

Learn to Conduct STN Searches

A leading database search service offered by the Technical Information Division (TID), STN specializes in providing structural, numeric and full-text material, as well as bibliographic information.

TID has organized classes for present and potential STN users, to take place as follows:

Tuesday, May 12

9 a.m. - noon STN update on new features

1 p.m. - 4 p.m. Reaction searching

Wednesday, May 13

9 a.m. - noon Properties searching

1 p.m. - 4 p.m. Physics & engineering information

While the three other sessions are free, the cost for the session on physics and engineering information is \$170. To register call (800) 848-6530, Ext. 3549. For more information about accessing STN or other databases, or these classes, contact Louise Heusinkveld, Ext. 3648.

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

Those interested in having a CSSP student intern with them this summer may review the 1992 applications in the library of the Science Education Center, Bldg. 438, through Thursday, May 7. Call Karl Swyler, Ext. 7171, for more information.

Gold

(cont'd)

an event that AGS Associate Physicist Thomas Roser oversaw beginning at 11 p.m. on April 21.

In the meantime, AGS Physicist Mike Brennan set the Booster's radio frequency (rf) parameters so that, at 12:30 a.m. on April 22, the gold beam went through the first of its required four coalescence points, or rebunchings, for acceleration to full energy on the complicated magnet cycle constructed by AGS Project Engineer Kenneth Reese.

By midnight on April 22, the gold beam was fully accelerated to its Booster energy of 267 million electron volts per nucleon. At that point, AGS Physicist Woody Glenn set up the Booster extraction system. Gold ions with a charge state of 33+ were extracted, stripped to charge state 79+ in the Booster-to-AGS extraction line, and injected into the AGS ring at 8 p.m. on April 23. By 4 a.m. Friday morning, the injected gold beam was spiraled in the AGS.

AGS Senior Technical Associate Edward Gill tuned the AGS low-level rf system so that, by 10 a.m. on April 24, the gold was captured and accelerated to its full energy of 11.7 GeV in the AGS. Then, AGS operators took the controls, and, by 4 p.m., they established slow extraction of the world's highest energy gold ions to the AGS experimental area.

On Saturday, April 25, at 8 a.m., experiment 878 began running with gold beam. The next day, beam was delivered to the three other heavy-ion



The BNL-sponsored National Science Bowl team from Shoreham-Wading River H.S.: (from left) Hirohisa Tanaka, Narendra Ghosh, Geoff Hendrey, Brian Perkins, Kurt Thorn and coach Jean Kahn.

BNL-Sponsored Team Competes In National Science Bowl

A team of five students from Shoreham-Wading River (SWR) High School — all children of BNL employees — traveled to Washington, D.C. on April 24-27, as one of 30 teams participating in the final rounds of the U.S. Department of Energy's (DOE) National Science Bowl.

Members of the BNL-sponsored team were: Kurt Thorn, team captain and winner of this year's national Westinghouse Science Talent Search, son of Craig Thorn, Physics Department; Narendra Ghosh, son of Arup Ghosh, Relativistic Heavy Ion Collider Project, and Vinita Ghosh, Department of Applied Science (DAS); Geoff Hendrey, son of George Hendrey, DAS; Brian Perkins, son of Kenneth Perkins, Department of Nuclear Energy; and Hirohisa Tanaka, son of Mitsuyoshi Tanaka, Alternating Gradient Synchrotron Department and Michiko Tanaka, Physics.

The National Science Bowl was initiated by DOE last year to increase interest in science and mathematics among American pre-college students. Sponsored by DOE and the Cray Research Foundation this year, the contest features challenging questions in biology, chemistry, physics, astronomy, earth science,

general science, mathematics and computer science.

To get to the finals — which were again won by the Texas team sponsored by the Superconducting Super Collider Laboratory — the SWR team first competed against 32 schools in the regional competition on Long Island. In all, about 12,000 students from 2,000 high schools nationwide participated in the National Science Bowl this year.

BNL's Office of Educational Programs (OEP) organized the local Science Bowl competition, which was held on site, with BNL scientists acting as judges and moderators, and personnel from the Public Affairs Tour Program keeping score.

The eight local finalists were featured on a program called "Brainstormers Science Bowl" on WLIW-TV, Channel 21. Sponsored by BNL, *Newsday* and Dairy Barn, the programs air on Saturdays at 6 p.m. and repeat on Sundays at 12:30 p.m., through May 17.

Donald Metz and William Lynch of OEP, and Jean Kahn, the SWR team coach and a mathematics and computer teacher at SWR High School, accompanied the students to Washington, D.C. — Diane Greenberg

experiments at the AGS: E866 got the beam at 1 a.m., E814 at 2 p.m. and E886 at 2:30 p.m.

Senior Physicist Harvey Wegner is a member of E866. He is also one of those whose early vision and persistence laid the groundwork for the Booster and the acceleration of heavy ions in the AGS.

As Wegner explained, "We're operating now under test conditions. Our apparatus was designed for silicon beams — with an atomic weight of 28, they are the heaviest ions that could be accelerated in the AGS without the Booster. Our target is gold, with atomic weight 197, and when a silicon beam hits the target, a few hundred particles are produced for a central, head-on collision. But when gold strikes gold, nearly a thousand particles are produced. So now we're studying what modifications have to be made to our detectors and other equipment before our first regular gold run next year. All of the different experiments have gold-beam test runs and should produce interesting, and even provocative, new preliminary information about nuclei under extreme conditions.

"This is very exciting. I couldn't be more pleased," Wegner added. "The Booster is running like a watch, and the AGS is now a complete heavy-ion machine, capable of accelerating ions over the full range of the periodic table of the elements. In the end, we would like to see evidence of formation of quark matter with the AGS gold beam, but that may not happen until RHIC."

Quark matter — the quark-gluon plasma believed to have been present at the birth of the universe — exists when quarks, the fundamental constituents of matter, are freed from their confinement in individual nucleons and can move throughout a larger volume. When a heavy-ion projectile slams violently into a target nucleus, it is expected to create a high-temperature, high-density state favorable for the creation of a quark-gluon plasma. With its high atomic weight, gold is believed to be one of the optimum heavy ions for this type of experimentation.

"It appears that the AGS will be the world's only facility accelerating ions with a mass around 200 for at least two years," said Wegner. "So this is really a golden opportunity, providing a rare window of discovery in basic research." — Anita Cohen

HFBR and NSLS (cont'd)

new materials and who need our sophisticated techniques for the characterization of their materials, but who are unfamiliar and, perhaps, a bit put off by the seeming complexity of the instruments at the HFBR and the NSLS," Axe says. "So we thought this workshop would be the best way to get these young investigators introduced to and practiced in the techniques we have to offer."

The workshop is sponsored by the Center of Excellence for the Synthesis and Processing of Advanced Materials, of the U.S. Department of Energy. — Marsha Belford

Hospitality News

Summertime is ideal for sightseeing, so favorite places to see on Long Island and New York City will be discussed at the next informal get-together of the Hospitality Committee on Tuesday, May 5, at 9:30 a.m., in the Brookhaven Center. Anyone with information such as travel folders, maps and instructions on how to get to various places is asked to bring them to share with others.

The get-together is a good chance for newcomers to meet some neighbors. Spouses of Lab employees and guests are welcome. Refreshments will be served, and baby-sitting will be provided free of charge.

Technical Seminar

A seminar and slide show on humidity measurement at BNL's research facilities will be presented by Sumner Weisman of General Eastern Instruments. It will take place in Room C, Berkner Hall, on Tuesday, May 5, from 10 a.m. to noon. Refreshments will be served.

Note to Employees:

Attendance at lectures, meetings and other special programs held during normal working hours is subject to supervisory concurrence.

Volleyball

Awards Dinner

The Volleyball awards dinner will be held in the North Room of the Brookhaven Center on Friday, May 8, 6-11 p.m. If purchased by May 4, tickets are \$14, which includes a hot buffet, keg beer, cash bar and music by Eddie Taylor; after May 4, tickets will cost \$17. For more information, contact Terry Sullivan, Ext. 2840, or Nancy Ohlmann, Ext. 4440.

Captains' Meeting

The last Volleyball League captains' meeting will be held on Wednesday, May 6, at noon, in the Biology conference room, in the lower level of Bldg. 463. Captains or team representatives must attend.

Playoffs

Open League — Round Two

Me and the Boys vs. G-Team
Magnum vs. Phoenix

League I Champions — Upfagrabs

League II — Final

Just Ups vs. Monday Nite Live

League III Champions — Over the Top

Bowling

Red/Green League

M. Guacci had a 256/614 scratch series, S. Thompson 248/617 scratch, H. Arnesen 234/228/206/668 scratch, R. Larsen 233, R. Mulderig 219, R. Wiseman 215/208, W. Cahill 213, R. Raynis 213, S. Dimaiuta 212/200, R. Eggert 210, N. Franco 207, A. Pinelli 202/201, R. Sick 202, C. Bohnenblusch 201.

White League

Joe Mayeski had a 232, Dick Adams 221/601 scratch, Joe Ferrante 215, Tom Romano 212/204/602 scratch, Craig Diaz 209/203/601 scratch.

Purple League

Ben Belligan had a 219, George Munoz 211, Sam Logan 208, Phil Radusewicz 203, Debbie Keating 201, Maryann Reynolds 191, Mary Adessi 191, Pat Manzella 183, Caryl MacDougall 180.

BROOKHAVEN BULLETIN

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

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Outreach Workshop

What Do Men Really Want?

Why are many American men unhappy, given they have the economic, political and social power in this country? When did a men's movement come about? How have men been victimized since the Industrial Revolution? What are modern men feeling deep inside, under their white or blue-collar uniforms?

In brief, what do men really want?

Possible answers to these and similar questions will be explored in the next Outreach workshop sponsored by the Employee Assistance Program (EAP) of the Occupational Medicine Clinic. "Not for Men Only — What Do Men Really Want?" will be presented by clinical psychologist Thad Harshbarger on Tuesday, May 5, at noon, in Berkner Hall. All are invited.

As Harshbarger will explain, the divisions of labor within today's working and personal worlds have separated men from their feelings, each other and their common experiences. He will focus on common themes in the hidden lives of men and discuss ways men can become more successful in discovering and meeting their own needs.

Thad Harshbarger received his master's and Ph.D. in psychology from the University of Michigan in 1965 and 1966, respectively. After teaching at New York University and the City College of New York, he began his clinical practice in 1974 and has been in private practice full-time since 1976, doing individual psychotherapy, couple counseling and family therapy. In 1983, Harshbarger completed postdoctoral training in psychoanalysis and psychotherapy at the Society for Psychoanalytic Study and Research. He is a black belt in Kenpo karate.

To register for this workshop, complete and return the bottom portion of the Outreach flyer recently sent to all employees to EAP Staff Psychologist Diane Polowczyk, Bldg. 490. For more information about the EAP and its Outreach workshop series, call Ext. 4567.

Equipment Demo

NSI, a manufacturers' representative, will exhibit instrumentation and offer demonstrations and prizes in the lobby of Berkner Hall, on Tuesday, May 5, from 10 a.m. to 3:30 p.m. For more information, call Richard Secoolish, NSI vice president, (215) 968-7577.

Basketball

Week of April 22

Trailblazers*	92	Runaways	83
T. Mayo	39	J. Desmond	19
T. Buck	26	J. Belz	17
C. Edwards	11	W. Cummings	15
R. Domenech	5	J. Gaeta	13
R. Garappolo	4	P. Ratzke	13
S. Springston	4	M. Fulkerson	4
D. Branch	2	B. Wells	2
A. Ratti	1		

3-point shots: J. Belz, W. Cummings (3), J. Desmond (5), R. Domenech, R. Garappolo, T. Mayo (3).

*Climbed regular-season league games.

X-Men	63	Scream	56
J. Hobson	20	S. Nappi	15
E. Meier	18	T. Powers	13
G. Mack	15	E. Gregory	12
R. Schuhmann	8	J. Rank	7
G. Smith	2	J. Barkwill	4
		J. Duggan	3
		J. Skonieczny	2

3-point shots: E. Gregory (2), J. Hobson (2), S. Nappi (3), T. Powers, J. Rank.

Service Awards

The following employees celebrated their BNL service anniversaries during the month of April:

30 Years

Jean C. Byrne.....Staff Serv.
Robert Carciello.....Chemistry
Robert A. Larson.....NSLS
Stanley W. Mars.....Sup. & Mat'l.
Eleanor M. Mitchell.....Nuc. Energy
Morris Reich.....Nuc. Energy
T. Laurence Trueman.....Physics
Dudley K. Vail.....AGS

25 Years

Herman C. Bartalomy.....AGS
Patricia F. Fox.....App. Science
Richard McCluskey.....Accel. Dev.
Donald J. Robbins.....Budget
Paul J. Sparrow.....AGS

20 Years

Cheryl A. Williams.....Instrum.

10 Years

Randolph Church.....NSLS
John E. Foley.....Saf. & Env. Prot.
Stanley B. Hanlon.....Staff Serv.

Arrivals & Departures

Arrivals

Joseph V. Cracco.....S&EP
Lawrence L. Lettieri.....S&EP

Departures

This list includes all employees who have terminated from the Lab, including retirees:
Sushil K. Sharma.....NSLS

Let's Dance



The location of the third dance class in the current eight-week series of the BNL Ballroom, Latin & Swing Dance Club has been changed: On Wednesday, May 6, the class will be held in the conference room of Bldg. 318, not the Recreation Building as announced previously.

For the dance classes scheduled on Wednesdays, May 13 and June 3, the Physics lounge, Bldg. 510, will be the location. Otherwise, classes will be held as usual at 5:15 p.m. in the North Ballroom of the Brookhaven Center.

Those who wish to take lessons with the club during the current series of one-hour classes may do so for \$5 per class, payable at the door. For more information about the club and its classes, call Walter Loss, president, Ext. 3086; or Marsha Belford, vice president, Ext. 5053.

Cafeteria Menu

Monday, May 4

Soup: Turkey noodle	.80/1.10
Entree: Vegetable lasagna w/ 1 veg.	3.35
Entree: Chef's choice	3.20
Fitness: Stir-fried beef & broccoli w/rice	3.45
Carvery: Hot pastrami sandwich	2.95
Grill: Monte Cristo w/cole slaw	2.85

Tuesday, May 5

Soup: Country vegetable	.80/1.10
Entree: Salisbury steak w/1 veg.	3.45
Entree: Chef's choice	3.20
Fitness: Grilled breast of chicken Dijon w/1 veg.	3.35
Carvery: Hot oven-roasted beef sandwich	2.95
Grill: Taco burger w/nacho chips	2.75

Wednesday, May 6

Soup: Minestrone	.80/1.10
Entree: Broiled liver & onions w/1 veg.	3.20
Entree: Taco bar	(each) .90
Fitness: Seafood linguine w/1 veg.	3.45
Carvery: Hot corned beef sandwich	2.95
Grill: BBQ pork on a bun w/fries	2.95

Thursday, May 7

Soup: Cream of cauliflower	.80/1.10
Entree: Veal Parmesan w/1 veg.	3.45
Entree: Chef's choice	3.20
Fitness: Baked fish gardener w/1 veg.	3.45
Carvery: Hot Virginia ham sandwich	2.95
Grill: Hot ham & melted cheddar on a kaiser roll w/potato chips	2.75
Coffee special: 2nd cup 1/2 price, same size	

Friday, May 8

Soup: New England clam chowder	.80/1.10
Entree: Pork Creole over rice	3.45
Entree: Deep-fried flounder w/1 veg.	3.45
Entree: Chef's choice	3.20
Fitness: Baked Mandarin chicken, 1 veg.	3.35
Carvery: Hot roast turkey sandwich	2.95
Grill: Grilled tuna melt w/fries	2.95

Golf Tournament

The second BGA golf tournament of 1992 will be held under stroke-play rules, on Monday, May 11, at the Indian Island County golf course, Riverhead. Call John Dabrowski, Ext. 4632, or Brian Culwick, Ext. 4930, to arrange a tee-off time, which will run from 10 a.m. to approximately 12:30 p.m., depending on the number of people signed up.

The greens fees for the county course are \$20. The deadline for signing up is Friday, May 8; all callers are encouraged to have a complete foursome prior to calling. In the event of rain, please call the Pro Shop, 727-7776.



Classified Advertisements

Placement Notices

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

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and, second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBSITE, Ext. 7744 (282-7744), for a complete listing of all openings.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

MK 0156. HEATING SERVICES SUPERVISOR - Responsible for the first-line supervision in the heating services section of Division. Directs employees on jobs including assignment, training, scheduling, grievance handling, and technical direction of work. Coordinates work, maintains records and reports, and supplies technical assistance as requested. Plant Engineering Division

LF 0145. SEWAGE TREATMENT PLANT OPERATOR B - Under general supervision, assists the Operator A. (reposting) Plant Engineering Division.

DD 0766. CLERK-TYPIST POSITIONS - Require accurate typing skills and data-entry experience. Additional duties will include filing, records

maintenance and handling telephone inquiries. Supply and Materiel Division.

DD 8393. SECRETARIAL POSITION - (term appointment) Requires AAS in secretarial science or equivalent and a thorough knowledge of Laboratory policies and procedures. Will provide varied secretarial support to the Radiological Sciences Division, including preparing technical reports, correspondence and BNL forms, arranging travel and maintaining office files. Demonstrated organization skills and IBM PC experience also required; WordPerfect 5.1 desired. Department of Nuclear Energy.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

NS 8138. TRAINING POSITION - Requires BS in a technical field, or equivalent, and 6-8 years' pertinent experience. Requires proven ability to establish, maintain and implement a diverse industrial safety training program that covers a wide range of OSHA, DOE and ANSI requirements. Performance-based training, practical (hands-on) and curricula development experience is essential. Safety and Environmental Protection Division.

NS 8139. ADMINISTRATIVE POSITION - Requires bachelor's degree or equivalent, and excellent written and oral communication skills to coordinate community relations program focusing on environmental restoration activities. A minimum of three years' demonstrated writing experience is required, as is proficiency using a PC for text processing. Responsibilities will include organizing public hearings, tours and work groups; preparing fact sheets and newsletters; and updating and maintaining community relations plan. Will assist with other clerical/administrative duties as needed. Office of Environmental Restoration.

LF 8137. ENGINEERING POSITION - Requires BS in science; health physics and three years' experience in health physics, industrial hygiene or safety engineering. Will support several departments' general safety programs with specific responsibilities, including radiation exposure control, industrial hygiene monitoring, safety engineering, program audit and oversight. Safety and Environmental Protection Division. (continued on page 4)

Classified Ads (cont'd)

LF 0407. MEDICAL ASSOCIATE POSITION - Requires BS in physics or equivalent, with experience in electronics and computers preferred. Responsibilities include the operation of the in vivo neutron activation facilities, concerned primarily with the inelastic neutron scattering and prompt-gamma neutron activation systems. In addition, routine patient measurements, data analysis, system maintenance and assisting in experimental work for the system calibrations are required. Medical Department.

Motor Vehicles & Supplies

91 ACURA INTEGRA - black, 5-spd., factory alarm, spoiler, am/fm cass., 4 speakers, 7k mi, \$14,000. Ext. 5919 or 722-3010.

91 CHEVY S-10 PICKUP - w/ext. cab, fully loaded, 25k mi., excel. cond., asking \$12,500. Lois, Ext. 4904 or 929-4753.

90 BUICK CENTURY LTD - rag-top, truck rack, 4-yr.-guar., loaded, 29k mi., mint cond., \$12,000. Bernadette, 696-1467.

88 FORD VAN - 38k mi., new radial tires, brakes & batt., good cond., \$7,000. Victor, Ext. 2395.

88 TERCEL - 2-dr. h/b, 5-spd., am/fm tape, 25k mi., excel. cond., asking \$4,500. Joel, Ext. 5038 or 751-3408 eves.

88 FORD RANGER 4x4 - 29k mi., a/t, p/s, p/b, V-6 eng., w/plow hook up, controls & lights, good cond., \$5,800 neg. Richie, 475-9027.

88 MUSTANG GT - 5.0 V-8, 5-spd., m/t, ac, p/w, p/d, p/m, tilt, cruise, am/fm cass stereo, 45k mi., gray, excel. cond., \$7,200. Ext. 2168 or 744-4948.

87 NISSAN STANZA GXE - all power, fully loaded, am/fm cass., ac, 5-spd., excel. cond. in & out, \$5,500 neg. Tim, Ext. 5277 or 744-1090 eves.

87 NISSAN MAXIMA - all power, sunroof, cruise, am/fm cass., leather int., mint cond., asking \$7,500. Jim, 758-0393 after 6 p.m.

86 JEEP WAGONEER LTD 4x4 - full power, white w/wood grain, still under warranty, excel. cond., \$8,500. 588-3775.

86 CAMARO - red w/black int., V-6, 61k mi., mint cond. in & out, \$2,900. Vicki, 698-2783.

86 MERCURY TOPAZ - 4-dr., p/s, p/b, ac, am/fm cass., 68k mi., excel. cond., \$4,000. Mardor, Ext. 2420/4830.

86 ISUZU PICKUP - 75k mi., am/fm, cap, 4-spd., good running cond., ask. \$2,000. Tom, Ext. 4563.

86 CHEVY NOVA - h/b, p/s, p/b, a/t, ac, \$1,600; '81 Pontiac T1000, a/t, reliable, local transport, \$500. John, Ext. 2509.

85 PONTIAC GRAND AM - 2-dr., gray, high mi. all highway, a/t, ac, p/s, orig. owner, good cond., \$2,300. Gary, Ext. 3473.

85 GMC PICKUP - 1/2-ton, all power, ac, a/t, w/cap, 305 V-8, excel. cond., \$3,850. Steve, Ext. 7936.

85 FORD ESCORT - 4-dr. h/b, white, a/t, 80k mi., new parts, \$1,400 or best offer. Vishwas, Ext. 3087.

85 GRAND MARQUIS - all bells & whistles, 60k mi., garaged, one owner, excel. cond., \$5,000. Alyce, Ext. 5203 or 447-5377.

85 OLDS CUSTOM CRUISER - s/w, cass., roof rack, 84k mi., no ac, good cond., \$2,800 neg. Pat, 727-0547.

84 FORD RANGER - a/t, 6.5k on rebuilt eng., Benzi am/fm cass., good gas mileage, good cond., \$1,950 neg. Steve, 878-0928.

84 FORD MUSTANG - V-6, a/t, p/s, p/b, am/fm cass., sunroof, high hwy. mi., v.g. cond. in & out, white, orig. owner, \$800. Kathy, Ext. 3832.

83 TOYOTA SR5 - ac, 5-spd., gauges, p/s, p/b, sunroof, am/fm, looks good, runs well, asking \$950. Tom, 924-6073.

83 CADILLAC SEVILLE - red, full power, conv. look top, excel. cond., \$2,200. Mike, Ext. 2050 or 399-7907 after 6 p.m.

83 NISSAN SENTRA XE COUPE - 2-dr. h/b, 5-spd., ac, Mich. XA4 tires, am/fm stereo cass., recent timing belt, 115k mi., \$1,400. Ext. 2296.

81 HONDA PASSPORT MOTORCYCLE - w/helmet, 70cc, \$100. Ext. 4689.

79 CHEVY CHEVETTE - 54k orig. mi., new batt. & starter, engine tuned-up, excel. cond., no rust, \$575. 732-1389.

78 FORD FAIRMONT WAGON - 6-cyl., a/t, orig. owner, body good., Gene, Ext. 4261.

76 CHEVY NOVA - rusty but runs OK, asking \$200. Ellie, Ext. 7328.

75 PROWLER CAMPING TRAILER - 21', bathroom w/shower, kitchen, good cond., \$2,000. Dan, Ext. 4987 or 698-7322.

72 CHEVY BLAZER - 4-spd. tranny & transfer case, \$250/both; 15"x7" alum. rims for same, \$75/4. Ext. 4026.

69 HONDA MOTORCYCLE - 90cc, w/helmet, \$200. Mike, Ext. 2052.

69 SUZUKI MOTORCYCLE - 6.8k mi., 2-cyl., excel. cond., no rust, \$150. Ext. 2769.

TRAVEL TRAILER - 15 1/2', hardtop, 2 gas tanks, stove, refig./freezer, heater, new brakes & tires, spare, hitch, extras, good cond., \$850. 878-6637.

HITCH - Drawtite class III, 2" H/D, frame-type, fits GMC Blazer/suburban, rated 5k+ lbs., used one season, \$150. Frank, Ext. 7519 or 277-0464.

BED LINER - fits Chevy S10, long-bed, \$75. Richie, Ext. 5317.

BUCKET SEATS - 2, high back, for Camaro or Monza, dark blue, mint cond., must sell, leave message. Joe, 698-7347.

CASSETTE CAR STEREO - Pioneer, under dash, auto reverse, loudness button, all parts incl., like new, no am/fm radio, \$50. Sue, Ext. 4931.

MERCEDES PARTS - for most models from 60s, 70s & early 80s, buy, sell, trade. Bill, 924-7357.

TIRES - 2, Falken Low Profile sport, steel-belted radials, 215/60 R1590H, like new, make offer. Bill, 281-4726 after 6 p.m.

CAR RADIOS - am/fm stereo, fit GM late model cars, 2 available, \$45. Walt, Ext. 7154.

Boats & Marine Supplies

28' BAYLINER CONTESSA - 1984, sleeps 6, Dink ob., loaded, \$15,000. Frank, Ext. 3698.

24' SEARAY - flybridge, many extras, good cond., asking \$6,000. 475-9643 or 289-1726.

23' 4 WINNS - 1986, 230-h.p. Merc. i.o. used two seasons, many extras, trailer optional, \$10,900. Charlie, Ext. 2407.

21' BAYLINER TROPHY - 1988, 125-h.p. ob., trailer, many extras, 929-5911.

17' BOAT - f/g, full canvas, new int., windshield, all access., galv. trailer, 60-h.p. Evinrude, excel. cond., \$1,000. 878-1617 after 6 p.m.

13' BOSTON WHALER - 1984, s/s, w/40-h.p. Johnson elec. start, galv. trailer, nav. lights, 12-gal. fuel tank, more, \$4,200. Brian, 757-1581.

RINKER 206 CAPTIVA - 1989, cuddy cabin, 260-h.p. Mercruiser, Shoreline trailer, in water twice, 5-hrs. on eng. George, 395-1677.

KAYAK - Klepper, f/g, double, \$500 or best offer. Ext. 7657 or 298-9560.

Furnishings & Appliances

ANTIQUA BAR & CABINET - large, very strong, you pick up, \$100 firm. Gina, Ext. 2396.

AIR CONDITIONER - window, good cond., \$50. 878-8847.

AIR CONDITIONER - Whirlpool, window, 8,000 Btu, used 3 hr., ask. \$350. 924-0138 after 5:30 p.m.

AIR CLEANER - \$30; earphones, \$15; wire recorder, \$20; kitchen table, \$15; 5' movie screen, \$15. Saxon, 929-4701.

BEDS - 2 queen mattresses, 1 set box springs, good cond., \$60/all. Dave, Ext. 5593 or 286-1975.

BEDROOM SET - black lacquer wall unit w/light bridge & triple dresser w/mirror, \$1,000. 924-0277.

COUCH - gold stripe, 84" long, good cond.; green armchair, \$150/both; brown recliner, \$50; more. Paul, 727-4859.

COUCH - queen pullout, coffee table, end tables, mauve lamps, entertainment center, china cabinet, kitchen table, 5 chairs. Lisa, Ext. 5867.

DESK - w/open-shelved hutch top, country, stenciled, good parlor/bedroom piece, excel. cond., orig. \$375, asking \$175. Debbie, 325-1207.

DINING ROOM - den furniture, dinette table & chairs, much more, prices neg. 732-1389.

DINING ROOM - country oak, 48" round pedestal table w/leaf, 6 carved back chairs, hutch w/etched glass, mint, 3 yr. old, \$1,800. Bonnie, Ext. 2875.

DINING ROOM - table, Formica top, 3+2 chairs, \$50. Ext. 4805 or 924-8113.

FREEZER - Amana Stor-Mor, upright, 66" high. 475-2679.

FREEZER - 30 cu. ft., very good cond., runs quietly, \$95. Tom, Ext. 5265.

HUTCH - \$39; slicing machine, \$20; vacuum, \$45; stereo, \$20; wooden storage cabinet, \$20; motorized Pontiac, \$20; more. Kathy, 744-2203.

KITCHEN CENTER - includes mixer, blender, shredder, etc., many attach., \$40. Judy, Ext. 2590.

LAMPS - 2, Venetian glass, 47 1/2"H, \$50/ea.; 4 Formica tables, 1 cocktail, 3 end, \$100. M.J. Rose, 475-8658.

MATTRESS - twin size, w/frame, never used, top quality, \$70. John, Ext. 7706.

MATTRESS - queen size, v.g. cond., new frame, you pick up, \$50. Mickey, Ext. 7908 or 473-7460.

CONVECTION OVEN - Farberware, 13 1/2"D x 20 1/2"L x 14"H, continuous cleaning, 4 hr. timer, drip tray, rack, \$100. T. Malloy, 475-7257.

PORTABLE WASHER & DRYER - apt. size, sep. units, w/caskets, stacked on rolling rack, connect washer to sink, \$385/pr. Marsha, Ext. 5053.

SEWING MACHINE - Singer Tiny Tailor, model M100A, never used, \$50; Sears mini vacuum, w/tools, \$15. Joann, Ext. 5671 or 472-6742.

SLEEP SOFA - queen size, blue, good cond., \$250; 2 end tables, \$25/ea.; living room chair, \$35. Jim, Ext. 5684.

TABLE - leather-top, Duncan Phyffe, \$75; oak rocker, \$165; lg. bookcase w/glass doors, \$175; steamer trunk, \$40. Janet, Ext. 2345 or 929-8443.

VACUUM - Electrolux, w/attach., power nozzle, extra bags, excel. cond., \$150. Wink, 286-4291.

WATER BED - King size, dual flotation mattress, waveless, heaters, pedestal, \$200. Mike, Ext. 2052.

Tools, House & Garden

ANNUALS - flowers, \$11/flat, \$6 1/2 flat; vegetables, \$1/pack, lg. choice. Ray, 727-6818 after 4 p.m.

LANDSCAPE TRAILER - 8'x10', w/gate & lights, 1 yr. old, like new, \$750. John, Ext. 7706.

CHAIN SAW - 16" bar, carry case, extra chain, oil, new; Commodore C128, printer & drive, many extras. Don, Ext. 2694.

GAS GRILL - tank, Arklia dual burner, chrome warming rack, self timer, electric motor, very clean, \$125. T. Malloy, 475-7257.

LAWN MOWER - Sunbeam, electric, 20", good cond., \$50. Wink, 286-4291.

LAWN MOWERS - Toro, 3-spd., self-prop., 4 h.p., rear bag, \$160; Craftsman, 21" cut, 4 h.p., \$60; John Deere, recond., \$70. Ed, 399-5701.

LAWN MOWER - riding, runs well, \$175. John, Ext. 4028.

LAWN MOWER - Craftsman, 20", \$50; Craftsman, 22", rear bag, self-drive, \$85; Lawn Boy, 21", rear bag, \$125. Dan, Ext. 4987 or 698-7322.

LAWN TRACTOR - 1990 Toro 210-S, riding, 10 h.p., 30" cut, electric start, lights, new cond., \$1,400. Tom, Ext. 4507 or 878-1060.

RETENTION HEAD BURNER - Beckett, \$50; wrought iron 8' stairs, handrail, \$10. Ext. 3500 or 363-2070.

STORM DOOR - alum., white, screen & Plexiglas, 80"x30", \$40; 30" gas stove, Welbilt, gold, \$50. Bob, 878-4556 after 5 p.m.

WINDOW - Andersen, energy efficient, screen, frame, 25 1/2"x40 1/2", new, never used, double hung, white. Ext. 4611.

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



TOPSOIL - fine screened, delivered, 3 yard min., \$20/per yard. 696-6011.

Sports, Hobbies & Pets

BIKE - blue, 16", training wheel, helmet, suitable for 4-6 yr. old. Ext. 7657 or 298-9560.

CAMERA - Nikkorex, 43-86mm, zoom, split image, range finder, built-in exposure, F3.5-22, Vivitar flash, filters, \$150. Saxon, 929-4701.

EXERCISERS - DP-300 body toner, \$100; DP-20 Universal body builder, \$200; model 266 cycle, \$50; misc. weights, \$50; \$275/all. Irving, Ext. 2827.

GO-KART - 5-h.p. Techumseh eng., knobby tires, v.g. cond., \$350. Dan, Ext. 4987 or 698-7322.

GOLF CLUBS - Ping Eye, 2 irons, SW black dot w/stiff shafts, best offer. Ernie, Ext. 2677.

PIANO - Knabe, c. 1945, sound board excel., string & felts 1982, stays tuned many years, no plastic, nice finish, \$649. Ballard, Ext. 1000 or 4751.

ROWING MACHINE - used once, \$45 firm. Gina, Ext. 2396.

SURVIVAL GAME - Paint Ball, equipment & access., too much to list, never used, must sell. Joe, 698-7347, leave message.

VIOLIN - for adult, \$350; clarinet, \$150. 924-2514 eves.

WEIGHT SET - Weider, 310 lb. Olympic, & 2 barbells, \$120. Marie, Ext. 2950 or 399-3401.

Audio, Video & Computer

CD PLAYER - Realistic CD2400, approx. 2 yr. old, like new, \$60. Joe, Ext. 5348 or 331-1372.

COMPUTER - XT, 640k memory, 20 meg hard disk, monochrome monitor, \$300. Dave, Ext. 2292.

STEREO SYSTEM - turntable, dual cassette, amp, CD, tuner, cabinet. Mike, Ext. 2050 or 399-7907 after 6 p.m.

SPEAKERS - Polk Audio 2.3 TL, \$1,200. Marie, Ext. 2950 or 399-3401.

TAPE PLAYER - Stereomatic 9900, 8-track, plays well, \$10; Power supply adapter, 120 Vac to 7.3 Vdc, \$5. Pete, Ext. 4581 or 399-2813 after 5 p.m.

TRANSCIVER - Kenwood TS930S, auto. antenna tuner, extra filter, mint cond. Dan, Ext. 2694.

Miscellaneous

LEATHER COAT - 3/4 length, new, size 42, \$140. Ext. 3589.

GOWNS - women's, worn once, white, 11/12, satin lace, \$40; pink, 15/16, satin lace, \$80; purple, 7/8, satin, \$25; blue, 9/10, \$25. Heidi, 281-7873.

TYPEWRITER - IBM, old, elec.; fireplace log holder, \$20; card table set, \$20; 6-chair kitchen set, solid maple, \$75; more. Ext. 2345 or 929-8443.

WEDDING GOWN - silk organza, new, size 10, orig. \$600, sell for \$200. 878-1617 after 6 p.m.

Free

DOG - beagle, female. We lost phone number of person interested. Please call again. 331-6473.

DOG - golden retriever mix, 3 yr. old, v.g. w/children, needs loving family, fenced yard. 475-2551.

STEREO CASSETTE DECK - AIWA AD-63400, needs minor work, give \$10 food to Food Drive. Ext. 2981.

Yard & Garage Sales

MIDDLE ISLAND - Sat., 5/2, 11-5 p.m., if no rain, baby clothes, NB-4T, 16 Woodville Rd., off Middle Ctry. Rd., call for appt. Mary, 924-6235.

SHIRLEY - 5/2 & 5/9, 10-4 p.m., craft sale, 452 River Rd., Mother's Day gifts. 924-6790.

Car Pools

BLUE POINT-PATCHOGUE - car pool wanted. Ellie, Ext. 7328.

Lost & Found

LOST - 14k gold bracelet, about 1/8" wide and small lobster claw clasp, on Lab site. Steve, Ext. 2175.

FOUND - pictures, left in book at Physics library. Gina, Ext. 2396.

Wanted

BOAT TRAILER - for 14' boat. Joe, 929-5911.

CHAIN SAW - Mac 120 for parts. 727-0082 after 7 p.m.

HORN ASSEMBLY - from Ford truck or van to fit steering wheel center. Victor, Ext. 2395.

HOUSE TO SIT - visiting college student working w/DNE from 6/1-8/31. Dan, Ext. 4050.

HOUSE OR APARTMENT - to rent around BNL or on site 15 days in June. Jean-Michel, Ext. 7092.

LAWN MOWERS - old, complete, also lawn tractors. Dan, Ext. 4987 or 698-7322.

LOVERS OF ROSES - fountains & A. Wyeth art to join bus to Longwood Gardens & Brandywine Museum, Sat. 6/27, \$32/all. Liz, Ext. 2346.

MAZDA RX7 - with good body, blown engine, pre-1985. Ext. 7657 or 298-9560.

ROOMMATE - share house in Mastic, lg. bdrm., w/w, cable, phone, w/d, 15 min. to Lab, \$85/wk. or \$350/mo. + sec. Susan, 399-3087.

SPEAKERS - Have you a lot to say and no one to listen? Visit Toastmasters! Darryl. Ext. 7892.

VCR - 2- or 4-head, work, good cond., color TV. Gina, Ext. 2396.

Services

Services are listed in the first Bulletin of every month as a courtesy to BNL employees. They are neither screened nor recommended by the Bulletin. Services forms are available in the Bulletin lobby, Bldg. 134.

ALARMS - commercial/residential, financing, leasing & monitoring avail., we will beat anyone's price, free estimate. George, 395-1677.

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

ASPHALT - sealing, repairs to driveways. Bob, 475-4382.

AUTO DETAILING - spring cleanup, meticulous, interior/exterior cleaning, washing, waxing at your home, \$15/up, refs. avail. Andy, 929-4450.

AUTOMATIC LAWN SPRINKLERS - free estimates, professional layouts, repairs, alterations & additions, prompt, courteous service. 928-7042.

BABY-SITTER - mom of one to care for your child in Eastport home, M-F after 1:00, Sat./Sun., reasonable. Debbie, 325-1207.

BABY-SITTER - available weekends, Riverhead-Greenport areas only, responsible. 298-3824 after 4:30 p.m.

BABY-SITTER - college junior, avail. from 5/14, Mon.-Fri., all hours, experienced all ages, including infants, excel. refs. Suzanne, 744-8512.

BABY-SITTER - local high school student avail. after school & weekends, all summer. 399-2179.

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

CARPETING - discount purchase, installation & repair, custom work, stripes, borders, printing in carpet. Mark, 399-2813.

CARPET/UPHOLSTERY CLEANING - spot, pet stains, odor removal, auto interior, fabric protector, free est., Lab discount. Jerry, 924-6019, days.

CHIMNEY SWEEPING - fireplaces, wood, coal & oil flues, prefab repairs, chimney caps & glass doors, Lab discount. Mike, 821-5526.

GOLF CLUBS REGRIPPED - get a grip on your golf game, \$3.50 & up, golf clubs custom-made. Ray, 758-4937.

HANDYMAN - painting, sheetrocking, spackling & landscaping, any cleaning or repairs around the home. John, 929-3407.

HOME IMPROVEMENTS - 35 yrs. exp., kitchens & baths, vinyl siding, doors & windows, fin. bsmts., lic., & ins. Carl, 698-9274.

HOUSE CLEANING - reliable, dependable, thorough, reasonable & trustworthy, refs. avail. Cathi, 281-0360.

INDIAN MUSIC LESSONS - beginners to advanced classes will be offered in vocal, sitar & tabla, by exp. teacher. Hasna, 821-5043.

KAYAK LESSONS - sea kayak, river playboats, \$70/5 hrs. + 3 hrs. free time, equip. supplied, intro to kayaking, \$25/2 hrs. Ernie, 281-7873.

LAWN CUTTING - yard work, cleanups, low rates, done by dependable student. Brian, 878-4356.

LAWN CARE - maintenance, estimates for mowing, fertilizing, etc. Tom, 434-9345.

LAWN MAINTENANCE - cleanups, free fertilizer. w/cleanup, weekly lawn care avail., also attic & bsmt. cleanups, free estimate. Jim, 737-8281.

LAWNS MOWED - Stony Brook to Wading River. Tim, 928-5322 after 8 p.m.

LAWNS MOWED