BROOKHAVEN BULLETIN
Vol. 39 - No. 9 March 1, 1985
BROOKHAVEN NATIONAL LABORATORY

Michael Knotek To Head NSLS

Michael L. Knotek, one of the country's synchrotron radiation experts, will come to Brookhaven on April 1 to take over the chairmanship of the National Synchrotron Light Source Department.

Knotek, who received his Ph.D. in physics from the University of California, Riverside, in 1972, joined the staff of Sandia National Laboratories that same year. There, his research interests centered on surface science, particularly desorption from surfaces. In 1979 he was appointed Supervisor of the Surface Science Division.

Brookhaven was particularly attractive to him, he says, because of the potential of the Light Source and the opportunity to "get involved in the science that's going to come out of it." He will not get involved with the science right away, because he sees his job as to help get the NSLS in full swing and to make sure that users, who have committed their resources to the facility, get enough operating time to generate results. Then, he says, "when that's done, I would like to do a little science."

Knotek was visiting BNL when the x-ray ring generated its first spectrum on February 14 (see box). He commented that "from all indications, the ring is going to come up quite nicely over the next few months and operate in a respectable range so that the groups can get their beam lines established and set up their instrumentation. We hope by the time there is demand for higher flux on the machine, we'll be able to give it to them." He has high praise for the accelerator physicists and engineers now at the Light Source and says this excellent team will make his job a lot easier.

Michael Knotek has had experience at the synchrotron radiation facilities throughout the country, with the bulk of his research being done at Stanford. He has served on advisory panels at these facilities and has chaired various symposia. In 1983-84, he was co-chairman of the Planning Study for Advanced National Synchrotron Radiation Facilities. He says this was important as it brought together all the people in the field to discuss where they then stood and what more could be accomplished in the next five to ten years. In 1983, Knotek received DOE's Basic Energy Sciences Award for Solid State Physics Research and was cited for outstanding work on stimulated desorption.

Mort Rosen

Michael Knotek

The new chairman was impressed by the commitment he found to the Light Source by the BNL administration, the AUI Trustees and the DOE. As he discovered, "The NSLS is one of their highest priorities. I see my job, as chairman, to translate that commitment into the necessary resources to get the Light Source up, and to draw new talent to Brookhaven to work on related programs." Knotek thinks the Lab has two big drawing cards for an ideal material sciences program — the NSLS and the High Flux Beam Reactor. He says, "They have no parallel anywhere in the world."

Goldhaber Wins National Medal

AUI Distinguished Scientist Maurice Goldhaber has been awarded the National Medal of Science. The medal is the highest honor accorded U. S. scientists and engineers by the Federal Government. Goldhaber and the 18 other scientists so honored received the award from President Reagan during ceremonies at the White House on February 27.

The National Medal of Science was established by Congress in 1959 to be given to individuals who are "deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical or engineering sciences."

Goldhaber was cited for "his many contributions to all aspects of nuclear physics and more recently particle physics, and for the leadership he has provided the scientific community, as an administrator of science, as a shaper of scientific thought, and as a prolific source of stimulating ideas."

Goldhaber says the award is an honor also for Brookhaven and the many people, here and elsewhere, with whom he has been associated. In an interview with the Bulletin, he reflected on his 50-year career as a physicist, which has been intertwined with his dozen years as a teacher and another dozen as the director of BNL.

"Physics is the most fundamental of the sciences because, in principle, you can reduce the other sciences to physics. Chemistry and biology more and more use physics to unravel the phenomena they study," says Goldhaber. And he has devoted his life to physics, beginning his research in earnest at Cambridge University's Cavendish Laboratory under the guidance of Sir James Chadwick. He remained at Cambridge for five years and, with Chadwick, discovered the nuclear photo-effect.

This was the first important investigation in which Goldhaber participated and Chadwick his first collaborator. Since then, there have been numerous other collaborators as his 200 publications attest. His most significant findings to date include the role of spin in nuclear reactions; the reactions of slow neutrons with light nuclei, e.g., that with lithium-six yielding the much used tritium, and through its decay, helium-three; the production of carbon fourteen from nitrogen; the observation of nuclear disintegrations in photographic emulsions (later used for particle studies); the observation that beryllium would be a useful neutron moderator in reactors; and recognition of the giant dipole resonance in nuclei. Among other

Mort Rosen

Maurice Goldhaber

techniques to which he has made contributions are the BF_3 counter for detecting slow neutrons and the neon-hydrogen bubble chamber for particle detection.

Though most of his early career was devoted to nuclear physics, the neutrino helicity experiment, which he carried out in 1958 with Lee Grodzins (now professor at MIT) and Andy Sunyar, played a role in his transition to particle physics. This experiment showed that the neutrino is "left

(Continued on page 2)

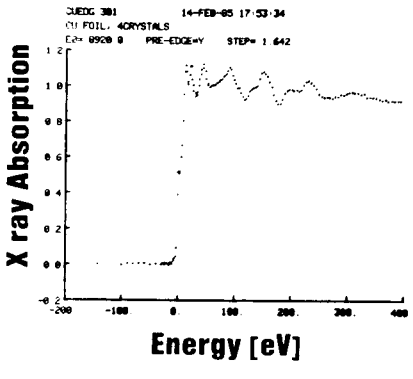
First Spectrum at NSLS X-Ray Ring

On Thursday, February 14, the first spectrum was taken at the x-ray ring of the National Synchrotron Light Source (NSLS). The event was cause for cheering among the experimenters at beamline X-11, where the spectrum was made, because it means that they can now begin to take experimental data.

That first spectrum was of copper, which is often used as a standard to judge beam quality, and it was made using a four-crystal monochromator, also a first-time achievement at the NSLS.

The X-11 beamline will be used by researchers from a number of institutions who form a Participating Research Team (PRT). The X-11 PRT was founded by scientists from BNL, North Carolina State University, University of Connecticut, General Electric and the University of Washington. They were joined later by scientists from Mobil Research & Development Corporation, DuPont Corporation and Argonne National Laboratory.

All of them will be using a technique called EXAFS, for Extended X-Ray Absorption Fine Structure. With EXAFS, scientists can investigate the environment of a particular atom in a material, such as identifying the chemical nature of that environment, as well as identifying the number and distance of the atom's nearest neighbors. A variety of projects are planned, ranging from catalysis, to hydrogen interactions with impurities in metals, to studies of material surfaces and interfaces.



The first copper spectrum was taken at 2:56 p.m. Three hours later, this spectrum was taken, which shows a more extended EXAFS scan of the copper by x rays from the NSLS. The initial jump in the absorption, referred to as the "edge," occurs when the energy of an x-ray photon exceeds that required to eject a core electron from a copper atom. Both the position of the edge and the character of the following wiggles give information about the copper sample.

Performance Appraisal Introduced at BNL

How'm I doing? Each nonbargaining unit employee will have a chance to find out this spring when the first written performance appraisal goes into effect at BNL.

This program will provide employees with a format for discussing job expectations, performance, and future goals. It will also provide an opportunity to recognize superior performance and identify areas which require improvement.

Performance appraisal programs are now in place at many organizations nationwide, including other DOE laboratories, and the results have been worthwhile. Among the benefits are improved communication between employees and their supervisors, a better understanding of performance expectations, an exchange of ideas concerning future growth opportunities and the establishment of an ongoing dialogue about individual and group work objectives.

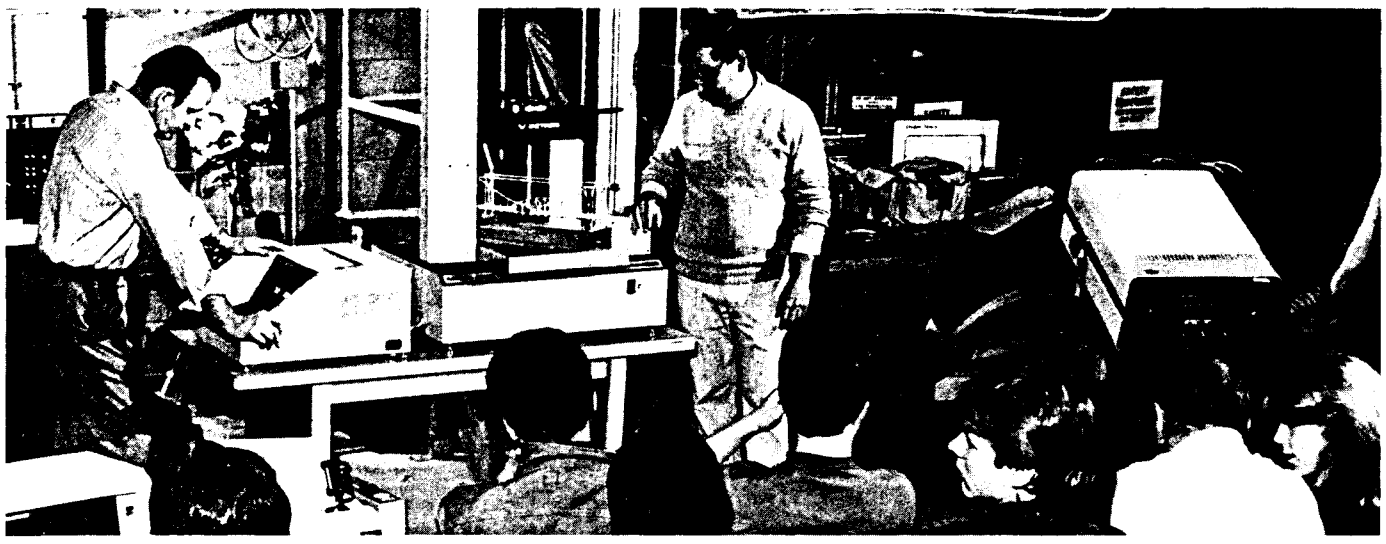
Appraisal discussions have already taken place in some departments and will be held with all employees by the end of June. To start the process, supervisors will complete a written performance appraisal of each employee under their supervision, and then meet with the employee to discuss the appraisal. This conversation is intended to be a dialogue between employee and supervisor, both expressing their ideas about job requirements and performance.

The employee will have the opportunity to make his or her written comments on the appraisal and will be asked to sign the form as an indication that the appraisal discussion has taken place. The completed evaluations will be considered confidential and will be retained for a limited period of time in the department/division personnel files.

Because of the diversity of employees and operations at the Lab, each organizational unit has developed its own form.

To help ensure that the objectives of the performance appraisal system are realized, the Personnel Division has been holding training seminars for supervisors. Once supervisors are aware of what is expected of them, appraisals can be conducted as objectively as possible.

It is understood that there will be rough spots in the program the first time around, but it is expected that as it becomes more familiar, it will encourage better year-round communication between supervisors and employees, as well as during a formal appraisal.



Don Horne (left) and Marty Woodle (at the stress tester) conducted the testing at the 5th Annual BNL Model Bridge Contest on Saturday, February 23, at the Metallurgy and Materials Sciences Division. They came up with a winner — Christina Kohm (far right), a junior at Cold Spring Harbor High School. She was one of 196 entrants from Long Island high schools, grades 9 through 12, who designed bridges of balsa wood and glue with the goal being to support the greatest weight per gram of bridge mass. Kohm's bridge weighed 42.91 grams and held a load of 263.9 pounds before crumpling. She received a home computer; 2nd and 3rd prizes of pocket computers were also awarded. The contest was coordinated by Janet Tempel and Jackie Mirzadeh of the Public Relations Office. —photo by Stoutenburgh

Medical Plan Changes

Most people won't hesitate to shop around for the best buy on a new car or to ask a salesman why he recommends one model over another — in other words, to be a good consumer. But many of those same people do have difficulty being good health care consumers. That's a large part of the reason that health care costs in this country keep increasing. From 1967 to 1980, for example, the average annual cost per person for health care almost quadrupled, rising from $238 to $941.

To help the Laboratory cope with spiraling health care costs, several changes have been made to the AUI Group Medical Plan. The changes, which are effective today, are outlined in a brochure that all active and retired employees should receive at home in the mail this week and encompass five areas: second surgical opinion, preadmission testing, weekend hospital admissions, ambulatory surgical facilities and hospice/in-home care.

"Some companies have increased employee premiums, introduced larger deductibles or cut benefits," said Robert D'Angio, Manager, Personnel and Labor Relations. "What the Laboratory is trying to do is to change our medical plan design to make our people better health care consumers. Hospitalization costs employers large amounts of money, so a lot of the things that we're introducing are designed to reduce the need for hospitalization."

The examples below illustrate how the changes might affect employees.

Nancy N. was upset and confused. Since her gynecologist had recommended a hysterectomy, she had read everything she could find about her condition and was still unconvinced about the need for surgery. But she was reluctant to express her concern to her doctor and did not know where to go for a second opinion.

The second surgical opinion benefit would relieve Nancy of some of her anxieties. Hysterectomy is one of the 13 elective surgical procedures, outlined in the brochure, for which you must obtain a second opinion before surgery, in order to receive reimbursement of the full surgical allowance payable under the medical plan. The plan now provides a program for employees to be referred to board-certified physicians for second opinions (and third, if necessary), with no billing to employees. The procedure for obtaining a second opinion is given in the brochure.

"It's for an employee's protection to get a second opinion," said Dick Schonberg, Deputy Manager, Personnel and Labor Relations. "Sometimes there are alternatives to surgery, but people hesitate to question their doctors. This program will allow our employees to question their physicians without jeopardizing the doctor-patient relationship. It will help avoid the cost, pain and trauma of unnecessary surgery; and when surgery is necessary, it will reassure the patient that the procedure is both medically necessary and appropriate. From the employer's point of view, any prevented surgery is going to save money, which benefits all employees because it keeps costs down so the money could be used in another area."

Mark was worried enough about his upcoming surgery, and then his doctor told him he would have to come into the hospital on Sunday, so tests could be taken on Monday for his Thursday surgery.

In relation to this situation, there are two changes to the plan. First, he would not have to go in the hospital on Sunday because the medical plan will no longer pay for weekend admissions (unless it's an emergency or deemed medically necessary). Second, he could have all his routine tests prior to surgery done on an outpatient basis, with the costs paid as if he were hospitalized. Now, he wouldn't have to go into the hospital until just before his operation. According to Schonberg, "Preadmission testing is becoming more and more common, partly because of pressure being exerted by employers like ourselves and insurance companies."

Two doctors had concurred that Barry B. should have arthroscopic surgery on his knee. But Barry loathed the idea of staying overnight in a hospital, so he kept putting off the surgery despite his chronic pain.

Arthroscopic surgery is one of many procedures that are often performed today in ambulatory surgical facilities (centers that are not affiliated with hospitals) or hospital outpatient surgical facilities. Barry would not have to stay overnight in the hospital; he could go home the same day he had the operation. The AUI medical plan already covers 100% of the reasonable and customary charges for hospital outpatient surgery; now it will also pay the same for ambulatory surgical facilities, which are expected to become more and more common in our area.

While one-day surgery is not required by the medical plan, employees are encouraged to ask their doctors if this option is available for their conditions.

Under the fifth medical plan change, things would be simplified for terminally ill patients who wish to spend their final days at home or in an approved hospice program, rather than remain in the hospital. The Laboratory will now pay home or hospice costs for the terminally ill up to $10,000. Before this, certain home or hospice expenses, such as homemaker's services and physical therapy, either were not covered expenses or were only covered under major medical, with reimbursement limited to 80%. "We think this is a significant improvement," said Schonberg. "We don't like to talk about people being terminally ill, but like it or not, it happens, and when it does, it's important not to have to worry about anything else."

Summing up the medical plan changes, D'Angio said, "We're trying to educate our people. We really would like them to start questioning their doctors, and we think these benefits will encourage them to do that, to be a little better informed about what is available and to use less costly alternatives."

Employees and their dependents who want to obtain a second surgical opinion or have questions about the benefit changes should call Personnel Services: on site, Ext. 2877; from off site, (516) 282-2877.

Inside Info

Eric Forsyth and **Meyer Steinberg** received Special Recognition Awards during Engineers Week. The plaques were presented at a luncheon meeting on February 22 attended by 170 engineers of the Long Island Metropolitan Area's Engineering Societies. Donald Metz accepted the award for Meyer Steinberg who was out of town.

Forsyth, who is head of the Advanced Technology Applications Division, AGS Department, was cited for the development of the superconducting power transmission system, and Steinberg, head of the Process Sciences Division, Department of Applied Science, for the development of polymer concrete.

Goldhaber (Continued)

handed," and this is now generally recognized to be a property of all particles. It also confirmed a theory, then still tentative, of beta-decay. Goldhaber maintains that "nowadays, there is a lot of speculation in physics. You have to try to prove speculations, not just take them for granted." Currently, he is involved in a search for proton decay in an experiment in a salt mine near Cleveland, which has already weakened one speculative theory of proton decay.

When he left Cambridge, in 1938, it was to join the faculty of the University of Illinois. There, for the next 12 years, he taught physics and did research on nuclear isomers with his students at the University and collaborators at Argonne National Laboratory. Among his students were Andy Sunyar and Rosalyn Yalow. Sunyar later joined the BNL staff, as did Ed der Mateosian, a collaborator from Argonne. Yalow went on to medical physics and to a Nobel Prize for the development of the radioimmunoassay.

Goldhaber was Laboratory Director from 1961 to 1973. Nature magazine commented on his administration in an article on CERN in a September 1984 issue: "The lesson, if there is a single one, is that Europe's laboratory was run too much by committee, whereas American laboratories owed more to individual flair. (Maurice Goldhaber at Brookhaven, R.R. Wilson at Fermilab and Pief Panofsky at Stanford)."

One of the ways Goldhaber's flair was exercised was in determining, with the help of the High Energy Advisory Committee, the kind of experiments to be performed at the AGS. He later joked, in an after-dinner speech, "I accepted those experiments which I would have liked to do myself." This period turned out to be the heyday of particle physics, and a number of important discoveries were made at the AGS — the muon-neutrino, CP violation and the Omega-minus particle.

As BNL director, Goldhaber was also faced with other issues as they spilled from the outside world into the Lab. He dealt with controversy over the Vietnam war and prepared the way for an affirmative action program. Goldhaber was President of the American Physical Society in 1982. In his retiring address, he voiced his concern over many grave problems facing the world and warned scientists that they "cannot escape the cold winds that blow in many countries."

In Memoriam

Robert H. Serrell, AUI Senior Auditor, died on February 25 at the age of 40 years. He had been at the Laboratory since March 1979. He is survived by his wife, Dorothy, a daughter, Wendy, and two sons, Bryan and Chad. Serrell was a resident of Sag Harbor.

— Mort Rosen

On February 14, three Eagle Scouts came to Brookhaven to get a first-hand look at their chosen fields of vocation. They spent the afternoon with Laboratory scientists, each of whom had volunteered to sponsor one of the Scouts. From left are Walt Tucker, assistant to the chairman, Department of Applied Science (DAS), who holds the rank of Silver Beaver; Martin Leach, DAS; Christoper Hoogendyk, DAS; Eagle Scouts Mark Gutekunft, Christopher Blyseth and Joe Strano; Gerald Strickland, DAS; Terry Whitledge, DAS; and Associate Director Vincent O'Leary, who is vice-president of the Suffolk County Boy Scout Council. Gutekunft, who wants to be a marine biologist, was matched with Whitledge; Christopher Blyseth, who favors engineering, spent time with Strickland; and Strano, who is interested in meteorology, was teamed up with Leach. Hoogendyk's computer expertise will be tapped by a fourth Scout, who couldn't visit the Lab that day.

BROOKHAVEN BULLETIN

Published weekly
for the employees of
BROOKHAVEN NATIONAL LABORATORY

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

PC Users Group

The PC Users Group will meet on Tuesday, March 5 at 10 a.m. in the AMD Seminar Room. David L. Murray of Crane & Egbert Corporation will present some hi-tech peripherals for the IBM PC, including an image processing system, an intelligent voice modem and a voice-input keyboard.

Arrivals & Departures

Arrivals

John P. Rubino ..... NSLS

Departures

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

Nicholas Alonzo ..... Biology
Marjorie K. Homan ..... Physics
Thomas C. Roberts ..... DNE
Julius Spiro ..... AGS
Wendy W. Westfall ..... Physics

Hospitality News

Phil Miller, who works in the Plant Engineering Division of BNL, will be the guest speaker at the Hospitality Committee's next morning get-together on Tuesday, March 5, at 9:30 a.m. in the Brookhaven Center.

Miller will discuss the carving of decoys of various songbirds and wildfowl in the New York-Long Island area.

Wives of Laboratory employees and guests are welcome. Coffee, tea and danish will be served. Please come and bring the children. Babysitting will be provided free of charge.

Stony Brook Events

Concert: Chamber Music Society of Lincoln Center, Saturday, March 2, 8 p.m., Main Stage.

Lecture: Toni Morrison, writer and winner of the National Book Critics Circle Award, will give "Readings from Work in Progress," Monday, March 4, 8 p.m., Jacob K. Javits Lecture Center, Lecture Hall 100.

Lecture: Martin J. Klein, Eugene Higgins Professor of the History of Physics, Yale University, on "Niels Bohr: The Centennial of a Great Physicist," Tuesday, March 5, 8 p.m., Recital Hall, Fine Arts Center.

Coming Up

Pianist Thomas Lorango will give a recital at Berkner Hall on Thursday, March 14, at 8:30 p.m. His program includes music by Haydn, Beethoven, Chopin, Liszt and Prokofiev. General admission is $8; students and those over 65, $5; and those under 18, $3.

From left, Ray Zaharatos, Ed Gill and Austin McGeary feast on venison lasagna after a day on the slopes.

Hurrah for Winter !

They all started the same way, as adults, using ill-fitting equipment, sliding pell-mell down a too steep slope. But they liked the speed, the thrill, and, in heightened contrast, the peaceful beauty of snow-covered mountains. So they kept at it, perfecting their skills as downhill skiers.

Every winter, Ed Gill, Austin McGeary and Ray Zaharatos go skiing together. It's a seasonal tradition for these three, who have been working together in AGS operations for well over ten years.

Sometimes they take day trips to places nearby, like Hunter Mountain and Vernon Valley. At least twice a winter, they set out for more distant parts and spend several days skiing. "The driving is brutal," says Zaharatos, "especially coming back at night on the one-day trips." But like other Long Islanders who are serious about downhill skiing, they are willing to spend long hours behind a wheel to pursue the sport.

In January, the trio returned to one of their favorite spots, Gore Mountain in the Adirondacks, New York. After a six-and-a-half-hour drive, they reached the unplowed logging road leading to their home base for the trip, a cabin nestled in the woods a mile-and-a-half up the road.

They brought in a battery for the jeep kept at the cabin, intending to use the vehicle to bring in their provisions. As it turned out, the jeep's wheels had been stolen, so the three had to walk back to the main road, then haul in their supplies on a toboggan.

The only other hitch during the trip came the next morning, when Gill's diesel car wouldn't start in the 5°F cold.

They finally reached the slopes at midday, and from then on, it was smooth skiing, figuratively speaking. Navigating a snowy hill on long, thin fiberglass boards machined to mirror smoothness and then waxed to be even slicker is suicidal unless one zigzags down with fast turns to reduce the speed a bit.

"If you are frightened by the speed, you will never do well skiing downhill," says Zaharatos. "You have to be relaxed and accept each bump that comes along without going into shock."

All three of them are active year-round, with tennis, swimming and jogging. Downhill skiing gets them outdoors in the wintertime, and they particularly enjoy the action.

It's the action, too, that keeps them warm. Says Zaharatos, "When you're moving all the time, you stay pretty warm. If you stay locked in a snow plow, there is nothing keeping you warm."

Beginning skiers first learn to make turns and to slow down by shoving their heels out to form a "V" with their skis, called the snowplow. To graduate from that into parallel skiing is difficult, and some never do. In years past, when people used longer skis clamped to their boots with cable bindings, it was even harder to control the skis.

Austin McGeary (left) and Ed Gill at Gore Mountain.

Gill, who stands six feet tall, skied for the first time on skis that came up to his wrist, arm extended overhead. He bought them at a garage sale and considered himself lucky to find the right size. "I fell all the way down the hill," he recalls of his first experience.

Now they all have proper equipment, mostly bought during spring sales when skis, poles, boots and bindings can be half price. McGeary updated his equipment just last year, after he saw his vintage metal skis in a ski museum.

McGeary started skiing twenty years ago. It began as a social outing with friends on the weekends. Later, when he got married, he bought a pair of skis for his wife. "I went one time with her, and that was it. She didn't like it and we sold her skis," he says. He gave up the sport for awhile, and then went back to it when he started skiing regularly with Gill and Zaharatos.

Their trips have settled into a comfortable routine. They ski during weekdays to avoid the crowds, picking the best days. As McGeary says, "None of us have been hurt in bad falls. As we get older, we only go when the snow and weather conditions are good."

They usually reach the ski lodge at 8:30 in the morning. If the AGS is running that particular day, they check in with the main control room. Each man is a specialist in certain areas of AGS operations, and a phone call can sometimes solve a problem.

They get to the slopes by 9 a.m., take a brown bag lunchbreak at 11 a.m., and make their last run by 4 p.m. If they are staying the night, it's dinner out at a local restaurant, or, as they did at Gore Mountain, they have precooked meals brought from home. Their second night at the cabin was a lasagna feast. Says Gill, the official re-heater, "I didn't tell them until after the meal that my daughter had made the lasagna with venison from a bow hunting trip I took with my son last year." He had gauged his friends correctly, though. They thought it was great.

—Mona S. Rowe

Cafeteria Menu

Week Ending March 8

Monday, March 4		
Chicken rice soup	(cup)	.65
	(bowl)	.85
Beef teriyaki & 1 veg.		2.30
Farmer's omelet & 1 veg.		2.10
Hot Deli — French bread pizza		2.15
Tuesday, March 5		
Lentil soup	(cup)	.65
	(bowl)	.85
Stuffed pepper & 1 veg.		2.15
or with spaghetti		2.35
Sauteéd chicken breast on rice		2.20
Hot Deli — Sloppy Joes		2.20
Wednesday, March 6		
Beef noodle soup	(cup)	.65
	(bowl)	.85
Swiss style steak w/onions & 1 veg.		2.35
Sweet 'n sour pork on rice		2.15
Hot Deli — Chicken patty club	(bread)	2.35
	(roll)	2.55
Thursday, March 7		
Spinach egg drop soup	(cup)	.65
	(bowl)	.85
Corned beef, cabbage & parsley potatoes		2.35
BBQ fresh ham & 1 veg.		2.25
Hot Deli — Monte Cristo		2.15
Special		1.25
Top your own baked potato served with chili and cheese sauce and a choice of two additional toppings		
Friday, March 8		
Fish chowder	(cup)	.65
	(bowl)	.85
Salisbury steak & 1 veg.		2.10
Seafood platter		2.30
Hot Deli — Breaded fish fillet	(bread)	2.00
	(roll)	2.20

—BERA News—

Model Plane Club

The regular monthly meeting of the R/C Model Airplane Club will be held in Room B, Berkner Hall, at noon on Tuesday, March 4. All those interested are encouraged to attend.

Motorcycle Club

A meeting of the Cycletrons will be held on Monday, March 11 at 5:15 p.m. There'll be hotdogs for dinner and a showing of the video "On Any Sunday II." The charge is $3.00. Money and reservations should be given to Dick Hildenbrand, Ext. 3273, by Wednesday, March 6.

Singles Club

The next Country & Western dance lesson is on Tuesday, March 5 from 7 to 8 p.m. in the North Room, Brookhaven Center. The fee is $5. Two or three different dance routines are taught each lesson. For information, call Doris Terry, Ext. 2228.

Volleyball

A League	**W-L**
Dinkers	29-4
UpFaGrabs	23-10
Semi Tough	17-16
Teddy Bares	15-18
Mixed Ups	9-24
Nuts and Bolts	6-27
B League	
TNT	28-5
Fossils	22-11
Phoubars	21-12
Set Ups	12-21
Chungas Revenge	10-23
Servers	6-27
C League	
Tigers	27-9
Captain Midnight	24-12
Screw Balls	22-14
Craw	12-24
Quirks	12-24
Couples	11-25
Open League	
Phoenix	39-0
Odds and Sods	23-16
Team 6	18-21
Half Lifes	18-21
Rowdy Radicals	14-25
Generic	4-35

(Continued)

Bowling

Red/Green League

High games were bowled by A.Pinelli 222, B. Kristiansen 213/204, T. Prach 213, E. Meier 203, K. Asselta 202, J. Connelly 201, E. Sperry 201, J. Ferrante 200, E. Sperry IV 200.

Pink League

Maryann Reynolds had a 187 game.

Purple League

Ed Meier 222, Gil Spira 208, Rich Scheidet 207, Bob Jones 201/200, Ron Picinich 201.

White League

Ben Belligan rolled a 258/641 scratch series, Ken Asselta 208, John Connelly 212, Bob Barberich 201, Jim Vogel 200, Caryl MacDougall 211/200, Jeanne Penoyar 192, Sharon Smith 190/187, Joyce Pinelli 187, Lee Barberich 187, Sandy Asselta 185.

Reminder: the Scotch Doubles Tournament will begin at 2 p.m., Sunday, March 3 at Port Jeff Bowl.

Basketball

Box Scores 2/21/85

Game 1

Coasters - 64		Longshots - 77	
R. Doty	20	P. Brown	4
F. Malone	8	J. Garrison	15
B. Allen	28	L. James	12
A. Washington	6	B. Jasper	4
K. Cosgrove	2	R. Seymore	28
		E. Taylor	4
		L. Walcott	10

Game 2

Hollywood - 57		Runaways - 61	
R. Domenech	6	S. Gilbert	12
G. Grigg	14	T. James	9
D. Hall	2	P. Johnson	18
G. Mack	19	G. Shepherd	2
E. Meier	16	G. Smith	6
		M. Tardd	10
		S. Woodson	4

Classified Advertisements

Placement Notices

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

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

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

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

LABORATORY RECRUITMENT — Opportunities for Laboratory employees.

2187. MATERIAL HANDLER - Supply and Materiel Division.

2188. CLERICAL POSITION - Requires excellent typing skills and knowledge of general office procedures. Will be involved in report preparation, record keeping and file maintenance. Experience in data entry very desirable. Ability to obtain "Q" clearance necessary. Safeguards and Emergency Services Division.

OPEN RECRUITMENT — Opportunities for Laboratory employees and outside applicants.

2189. BIOLOGY ASSOCIATE - Requires BS degree or above in biology, biochemistry or chemistry. Must have significant experience in biochemistry and molecular biology. Will be involved in the cloning and characterization of DNA repair enzymes from human and bacterial cells. Duties will include molecular cloning, enzyme isolation, enzyme assays, DNA sequencing, polyacrylamide and agarose gel electrophoresis, preparation of DNA's for use as substrates. (Term appointment, one year.) Biology Department.

2190. TECHNICAL POSITION - Requires an AAS degree in electronic technology or equivalent experience. Primary responsibility will be NSLS experimental area safety operations. Duties will include safety system checkouts, beam line documentation, interfacing between control room and experimenters with respect to user safety and enabling of beam lines for experimental use. The safety operator will work with the BNL Safety and Environmental Protection representatives at the facility to insure proper beam line operations. Experience in the construction, maintenance, and trouble-shooting of electromechanical safety systems desirable. National Synchrotron Light Source Department.

2191. TECHNICAL POSITION - Requires an AAS degree in electronic technology or equivalent experience. Will be responsible for assembling and testing prototypes for beam diagnostic, closed orbit feedback, and other systems used in accelerators. Hands-on experience with RF and low frequency analog circuits required. National Synchrotron Light Source Department.

Autos & Auto Supplies

MINI BIKE - new engine, 3.5 HP, asking $85; (2) crushed velvet power car seats. Don, Ext. 5329 or 878-2215 after 6 p.m.

78 CHEVY CREW CAB - cruise control, dual gas tanks, batteries, full gauges, extras, $5,500. 732-0887.

JEEP HARD TOP - steel, good shape for CJ5, 57-75, $200. Joe, Ext. 4638 or 736-2728.

77 HONDA CVCC - 4 spd., good cond., $900. Ken, Ext. 4421 or 744-0722.

83 DATSUN 280 ZX - low mi., clean, computor, $12,999. 472-3236 after 6 p.m.

80 HONDA MOTORCYCLE - 750 CBC, 2,800 mi., good cond., $1,200. 286-0372.

73 FORD PICKUP - A-1 cond; cap, many extras, $1,300. 331-5118 before 9 p.m.

VW PARTS - gens., starters, clutches, flywheels, assorted engine parts, all Bug parts. Fred, Ext. 4407.

73 DUSTER - slant-6, p/s, a/c, new brakes, exhaust, high mi., mint in/out, must see, asking $1,200. Joe, Ext. 4527 or 281-9412.

68 PONTIAC LeMANS - p/s, p/b, a/t, high mi., doors need work, $950, neg. Ext. 2666 or 283-5376 after 6 p.m.

79 CHEVETTE - red, 4 spd., 4 cyl., low mi., like new, $2,000 firm. 281-4906 (Sat. & Sun.).

FRONT TIRE CARRIER - truck, $20; (4) 15" Chevy rims, $10 ea.; Blazer/van rear seat, $50. Bill, Ext. 2807 or 281-0557.

83 HONDA MOTORCYCLE - model VT-500C, good for parts. Bob, 283-1752 days.

83 HONDA SHADOW - 750 CC, black, low mi., brand new cond., no maint., $2,500. Frank, Ext. 4173 or 281-6125.

73 LESABRE - body needs work, good running cond., 4 dr., a/t, p/s, p/b, $800. Oster, Ext. 3876.

81 KAWASAKI - 440 LTD, service maintained, new battery, excel. cond., $1,000. Leave message, 744-3968.

76 CHEVY PICKUP - a/t, fm, Silverado C-10, best offer. 821-9280.

71 CORONA - 4 dr., a/t, runs well, best offer. 281-7230.

79 HONDA CIVIC - hatchback, am/fm stereo, high mi., good body. Wendy, 666-7181 days.

75 PACER - 6 cyl., a/t, p/s, p/b, new battery, alt., exhaust, am/fm radio, good cond., asking $700. Ext. 3569 or 286-9560 after 6 p.m.

76 FORD TORINO - 2 dr., V-8, 351, a/c, p/s, p/b, 80k mi., new trans., $1,500. Al, Ext. 4636 or 231-4613.

76 VW RABBIT - excel. cond., am/fm, 4 spd., $1,600. Lee, Ext. 3702 or 751-1042 after 6:30 p.m.

75 PLYMOUTH GRAND FURY - wagon, p/b, p/s, a/c, am, good cond., runs well, $850. Jochen, Ext. 2002.

70 MONTE CARLO - 350, p/s, p/b, a/c, good body, runs well, asking $800. Ext. 4987 or 698-7322.

80 HONDA CIVIC - 1300 DX, 5 spd., am/fm stereo, 34 mpg, garaged, very good cond., $2,950. Ext. 4752.

74 BEETLE - rebuilt engine, radio, 2 extra snow tires, new battery, 100k mi., good cond., $1,200. Edith, Ext. 4379 or 3002 after 8 p.m.

77 CHEVY VAN - 74k mi., good cond., Beauville package, am/fm radio. Ext. 7225 or 929-6748.

80 CHEVY CITATION - V-6, a/c, tint, 4 spd., fm, 2 tone, immac. cond., $2,400. 821-9296.

VAN SEAT - heavy duty, excel. cond., two tone blue, $70. Dick, 878-1580 after 6 p.m.

75 CHRYSLER NEWPORT - 2 dr., high mi., runs well, asking $600 or best offer. 727-5912.

71 DATSUN - station wagon, body rusty, runs well, $300. Ext. 4168 or 286-3675.

80 SUBARU DL - wagon, garaged, maintained, low mi., excel. cond., $3,300. 288-3104 eves.

75 VW BUG - excel. cond., am/fm, snows, (2) extra rims, $1,200. Bill, Ext. 2906 or 929-6189.

76 PINTO - station wagon, V-6, p/s, p/b, a/t, reliable, $700. Ext. 3577 or 3183.

75 FIAT - good engine, (2) new tires, needs work, $395. Jose, Ext. 3714 or 3208 after 7 p.m.

65 COMET - 6 cyl., 95k mi., new tires and muffler, make offer. 281-8778.

69 VOLVO - 144 wagon, $400. Ext. 3006.

CRAGARS - (4) w/lugs fits GM and (4) GR78x14 radials, $200; trailer hitch, HD, fits 82-85 Camaro or Firebird w/cap and ball, $100; (2) CB radios, Cobra & Radio Shack, both 40 channel w/antennas, excel. cond., $50 ea. Larry, Ext. 5611 or 924-0010.

67 FALCON WAGON - new tires, dependable, asking $550. Gary, Ext. 2848 or 473-5776.

71 FORD MAVERICK - 6 cyl., 4 dr., new tires, mech. excel., some body rust, 286-1097.

78 PINTO - p/b, am/fm, 4 spd., very good cond., $1,895. Bill, Ext. 2047 or 472-4684 after 6 p.m.

78 HONDA HAWK T2 - 400 CC, plexifairing, luggage rack, engine guards, nylon bike cover, $550. Sam, Ext. 4749.

SNOW TIRES - H-15, radials, excel. cond., best offer. Al, Ext. 4215.

76 FORD VAN - E250, a/t, p/s, p/b, 6 cyl., paneled and insulated, $2,200. Ext. 4530 or 261-2719.

73 FORD - station wagon, very reliable, many new parts, good rubber, a/t, p/s, p/b, 351 CID, just inspected, $1,150. 475-6981.

SUPER BEE - (2) dark blue, one w/engine, one w/out engine, reasonable price. 924-0906.

Boats & Marine Supplies

8' SPEED BOAT - soap box. Don, Ext. 5329 or 878-2215.

18' LARSON - 1973, Tri-Hull, 74 trailer, very good cond., $1,600. Tony, Ext. 4605.

20' FRIENDSHIP SLOOP - new jib, stay sail, new deck, radio, sleeps 2. Ext. 7225 or 929-6748.

90 HP MERCURY - 1982, purchased new on 8/83, w/controls, very low hrs., never in water over night, mint cond., asking $2,500. Ext. 7971 or 286-1358.

25' CATALINA - 4 sails, Honda 9.9 HP, poptop, fixed keel, cradle, VHF, asking $13,900. 473-2473.

18' A1 MONARCH - 81 Chrys., 30 HP, 81 highlander trailer, motor & trailer, mint, must sell, $2,200. Ext. 2021 or 727-4925.

Miscellaneous

FURNITURE - sofa bed, light tweed pattern, cost $700, asking $350; recliner chair, light camel color, cost $250, asking $135, both less than one year old. 924-3855.

SWAG LAMP - 16", brown wicker shade, $30; brass headboard (double bed); Zenith b&w TV, $25. 744-6874.

ELECTRIC STOVE - gold, good working order, hood included, $60; 15.6 cu. ft. refrigerator, side-by-side, frost free, excel., gold, $150. 289-3667 after 7 p.m.

ENLARGER PROCESSOR - Daylab 200, no darkroom req., chemicals and paper included, brand new, asking $240. 732-6838.

MOVIE PROJECTOR - 16 mm, sound, Singer model. new cond., $225. 878-9256.

PIONEER STEREO TURNTABLE - PL-120, w/magnetic cartridge, like new; Epoch 200 am/fm stereo receiver, $50; (2) "Creative II" acoustic suspension bookshelf speakers, wide range, high compliance. 281-2002.

COMPUTER - TRS-80, Model-3, 16k, Z-80 based, expandable, CRT display, never used, $235. 542-1078.

EARTH STOVE - A-1 cond., wood/coal burning, stack kit, must sell, $375 firm. 588-4703 after 5 p.m.

SPANISH DEN FURNITURE - w/accessories, white formica top vanity, white 12 drawer dresser, drapes, lamps, etc. Ext. 3450 or 3675.

PHOTO CHEMICALS - assorted; new wallpaper, (4) double rolls, $5/roll. Susan, Ext. 4267.

MET OPERA TICKETS - (2) Puccini's Manon, Fri. March 8, balcony, $20 ea. Franz, Ext. 7213 or 744-3235 eves.

MS. PACKMAN - the origional video game as seen in arcades, $400. 399-2342 after 5 p.m.

KITCHEN SET - dark pine, 4 mate chairs w/lazy susan, good cond., $265. Ext. 2514 or 755-3178 eves.

LAWN THATCHER - Blue Bird, 5 HP, excel. cond., $525. 289-0413.

WILSON 1200 GOLF CLUBS - (3) pw, irons, (4) woods, very good cond., $200. 475-4792 after 5 p.m.

SKI RACKS - roof mount $30. Rick, 727-0499.

PIANO & BENCH - 84 Wurlitzer upright, walnut, finish, only 3 months old, $1,450. Ext. 2823 or 282-3187.

SHOP VAC - w/accessories, $15; Empire period couch, c1830. Paul, Ext. 4156.

MATCHING LOVE SEATS - (2) convertible, can deliver, $75 ea.; B&D circular saw w/blades, 9 amp, $15. 929-8287.

LIVING ROOM SET - excel. cond., yellow & tan sofa, $100; love seat, $75; or $150/both; multistriped sofa, shows wear, $50; nylon carpeting, sea green, sculptured, 12' x 14', 12' x 16', runner 30" x 15', any part, $3/yard. 727-6481.

FREE STANDING FIREPLACE - red & black Paucalin, w/smoke pipe and accessories, $250. Ext. 3365.

CONVERTIBLE SOFA - 77" earth tone, Herculon, very good cond., $250; 11-1/2'x 14-1/2' carpet, pale green, includes padding, $55. 878-0717.

ACCORDIAN - good cond., $75 or make offer. 286-2280.

MAGNAVOX STEREO - console, am/fm and record changer, $35. Al, Ext. 5128.

VIOLIN - 1/2 size, Italian, $225; Kodak Retina II-A camera, 50 mm-f/2 lens, $55; Kneissl Epoxy skis, bindings, Scott poles, $45; size 12 ski boots and carrier, $20; hockey skates, size 12, $10. Corliss, Ext. 4438 or 472-1585.

KITTEN - Siamese Sealpoint, male, affectionate, good w/children, litter trained. Lois, Ext. 2959 or 286-8291.

KIS - 200 cm, size 10 boots. Kastinger, Ext. 4489.

BOOKCASE - metal cabinet w/glass doors, approx. 3-1/2' high x 4'. 878-0717.

HARD COAL - (2) tons, pea size, $125. Elaine, Ext. 4379 or 758-6136 after 6 p.m.

LAMP TABLES - (2), $10. 727-5912.

LARGE FREEZER - best offer. Les, Ext. 5180.

MOVING SALE - double bed & mattress, $100; camping table & chairs $30; lamps, kitchen & household items. Jochen, Ext. 2002.

CASSETTE DUPLICATOR - Telex 1:1. Brenda, 643-2941 eves.

CASSETTE DECK - Sony TC-FX6, Onkyo CP-1000A turntable w/cart, $200 for both. Pete, Ext. 7627.

TELEPHONE - GTE, rotary, white w/13 decorative face plates, almost new, in box, $15. Jag, Ext. 5080 or 751-1884.

SOFA - L shaped sectional, beige, good cond., $200. 289-0012.

COPY MACHINE - Sharp Fax SF-501, incl. paper, $75. Ext. 4490 or 289-9724.

BASEBOARD HEATER - low energy, electric, $35. Ext. 4490 or 289-9724.

ELECTRIC TYPEWRITER - Adler, $75. Ext. 4490 or 289-9724.

REPAIR BOOK - new, Toyota Tercel, $10; Crestline kerosene heater, 16,000 btu, excel. cond., best offer. Ext. 2676.

MAPLE TWIN BED - and mattress, $25; 14 cu. ft. Sears refrigerator, $75; maple chest, $15, all items good cond. Dom, Ext. 4851 or 732-6995 after 6 p.m.

POOL - 18' with 3/4 HP earth filter, cover and accessories, $50. 698-3394 after 3 p.m.

BELGIAN RUG - 8'3" x 11'6" 100% wool, $150; 9 x 12 gold rug, $50; new size 10EE safety boots, $20. 289-8212.

ATARI XL COMPUTER - 64k, Rana D/D, IOIO recorder, $350 worth of software on 40 disks & files, all original boxes, 6 mths. old. Chris, 878-2421.

DIAMOND RING - 1.05 ct., VS1, color H-J, 2 side marquise diamonds, platinum, appraised $7,300, neg. 331-3611.

72 POP-UP CAMPER - Bravo, sleeps 7-9, pullout kitchen, 3 burner, stove sink, ice chest, asking, $1,500. Ext. 3981.

LIVING ROOM FURN. - couch, $50; chair, $40; corner table, $30; coffee w/matching end tables, $100; (2) lamps, $20. Mary, Ext. 2926 or 281-0268.

B&W TV - 12", 6 months old, excel. cond., $50. Luigi, Ext. 3090 after 8 p.m.

BED DOUBLE - box spring, mattress & metal frame, excel. cond., $120; youth bed & dresser (solid wood) good cond., $80. Inan, Ext. 3370.

Free

GAS DRYER - needs some work. Ext. 7225 or 929-6748.

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 Rent

PORT JEFFERSON - Harbor Hills, private 3 bdrm. ranch, furn., avail. April 6 to July 6, $800/mo. plus util. 928-7154 or Ext. 3791.

SHIRLEY - 2 rm. apt., w/full bath, ground level, partially furn., $400/month, inc. util. Joann, 744-2821.

SHOREHAM - 4 bdrm., colonial, l/r, d/r, den, f/p, carpeting, country kitchen, dishwasher, washer/dryer, 2-1/2 baths, garage, excel. location, avail. April, $1,250 pays all. 744-8659.

SOUND BEACH - 3 room apt., 1 bdrm., kitchen/dinette, $400 incl. util., plus cable. 821-1059.

For Sale

N. CORAM - townhouse, A-1 cond., fenced yard, w/w carpet, 2 zone heat, basement, redwood deck, oil hot water heat, storms, $77,000. 331-5118 before 9 p.m.

CB HOME - 2 bdrm., 2 baths, l/r, d/r (open living room), w/w carpet, TV room, util. room, encl. screen patio, a/c, heat, ceiling fans, attic exhaust fan, 1 full acre, beautiful shade trees, lots of extras, $62,500. 904-753-3494.

RIDGE - 3-4 bdrms., living room w/coal stove, country kitchen, basement, patio, 1/3 + acre, $83,000. Ext. 7509 or 924-8594.

LAKE PANAMOKA, RIDGE - ranch, 3 bdrms., l/r, d/r, eik, cathedral ceiling in l/r & d/r, 6" ext. walls & extra insulation, A.G. 18' pool & deck, lake rights, 5 min. to Lab, $91,000. 929-8748.

Lost & Found

FOUND - set of keys between bldg. 459 & 460, GM car key & 7 others. Pete, Ext. 7627.

LOST - keychain, German shepherd head, lost 2/25. George, Ext. 2296.

Wanted

KNOWLEDGABLE PERSON - to appraise and/or purchase stamp collection, lg. quantity of sheets, half sheets and blocks. Bush, Ext. 4638.

FULL SIZE CELLO - reasonable price, for a teenager. Mac, Ext. 2959 or 744-5977.

MESH PLAYPEN - 36 x 36; port-a-crib. 751-6418.

SMALL HOUSE - 15 min. to BNL. Ext. 3448.

FURNISHED ROOM - 15 min. to BNL. Otto Lazareth, Ext. 3448, bet. 5 & 7 p.m.

SOFTWARE - Sinclair ZX81/Timex 1000, hardware, literature. Pete, Ext. 7190 or 369-1844.

TENNIS RACKET - standard size, cover, clean. Yako, Ext. 2592 or 3349.

REPAIR MANUAL - 74 Peugeot diesel. Kathy, Ext. 3420 or Jim, 281-2849.

CRIB MATTRESS - good enough for spare crib. Ext. 3319 or 744-9802.

RUGBY PLAYERS - new or used, all sizes, all ages, practice has begun. Pierrick, Ext. 3464.

HOUSE TO RENT - in Bellport area, first two weeks in August, by immaculate Chicago couple. 286-1097.

Services

FINANCIAL PLANNING SERVICE - lower taxes, increase investment yields, initial consultation free, certified financial planner. Michele, 751-7491.

BABYSITTER - my home, on site, experienced housewife, available anytime. Kim, Ext. 3192 or 282-3192.

IBM PC CONSULTING - purchasing? upgrading? software & hardware help available. Ext. 4967 or 928-2910 after 6 p.m.

HOUSESITTERS - female college graduates, summer 1985, care for pets, house & lawn. 744-2821.

GENERAL CONTRACTOR - carpenter, extensions, dormers, garage, conversions, basements, decks, kitchens, licensed. Jim, 698-2501.

TAXES - prepared by tax consultant, your home or mine, reasonable. John, 732-2472.

CHILD CARE - mother of 3, nonsmoker, nonsoap opera watcher, creative activities, any age, North Shore. Barbara, 821-2952.

HOUSESITTER - available Suffolk & Nassau areas. Ext. 3671 or 736-2131.

BABYSITTER - reliable, experienced teen available nights and weekends. Mary, Ext. 2926 or Chris, 281-0268.

WORD PROCESSING - letter quality printer, reasonable rates. Debbie, 399-1790.

AUTO SERVICE - all areas of auto body repair, insurance estimates given, auto cleaning, compound waxing, interiors, rugs, chrome, professional detailing, $49.95; oxidation, $20 additional, pickup & delivery. Bob, 744-4047.

In Appreciation

The family of Walter Milian wishes to thank all those who, in some way, expressed their loving concern during Walter's illness and since his merciful death.

It meant so much to Walt to experience the warmth of your friendship during his ordeal, and we, his family, have been sustained by your support and caring throughout this difficult time.

Please accept our sincere appreciation for your prayers and many kindnesses as we all wish for him the blessing of eternal peace.

—Maebelle Milian

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