BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Education Center Planned

BNL has received approval from the U.S. Department of Energy (DOE) to build a new Education Center on site — a 4,700-square-foot facility to provide space for the staff and programs of the Lab's Office of Educational Programs (OEP). At present OEP oversees approximately 50 learning opportunities for students ranging from elementary school to postgraduate levels.

The DOE-funded Education Center is expected to cost $700,000. Ground breaking is scheduled for the fall, and the center should open in the summer of 1991.

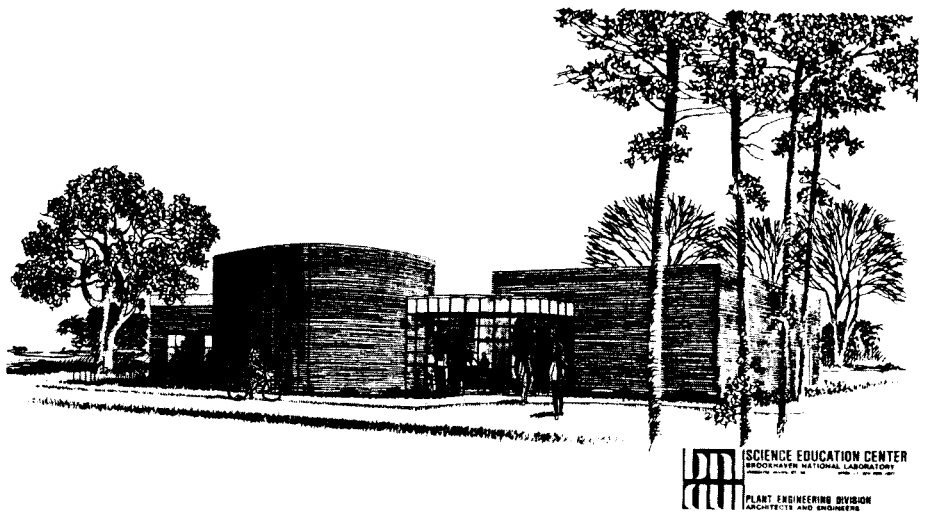
Designed by BNL architect Ove Dyling, Plant Engineering Division, the building will contain a spacious lobby and display room, eight offices, a large workroom, a training room, a ten-seat conference room, a library, and an auditorium that will seat 44.

"The new Education Center will be located in the parking lot on Brookhaven Avenue where the Farmer's Market is held," said Donald Metz, head of OEP. "But there will still be ample room for parking and the market."

Metz credited Laboratory Director Nicholas Samios with helping to make the project a reality, and Metz added that Parke Rohrer, Associate Director for Management & Physical Plant, suggested the site for the new building.

Currently, OEP is housed in the Medical Department, Bldg. 490, and its various programs are scattered around the Lab site. Said Karl Swyler, OEP, "A centralized location will be convenient for our staff and our students. For example, we will hold the Saturday morning Science Explorations class in the new building, and high school teachers will be able to take the evening environmental courses there."

— Diane Greenberg



An artist's conception of the Education Center designed by BNL architect Ove Dyling. The design is based on two geometric forms — two rectangles and a circle — combined with glass. The building will be constructed of masonry brick and be accessible to the handicapped.

Science Teachers Learn About BNL

About 150 teachers attended the annual Suffolk County Science Teachers Association Spring Conference held at BNL on April 27. At one of a dozen workshops at the all-day conference, Karl Swyler (standing) from BNL's Office of Educational Programs presented "Directions in Science Education at BNL." Swyler spoke about the U.S. Department of Energy's increasing commitment to precollege science education and outlined BNL's current programs. The teachers were invited to offer their ideas to assist the Lab in developing new educational initiatives. — photos in this issue by Roger Stoutenburgh

DOE Award for Victor Bond

BNL Senior Scientist Victor Bond (second from left), Medical Department, was honored on May 2 "for outstanding leadership and scientific vision in radiation biology and biophysics" with a Distinguished Associate Award from the U.S. Department of Energy (DOE).

Presenting the plaque is David Galas (second from right), the DOE Associate Director for the Office of Health & Environmental Research (OHER). The onlookers are: Richard Setlow (left), BNL Associate Director for Life Sciences; and Robert Wood, Director of the Physical & Technology Research Division, DOE OHER.

Bond was cited for "his research accomplishments, insight, and dedicated service [which has] substantially advanced the scientific basis for radiation protection."

At present, Bond's research centers on developing a new method for evaluating low-level radiation exposure, which is based on energy deposited in the genome rather than an average for the entire organ.

Bond joined the scientific staff of the Medical Department in 1955. From 1962-67, he served as Chairman of that department. He left that position to serve as BNL Associate Director for Life Sciences, until 1984.

Rescue Award for Per Bak

Per Bak, a senior physicist in the Physics Department, has received the Samuel Friedman Foundation's 1990 Rescue Award. The award consists of a $10,000 honorarium, a solid silver medallion, and a plaque.

Per Bak

The Rescue Award was established by the Friedman Foundation in 1984. The preamble to the award's documentation reads:

> In 1943, the Danish people rose up suddenly, and, seemingly overnight, snatched virtually the entire Jewish community from the grasp of the Nazis, smuggling them in a motley collection of boats across the sea to safety in Sweden. In recognition of these heroic acts, the Samuel Friedman Foundation created the Rescue Award in 1984 to honor outstanding Danish achievements in the Arts and Sciences.

In choosing Bak for the award, the Foundation cited him for his "original contributions to the theories of surface phase transitions, quasicrystals, and nonlinear dynamics."

Next week, Bak will travel to California for a banquet to be held in his honor on May 24, at the University of California at Los Angeles.

In recent years, within the general field of nonlinear dynamics, Bak has been working on self-organized criticality, a theory that he and his colleagues invented to explain how certain interactive systems work. His research has captured the attention of scientists and economists, as it has given insight into such unpredictable systems as earthquakes and the Dow-Jones average.

Interactive systems evolve naturally towards a condition called a critical state. In the critical state, a system appears to be stable, but in fact it is poised to evolve into another condition. One way to visualize this, explained Bak, is to imagine building a sandpile by adding grains one at time, at random. As the pile gets steeper, small slides occur, then bigger ones. Eventually, the sandpile stabilizes in that the amount of sand added equals the amount falling off. At this point, the sandpile has reached a critical state. The result of adding just a little more sand is unpredictable — avalanches of any size or duration can be triggered.

"It's important for theorists that experimentalists confirm their theories," said Bak. He reported that IBM researchers in Yorktown have done just that, building up piles of sand grains as well as aluminum particles.

Bak is intrigued with large fluctuations in natural phenomena and questions the assumption that external forces are always at work. The extinction of the dinosaurs, evolution of individual species, the earth's climate — all these are material for his thinking. He has pioneered the concept of self-organized criticality and sees its application in numerous areas.

Per Bak received his Ph.D. in physics in 1974 from the Technical University of Denmark for work done at the Riso AEC Research Establishment. He worked at BNL as a research associate in the Physics Department from 1974-76. Returning to Denmark, he took a research position with NORDITA, in Copenhagen, and, in 1979, became an associate professor at the H.C. Orsted Institute in Copenhagen. In 1983, he returned to Brookhaven, rejoining the Physics staff.

Bak served as an editor for Physical Review Letters from 1986-87. He is a fellow of the American Association for the Advancement of Science.

Focus on the Future

The focus was on the future of high energy and heavy-ion physics at BNL, at the Annual Meeting of the AGS Users Group, held May 3-4.

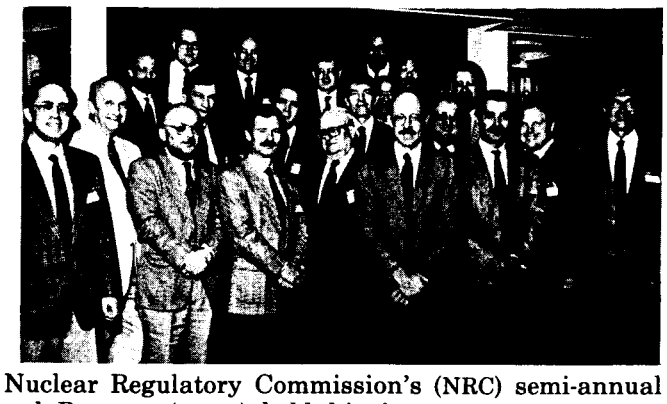
The Alternating Gradient Synchrotron (AGS) figures very much in the future of BNL's proposed Relativistic Heavy Ion Collider (RHIC), for which it will be the injector. Thus, one highlight of this users' meeting was a call for letters of intent for first-round RHIC experiments.

Also brightening the future was the strong endorsement given to the AGS by the recent High Energy Physics Advisory Panel (HEPAP) subpanel, headed by Frank Sciulli. HEPAP advises the Division of High Energy Physics in the U.S. Department of Energy's Office of Energy Research, which is directed by John O'Fallon (right), who gave the attendees "A View from the Department of Energy."

As recounted at the meeting, the subpanel's report noted, ". . . the BNL AGS, augmented by its Booster injector nearing completion, provides the most intense kaon beams in the world, and thus offers unique ways of probing the standard model and exploring what lies beyond." The Booster will increase the AGS's kaon (K) flux — already the world's highest — fourfold.

Many experimentalists who are eager to take advantage of that intensity presented their future plans at the meeting. One of those was Michael Zeller (left, below), Yale University. Zeller, who previously participated in two, now completed, rare K decay experiments at the AGS, presented his collaboration's ideas for a new experiment using the accelerator's intense kaon beams to study a particular decay with unprecedented sensitivity.

No Accidental Tourists Attend NRC Meeting



Preventing severe accidents in light water reactors is of prime importance to the U.S. and many other countries where these reactors are used to generate electricity. On April 30 to May 3, over 125 participants from the U.S. and worldwide attended a meeting of the U.S. Nuclear Regulatory Commission's (NRC) semi-annual Severe Accident Research Program (SARP), held this time at BNL.

SARP research consists of experiments and analyses that explore the physical phenomena and consequences of reactor meltdown accidents in light water reactors. These investigations are conducted for the NRC at national laboratories, universities and by private consultants. In 1983, the NRC started a foreign partner program — participating countries help support the research and meet twice a year to share in the results.

At a break in the proceedings of this most recent meeting, a partial gathering of the attendees included (third from left) NRC's Farouk Eltawila, branch chief for Accident Evaluation; (back, third left) Ralph Meyer, section leader for the same branch; and (in front of Meyer, with glasses) Robert Wright, NRC program manager for the meeting. Others present represented Italy, Japan, Sweden and several U.S. national laboratories. BNL's Robert Bari (far right) organized the meeting with Allen Weiss (not pictured). Among the speakers was BNL's Theodore Ginsberg (not pictured).

IBEW Meeting

Local 2230 of the International Brotherhood of Electrical Workers (IBEW) will hold its monthly meeting on Monday, May 21, in the Knights of Columbus Hall, Railroad Avenue, Patchogue. Please note, the meeting will begin at 5:30 p.m., earlier than usual.

The agenda includes regular business, committee reports, the president's report, and the nomination of officers.

Software Demo

Structural Dynamics Research Corporation will present their mechanical computer-aided engineering software with level 5 enhancements on Thursday, May 24, in the CCD seminar room, Bldg. 515, beginning at 10 a.m. This seminar will describe conceptual and analytical tools, and discuss how some Fermilab and BNL designs were made in real time using workstations. Call Chris Neuberger, Ext. 4160, with questions.

Spring Art Show

May 30, 31 & June 1
11:30 a.m. to 1:30 p.m.
Berkner Hall, Room C

Prize-winning paintings and sculpture from the *South Bay Art Association* Spring Show will be exhibited by the BERA Art Society.

Help Evaluate New Workstation

Users can now test and evaluate a Silicon Graphics Personal Iris System W-D25TG, UNIX-based engineering workstation in the workstation room opposite the user cubicles at the Central Scientific Computing Facility in Bldg. 515. It is accessible on the BNL local area network. Contact Curt Bergh, Ext. 7152, to schedule time at the console and for additional information.

The workstation is based on a 20 MHz, 32 bit RISC CPU and a 20 MHz floating point coprocessor from MIPS computer systems. The processor delivers 16 MIPS and 1.6 double precision MFLOPS. It includes 24 color-bit planes and 8 additional bit planes dedicated to windows, overlay and underlay, as well as 32 MB of memory and a 760 MB SCSI disk. System software now includes FORTRAN, C, PASCAL, NFS, DECNET and Wavefront Personal Visualizer, and the system should soon run Mathematica.

Coming Up

BNL will host the U.S. Department of Energy's (DOE) Computer Conference this year, on June 5-7, which will bring together participants from most major DOE contractor sites. Most of the meeting will be held at the Days Hotel in Holtsville. The afternoon session on Wednesday, June 6, however, will be held at BNL and will include a discussion on the topic of "What do you expect from a User Support Service?"

The BNL computing community is invited to participate in any part of the conference. Registration is required for the Days Hotel sessions, and the fee is $56. For conference information, contact Kurt Fuchel, Ext. 4116; for registration information, contact Donna-Ree Fernandez, Ext. 4103.

ANS Meeting

Ronald Feddersen, the Multimegawatt Program Manager at Grumman Space Systems, will be the speaker at the May dinner meeting of the Long Island Section of the American Nuclear Society (ANS). The meeting will take place on Wednesday, May 23, at the Bavarian Inn, Lake Ronkonkoma; cocktails will be served at 6 p.m., dinner at 7 p.m., and the speaker will talk at 8 p.m.

In his talk, Feddersen will describe the design study of a space-based power system capable of generating hundreds of megawatts. He has been responsible for overseeing this work, which is sponsored by the U.S. Department of Energy as part of the Strategic Defense Initiative.

To make reservations, at $16 for members and their spouses, and $18 for others, contact Ellie Mitchell, Ext. 7328.

Choppers on Site

It's a rare sight on site, but helicopters do come and go at BNL. This one, belonging to the Suffolk County Police Department, was participating in a medical emergency drill on March 15. The drill involved teams from both the County and BNL, which coordinated an air evacuation of a "patient."

"Through a memorandum of understanding with Suffolk County, we can count on them for support if we need an emergency air evacuation," said Russel Reaver, Police Group Manager. Since air transport saves about ten minutes of commuting time to nearby area hospitals, it is an option that can be used depending on the nature of the problem.

Reaver, who has been at BNL for nine months, says in all that time, helicopters have landed on site only four times, all within the month of March. Two occasions were in conjunction with the current U.S. Department of Energy Tiger Team visit, when the helicopter doing the aerial radiation survey landed twice to drop off and pick up ground-survey personnel. Most recently, BNL photographer Peter Horton was picked up by helicopter to take new aerials of the Lab site.

Over the years, a number of visitors have arrived by helicopter, some even landing in the big field in front of the Physics Department, Bldg. 510. Members of the press have arrived via helicopter. Even a Coast Guard helicopter came once, in 1979, to pick up radiation experts from the Safety and Environmental Protection Division and rush them to Three Mile Island in Pennsylvania, where they lent their assistance.

A grassy area south of Police Headquarters is designated as the primary heliport. Marking the spot are a wind sock and a large triangle with an "H" in it, formed out of stones set in the ground.

BNL is not a restricted airspace, according to Reaver, so overflying is permitted at any time, in compliance with Federal Aviation Administration regulations on altitude. If an aircraft wants to land, however, it usually notifies BNL in advance through the Police Group. For on-site medical emergencies, the Fire Group can call Suffolk County for a helicopter and communicate with the chopper via two-way radio.

1990 Volleyball Champions

The 1990 League I Volleyball Championship has definitely been won — though some may think it's still upfagrabs! The winning Upfagrabs team members are: (back, from left) Walt Reams, Jay Adams, Bill Kropp, (front, from left) Ali Lopez, Barry Karlin and Sandy Lane. Missing is Jean Spears.

G may stand for goals or for go-getters, but whatever it stands for, the goal-getting GTEAM got the Volleyball Open League Championship this year. Shown are winners: (back from left) Bill Kropp, Dan Mullaly, (front, from left) Tom Choi and Walt Reams. Missing are Dan Kropp and Jean Spears.

Some fossils fuel an unusually competitive spirit — and the BNL Fossils burned hot enough to win 1990 Volleyball League II Championship. The winners are: (back, from left) Marty Leach, Kathleen McIntyre, Frank Haibon, Arnie Stillman, (front) Gary Smith and Sandi Lane. Missing are Carrie Grimshaw and Sue Pepper.

Cracking down on opponents to become champion of Volleyball League III this year is the Nutcracker team, with members: (back, from left) Diana Toledo, Pat Giacalone, Kathleen McIntyre, (front, from left) Sue Ellen Gerchman, Sandi Lane and Michi Miura. Missing faces are Carrie Grimshaw and Sue Pepper.

Equipment Demo

On Monday, May 21, a representative of Gerber Scientific Instruments will present the latest in photoplotting technology. The presentation will be held at 1 p.m. in the CCD seminar room, Bldg. 515.

For more information, call Pam Mansfield, Ext. 7286.

Bowling

Pink League

Pam Meehan had a 190/189/527 scratch series, Fern Simes 180, Donna Cunningham 171. The High Rollers are the second half winners.

Red/Green League

N. Franco had a 236, R. Mulderig 235/203/632 scratch series, F. Griswold 222, R. Jones 221/600 scratch. J. Muller 219, C. Scarlett 216, R. Eggert 214/606 scratch, M. Guacci 212/200, R. Sick 203/200, G. Spira 201, S. Dimaiuta 200. The Biotniks are the winners of the second half.

Brookhaven Highlights

The 1989 edition of the Brookhaven Highlights is now being distributed to all employees. Additional, individual copies and larger quantities are available from the Technical Information Division, Ext. 3484. Bldg. 477. Ask for BNL report number 52210.

BROOKHAVEN BULLETIN

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ANITA COHEN, Editor
MARSHA BELFORD, Assistant Editor
LIZ SEUBERT, Reporter

35 Brookhaven Ave., Upton, N.Y. 11973
(516) 282-2345

Summer Openings For HS Students

There are still openings for advanced high school students in a morning lecture series, offered through the 1990 Community Summer Science Program of BNL's Office of Educational Programs (OEP).

Starting on July 9, the morning lecture series will review forefront science, and include tours and other special activities.

For more information, contact Karl Swyler, OEP, Ext. 7171.

Basketball

Championship Game

Warriors 47		Bulls 36	
T. Mayo	16	P. Johnson	18
W. Cummings	12	S. Gilbert	8
C. Edwards	10	B. O'Brien	4
B. Gunther	5	C. Victoria	4
G. Mack	4	G. Smith	2

Three-point shots: T. Mayo

Golf Tournament

There are still a few openings left for the June 14 outing at the Bethpage red golf course. The greens fees are $15, payable by check to the BERA Golf Association. Please send or hand deliver all checks to John Millener, Bldg. 510A, Ext. 3853, as soon as possible.

Arrivals & Departures

Arrivals

Victoria F. Drell ..... Fiscal
Donna E. Friedman Occ. Med. Clinic
Giuseppe Mondi ..... Central Shops
Yahia F. Musa ..... Plant Eng.
Carmen M. Narvaez ..... Plant Eng.
William T. Robinson ..... Plant Eng.
Dawn M. Schick ..... Fiscal
Robert L. Soja ..... Central Shops

Departures

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

Sergei Obukhov ..... Physics

On the Menu

At the Cafeteria

Monday, May 21

Soup: Minestrone	.75/.95
Entree: Veal & peppers over noodles	3.10
Entree: Baked ziti w/1 veg.	3.00
Fitness: Chef's special w/1 veg.	3.10
Carvery: Pastrami sandwich	2.85
Grill: Hamburger cordon bleu w/French fries	2.85
SPICE: Stuffed pita at salad	

Tuesday, May 22

Soup: Cream of broccoli	.75/.95
Entree: BBQ chicken w/1 veg.	3.10
Entree: Spaghetti w/clam sauce & Italian bread	3.10
Fitness: Broccoli au gratin over baked potato w/1 veg.	2.95
Carvery: Hot roast beef sandwich	2.85
Grill: Cheese steak hero w/French fries	2.85
SPICE: Hero sandwich to go	2.50

Wednesday, May 23

Soup: Black bean	.75/.95
Entree: Make your own taco	(each) 1.00
Entree: Arroz con pollo	3.10
Fitness: Vegetable tacos	(each) .90
Carvery: Roast pork olé	2.85
Grill: Mexican salad	(ounce) .25
SPICE: Mexicali fling	

Thursday, May 24

Soup: Navy bean	.75/.95
Entree: Sausage & pepper hero w/1 veg.	3.10
Entree: Irish lamb stew over rice	3.10
Fitness: Eggplant Parmesan w/1 veg.	3.00
Carvery: Hot corned beef sandwich	2.85
Grill: Gyro sandwich	3.00
SPICE: Bagel bonanza	

Friday, May 25

Soup: Seafood chowder	.75/.95
Entree: Fishman's platter	3.50
Entree: Meatloaf w/gravy & 1 veg.	3.10
Fitness: Seafood quiche w/1 veg.	3.10
Carvery: Hot roast turkey sandwich w/cranberry sauce	2.85
Grill: Tuna melt w/French fries	2.15
SPICE: Seafood platter special	

Breakfast served w/coffee, 7:30 - 10:30 a.m. 2.65

Mon.: 2 eggs, bacon & pancakes
Tue.: Western omelet, French fries, toast
Wed.: Spanish omelet, home fries, toast
Thu.: 2 eggs, bacon, cheese on croissant, fries
Fri.: French toast, 2 eggs, bacon, home fries

Catch a glimpse of
GLANCE
playing in Berkner Hall
weekdays, 11:30 a.m. to 1:30 p.m.
Show changes every Tuesday.

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 and/or appropriate bargaining unit, 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.

The vacancies listed below have been exempted by the Director's Office from the current freeze on open requisitions.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

4232. SECRETARIAL POSITION - Requires AAS in secretarial science or equivalent, and a knowledge of Laboratory policies and procedures. Previous word-processing experience is required; WordPerfect preferred. Excellent communication skills and demonstrated math abilities are also required. Will provide secretarial support, including preparation of reports and correspondence, and processing POs and ILRs. (Reposting of Job #4217.) Staff Services Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

4233. OFFICE SERVICES POSITION - Requires knowledge of office practices and previous computer experience. Duties include maintaining master drawing and backup files, quality assurance logs, and computerized data-base drawing file. Will prepare, distribute and control engineering documents. Word-processing experience desired. (Reposting of Job #4179.) National Synchrotron Light Source Department.

4234. SCIENTIFIC ASSOCIATE POSITION - Requires BS in health physics or physical science with two years' experience in nuclear power, nuclear navy reactor, health physics or equivalent. Responsibilities include assisting the Safety Representative in program audit and oversight, radiation exposure and contamination control

practices, industrial hygiene monitoring and safety. Safety & Environmental Protection Division.

4235. TECHNICAL POSITION - Requires AAS in electronic technology or equivalent, and experience in fabricating and testing of integrated and discrete semiconductor circuits. Ability to work from electronic schematics, verbal instructions and rough sketches also required. Demonstrated mechanical abilities and design skills (CAD) desired. Accelerator Development Department.

4236. TECHNICAL POSITION - Requires AAS in electronic technology or computer science and five to ten years' experience, preferably systems related. The ability to apply program software and troubleshoot control systems also required. Responsibilities will include oversight of superconducting magnet-test facilities, and implementation of new components and systems. Accelerator Development Department.

4237. BIOLOGY ASSOCIATE - Requires BS/MS in biology or related field. Previous experience handling and testing antibodies, ELISA, and biochemical skills such as column chromatography, HPLC and gel electrophoresis (PAGE) also required. Duties will include preparing of antibody conjugates and testing immunoreactivity as part of a cancer research program. Biology Department.

Motor Vehicles & Supplies

77 BUICK CENTURY WAGON - 62.5 k mi., ac, air shocks, trailer hitch, new tires & brakes, $1,000. Don, Ext. 3625 or 286-0428.

76 MERCURY COUGAR - new paint, rims, excel. cond. 878-6074 after 7 p.m.

72 DODGE POWER WAGON PICKUP - 1-ton, 4x4, 100k mi., 11' camper, orig. owner, $4,995. Jim, 732-6871.

63 CHEVY COVAIR MONZA - conv., red/red int., white top, 4-spd., completely restored, $4,000. Ext. 3992 or 331-1003 eves.

59 EDSEL - 4-dr., V-8, restored. Ken, Ext. 5110.

CAP - fits full-size pickup, 8' long, fair cond., best offer. Kevin, 758-2653.

TIRES - 4, Goodyear Tiempo, P235/75R15, 2 slightly worn, 2 v.g. cond., $60 all 4. 821-0469.

TIRES - 4, Yokohama, steel belted, tubeless, P-145-80R13, like new, $30 for 2. Tom, Ext. 2957.

LIFTERS - new T.R.W., V-6, Ford; V-6 radiator & shroud; small block, C6, stall spd. converter & fly wheel. Wayne, Ext. 3084.

PILLAR POST - sheet metal, replacement part, OEM fits '80-'89 full-size Bronco, $20 for 2. Dan, Ext. 4987 or 698-7322.

SNAP LINE - for beach vehicles, brand-new, $20. Ext. 7727 or 929-4631.

SNOW TIRES - F78/14, plenty of tread, on rims from '74 Nova, $25/pr. Tom Joos, Ext. 7707.

88 HYUNDAI EXCEL GL - h/b, 3-dr., white, 4-spd., am/fm cass., excel. cond., $4,000. Debbie, Ext. 2876.

88 FORD ESCORT GL - gray/gray, a/t, ac, stereo, 16k mi., clean, good shape, Ford extra protection plan incl., $5,300. Tom, 791-4776.

88 HONDA ACCORD LXI - 4-dr., champagne, 40k mi., p/sunroof, loaded, excel. cond., $10,000. Don or Sue, 473-6570 after 7 p.m.

88 MUSTANG LX - white/blue, 4-cyl., Trick Edition, extended warranty, loaded, mint in & out, $8,500 neg. Emil, Ext. 4289.

87 MAZDA 4x4 - new clutch, tires, alum. rims, sunroof, bed liner, alarm, extras, excel. cond., $7,700 neg. 281-7935 eves.

87 HONDA 250X FOURTRAX - 5-spd. w/reverse, excel. cond., $2,000. Scott, 563-2323 or 331-1349.

87 MAZDA PICKUP - silver, 37k mi., 2wd, good cond., new brakes, well maintained. Joseph, 345-3923 eves.

87 SUZUKI SAMURAI 4x4 - silver, convertible, 18k mi., am/fm cass., immac. cond., asking $4,700. 589-4323.

86 IZUZI I-MARK - 42k mi., loaded, excel. cond., $5,000. Ext. 7958 or 929-6540.

86 YAMAHA VENTURE ROYALE - 24k mi., loaded w/many extras, excel. cond., $4,100. Jim, 447-1381 after 5 p.m.

86 TOYOTA PICKUP 4x4 - 59k mi., 5-spd., alarm, tinted, 31" tires, am/fm stereo, excel. cond., more, $5,950. Danny, Ext. 4988 or 286-8541.

85 TOYOTA TERCEL - h/b, 5-spd., ac, 2-dr., 47k mi., $2,800. 874-3927 after 8 p.m.

85 CAMERO - a/t, p/s, p/b, am/fm cass., tinted windows, asking $3,800. 874-2387 after 6 p.m.

85 SENTRA WAGON XE - m/t, ac, p/s, p/b, $2,000 firm. Ext. 4184 or 929-3347 after 6 p.m.

85 DODGE CARAVAN LE - fully loaded, brown metallic, low mi., 874-2737.

84 FORD RANGER - V-6, 45k mi., good cond., asking $3,250. Danny, 286-8938 eves.

84 CUTLASS SUPREME BROUGHAM - 6-cyl., full power, am/fm, ac, 68k mi., excel. cond. Irv, Ext. 2827 or 423-8384 eves.

84 RENAULT ENCORE - 2-dr., blue, 5-spd., am/fm cass., ac, new tires, good cond., $1,000 neg. 286-0913 after 6 p.m.

83 CHEVY S-10 PICKUP - 4-spd., long-bed, 67k mi., v.g. cond. 325-0447.

83 MITSUBISHI PICKUP - 4-spd., 84k mi., good trans., $800 neg. Joe, Ext. 3084 or 399-0731.

82 VOLVO - 240 turbo, 2-dr. sedan, 5-spd., black, ac, sunroof, am/fm cass., excel. mech. cond. Ext. 2253.

82 RELIANT - s/w, m/t, great mpg, new brakes, battery & clutch, runs well, good cond., $1,000 firm. Bill G., Ext. 5565.

81 TOYOTA CELICA GT - liftback, 5-spd., p/b, am/fm stereo, 37k orig. mi., excel. cond., $3,000. Hank, Ext. 2497 or 286-2203 eves.

81 KAWASAKI 440 LTD - 12k mi., new tires, brakes, battery, chain, sprockets, sissy bar, v.g. cond., must sell, $700. 474-5715.

81 SUZUKI GS 650G - red, low mi., excel. cond. 874-2737.

80 CHEVETTE - h/b, 2-dr., 4-spd., good cond., reliable, $475. Herman, Ext. 7333.

78 HONDA CB400-A MOTORCYCLE - red, 5k mi., mint cond., $550 firm. 281-2092.

77 PONTIAC FIREBIRD - black, body good cond., T/A pkg., additional parts, motor rebuilt 20k mi. ago, asking $3,350. 281-7873 eves.

76 SUZUKI MOTORCYCLE 250 - twin engine, 2 stroke, low mi., runs well, $250. Ext. 7699.

75 BUICK ESTATE WAGON - new trans., rebuilt eng., runs well, $800 neg. Ext. 3969 or 878-6580.

74 PLYMOUTH SATALITE 318 - p/s, p/b, ac, runs well, many new parts, $600 or best offer. Eric, Ext. 3677 or 924-4107.

74 HONDA CB 360 MOTORCYCLE - 200 mi. on rebuilt engine, crash bar, sissy bar, new brakes & front tire, garaged. Pete, Ext. 4100.

71 DODGE DART - 4-dr., runs well, needs tires & shocks, good trans., $200. Mike, Ext. 5662.

68 PONTIAC FIREBIRD - metallic jade green, steel tilt front nose, 400 cid, TH400, car show winner, $7,500 neg. Scott, 289-6892.

65 DODGE DART - slant-6 motor, good for parts, best offer. Frank, Ext. 2314 or 567-5131.

RIMS - one 8.25-14, 5 lugs; one D78-14, 4 lugs. Ext. 2950.

SUZUKI RM60 MOTORCYCLE - excel. cond., $450. 878-1178.

CAR STEREO - Panasonic, $50. Ext. 5320.

SPIRIT AMC - any part for '78 to '80; Dodge, 4-spd. tranny, plus complete clutch set & posi-rear. 924-0960 after 5 p.m.

TIRES - 6, P215/75R15, Goodyear radials on Chevy rims, good cond., $25 ea. Aron, Ext. 2434.

Boats & Marine Supplies

31' CORVETTE SLOOP - classic shoal draft, fiberglass, Atomic 4, wheel, 7 sails, fully equipped, reduced to $14,000. McGeary, 363-2796.

28' CAPE DORY SAILBOAT - 1975, includes cradle, Volvo diesel, fully equipped, great shape, $23,500. Roger, Ext. 2382.

25' MORGAN SAILBOAT - new sails & ob., draws 2'9", extras, $6,000. Steve, 821-0686.

24' SEARAY SUNDANCER - 1976, repowered 1989, new int., H.W., dockside power, frig., stove, Merc Cruiser o.d., very clean, $10,000. 654-2617.

23' CHRIS CRAFT - new engine & canvas, mooring, cradle, $4,200. 928-7734.

23' O'DAY - loaded, cruising, racing, 6 sails, VHF, Loran, depth/spd., dodger, solo handling, excel. cond., extras, $10,500. 286-1024.

22' SPORTCRAFT - 1987, walk-around, 225 h.p. Evinrude, ob., low hrs., many extras, '88 E-Z loader trailer, $18,000 neg. 744-7549.

19' BOWRIDER CRUISER - 1972, w/ 1976 115-h.p. Johnson, Coast Guard pkg., trailer w/electric winch, $3,000. Frank, Ext. 2314 or 567-5131.

19' O'DAY - 1986, all factory options, many extras, asking $6,500. 732-9091.

18' GLASSPORT BOWRIDER - 1983, w/90-h.p. Evinrude, trailer, mooring cover, approx. 110 hrs., ask. $2,800. Chris, Ext. 2022 or 395-6112.

18' CATAMAN TRAILER - beach wheels, extras, MF4 SOL-CAT, $1,800. Steve, 821-0686.

17' SUNRUNNER - 1987, 131-h.p. Volvo i.o., V.H.F., cass., E-Z trailer, only 30 hrs. use., serviced, mint cond., $7,900 firm. 924-4276.

MOTOR - 1984, 40-h.p. Johnson, long-shaft manual, used 4 seasons, super cond., very low hrs., service manual, $900. 298-4172.

Furnishings & Appliances

SECTIONAL SOFA - Koehler, three-piece, turquoise, always covered, excel. cond., $300 firm. 744-2805.

LOVESEAT - gold; 2 green wood trimmed chairs; drawing table; wood table, reasonable, have pictures. Jack, Ext. 4054 or 289-1989 eves.

WATER BED - super twin w/6 built-in drawers, dark wood, good cond. Jerry, Ext. 7427 or 475-5591 after 6 p.m.

KITCHEN SINK - fittings & cabinets, above & below, 5' long, great for apt., $350 neg.; portable dishwasher, $75. Bill, Ext. 2378 or 758-3284.

FURNITURE - French country dining room set w/6 chairs & 2 leaves, new, $1,500; 2 French provincial dressers, $100. Mike, 698-0574.

END TABLE - large, pine, w/storage compartment, $35; chaise lounge, $5; pine hamper, $20; solid walnut end table, $65. Kathy, 744-2203.

AIR CONDITIONER - G.E. AD910FT Superthrust, 10.9 EER, 9,750 Btu/hr., 115V, $350. Scott, Ext. 4956.

AIR CONDITIONER - Whirlpool, 8,000 Btu, used 1 week, still under warranty, energy efficient, $400 neg. Betty, Ext. 7126.

REFRIGERATOR - Emerson OR 500, 4.2 cu. ft., deluxe freezer, compart., new, $95. Xuan, Ext. 3677.

CHILDRENS LAMP - chandelier, excel. cond.; electric heater; maple twin beds & mattresses; dehumidifier; bed frames. 475-1254 or 475-3366.

DESK - & chair, white, seven drawers, reasonable. Ext. 7958 or 929-6540.

COMFORTER SET - ruffle, shams, sheets, gray & beige w/dots, full size, $50. 281-7844 eves.

FREEZER - Amana, 16 cu. ft., upright, good cond., $75. B. Haug, Ext. 5156 or 581-4436.

BED - twin, w/mattress, boxspring & frame, $35; 14'x11' brown rug w/padding, $70. 475-4394.

EXECUTIVE SECRETARY DESK - walnut, high-back swivel chair, blue leather, excel. cond., $500. Herman, Ext. 7333.

FREEZER - Sears, frost-free, upright, old but good cond., trade for refrigerator. Ann, Ext. 2666 or 283-5376.

Tools, House & Garden

LAWN MOWERS - Wheeler, 3½ h.p., Briggs, $85; Wheeler, $75; Mastercut, $75; more; all 21" cut & rear baggers. Dan, Ext. 4987 or 698-7322.

GAS GRILL - Sunbeam, 2 burners, used one season, $65 or best offer. Donna, Ext. 4103.

WIRE FENCE - heavy gauge, green vinyl, 100'l x 5'h; 100' w/o vinyl coating. 924-0960 after 5 p.m.

GAS GRILLL - Turco, good cond., $30. Steve, Ext. 7862.

TOPSOIL - fine screened, delivered. 696-6011, leave message.

ARC WELDER - Sears Craftsman, 230 amp, Davl range w/helmet & cables. Scott, Ext. 4956.

TOPSOIL - screened, can be delivered, 15 yards minimum for delivery. Bob, 654-4800.

IRIS - tall, bearded, over 20 colors, field grown, $4; Hosta, 10 different varieties, $4. Kim, Ext. 2839.

POOL EQUIPMENT - SS ladder, earth vacuum, hose, head, pole, brush, ¾ h.p. motor pump. E. Raka, Ext. 4727.

PICTURE WINDOW - approx. 4' square, $10; drapery rods, 1 left pull, 2 center pull, pole & ring design. Ann, Ext. 2666 or 283-5376.

Sports, Hobbies & Pets

JET SKI - 1987 Kawasaki, 550cc, w/trailer, less than 30 hrs., mint cond., $2,500. 395-1554 after 7 p.m.

CAMERA - Olympus Infinity, 35mm, new, $90. Jim, Ext. 4584.

EXERCISE UNIT - 4 positions, excel. cond., $50. Ext. 4184 or 929-3347 after 6 p.m.

FISH TANK - 55 gallon, stand, light strip, under ground filter, $40. Scott, Ext. 4956.

CATS - Balanese Javanese, show quality. Ramona, 928-3088 eves & wknds.

MINI PIANO - Hardman Peck, full keyboard, good cond., $650; triple cherry dresser w/mirror, $150; baby crib w/mattress, $40. 472-2394 after 5 p.m.

FISH TANK - 55 gallon, w/stand, all accessories & Magnum filter, like new. 878-0516 after 4:30 p.m.

GRAND PIANO - Knabe, 5'8", walnut, 12 years old, excel. cond., $6,500 or best offer. Ext. 5154 or 744-2373.

FLASH GUNS - Vivitar 283 w/filters, quick charger, $40; Honeywell Strobonor 880 w/filters, battery holder, $35. Irv Meyer, 929-4326.

ROWING MACHINE - Precor, excel. cond., $150. Ext. 2041.

BIKES - Raleigh Gran Prix, 10-speed, 21½", silver, $80; Raleigh Gran Prix, 25½", blue, $100. Karl, Ext. 7977.

DOG CRATE - 27"l x 17"w x 21"h; travel cage for medium size dog. Duke, Ext. 2957.

TANNING BED - 6', adjusts for easy storage, orig. $850, sell for $300. 289-7902.

HEALTH CLUB MEMBERSHIP - Jack LaLanne Olympic, lifetime, good at any location in any state, $500. Tracy, Ext. 3681 or 929-4898.

Audio, Video & Computer

STEREO - Panasonic, double cassette, turntable, amplifier, speakers, asking $180. Wendy, 399-4399.

COLOR PRINTER - Okimate 20, interface for Commodore 64, new, extra ribbons & paper, $90. Chuck, 929-4413.

MODEM - Tandy internal 1200BPS, works w/pulse or tone dialing, $50. 286-0654 after 6 p.m.

NEW TAPES - $5/each; portable radio w/cassette player, $20; Superman the movie, VHS, $15. Kathy, 744-2203.

CB EQUIPMENT - Superstar 360FM, 120 channel, upper & lower sideband, microphone, $150; 7 amp power supply, $50. Patrick, Ext. 4988 or 475-8504.

VIOLINS - ¼, ½, & ¾ sizes, $50 - $70; classical guitar, $60. Ext. 3702 or 751-1042 after 7 p.m.

COLOR TV - G.E., 19", remote control, like new, $150. 289-7902.

COMPUTER - Tandy 1000TX, 20 meg hard disk, 640k ram, color monitor, dot matrix printer, IBM-PC/AT compatible, $1,200. Doug, Ext. 5857.

Miscellaneous

MAPLE SYRUP - from my family's farm in Vermont, grade A, dark amber. Peter, Ext. 7687.

CRIB - baby car seat; bicycles; desks; chairs; lamps; brown velvet living room set, $600 neg. Ext. 3702 or 751-1042 eves.

Free

FREEZER - upright, G.E. 624-3102 eves.

Yard & Garage Sales

MASTIC - May 19 & 20, 4'x15' pool, microwave, dinette set, boy's baby clothes, lots more, 69 Dover Street, 281-1540.

MASTIC - Sat., Sun., May 26-27, 9-4 p.m., treasures of 3 families, 22 Kilroy Drive, 399-3048.

WADING RIVER - May 19 & 20, 8:30-4:30 p.m., misc. household items, 929-4631 or Ext. 7727.

Car Pools

MORICHES - need ride, 7-3:30 p.m. Ext. 3084, 878-0744.

BOHEMIA-OAKDALE-SAYVILLE - need 2 more drivers for car pool, also can meet at Exit 59 LI Expressway. Frank, Ext. 2314.

PLAINVIEW - Exit 43, LIE, 4th driver needed. Elliott, Ext. 2495.

Lost & Found

FOUND - keys in the front parking lot of Bldg. 703. Pam, Ext. 4070.

Real Estate

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

For Rent

BROOKHAVEN HAMLET - 3-bdrm. house, quiet lane, 2 baths, l/r, d/r w/fp, $925/mo. + util. & sec., avail. 6/1. J. Barry, Ext. 7607 or beeper 0830.

CALVERTON - 2-bdrm. townhouse, 2½ baths, w/w, appl., patio, deck, $750. 878-0874 after 5 p.m.

MASTIC BEACH - 2-bdrm. cottage, screened porch, fenced yard, nice neighborhood, $700/mo. + util. 360-3803 eves.

MEDFORD - 1-bdrm. apt., kitchen, l/r, full bath, priv. ent., no pets, $550/mo. pays all, + 1 mo. sec. 282-3082.

MEDFORD - 1-bdrm. apt., priv. bath, priv. ent., microwave, small refrig., no children, no pets, nonsmoker, $100/wk. + sec. 475-7250.

NORTH SHIRLEY - 2½-rm. furn. apt., bdrm., l/r, kit., w/w, priv. ent., 1 person, nonsmoker, no pets, 5 min. from Lab., $500/mo. pays all. 281-8044.

NORTH SHIRLEY - small house,, fully furn., close to Lab., single or couple, reasonable. 212-213-5993.

PATCHOGUE VILLAGE - 1-bdrm. apt., full kit., bath, priv. ent., cable, furn. or unfurn., $600/mo. + sec. Ext. 4087 or 289-7902.

CATSKILLS - 3-bdrm. chalet w/sleep loft, fully furn., near Hunter & Windham Mts., fishing, golfing, hiking, swimming, Music Festival & Catskill Game Farm. Bea or Kay, Ext. 3672 or 4501.

MARTHA'S VINEYARD - 3-4 bdrm. house, convenient to water, between Oak Bluffs and Edgartown, $1,200 per week, July or August. Steve, Ext. 3928.

For Sale

FARMINGVILLE - 1-bdrm. house, cathedral ceilings, carpeting, OHWH, modern kitchen & bath, detached gar., maint. free, rent till buy, ask. $87,900. Chuck, Ext. 5327 or 698-9489 eves.

MANORVILLE - 3-bdrm. Colonial, d/r w/cath. ceiling, skylights, solar panels, barn, fp, w/w, sprinklers, gar., igp, 1¼ acres, cul-de-sac, South Manor School; $171,900. 878-4265.

MASTIC - 3-bdrm. expanded ranch, new Andersens, w/w, gar., + many extras. Ext. 2253.

MATTITUCK - 3-bdrm. house, 1½ baths, fin. bsmt. w/fp, bar, ¾ acre, low taxes, $139,000. 298-8537.

MEDFORD PINES - 2-bdrm. ranch, new kit., all cedar Florida rm. w/skylights, woodstove, shop, solar HW, gar., Andersen windows, 9 miles to Lab., annual fuel bill $300, $125,000. 654-2617.

MIDDLE ISLAND - Coventry Manor, 3-bdrm. townhouse, 2 baths, kit., l/r, d/r, laundry rm., cac, 5 appl., patio, pool, tennis, carpet, ask. $102,000. Rosalie, Ext. 3160 or 289-5704 after 5 p.m.

MIDDLE ISLAND - Lake Pointe, 2 bdrm., cac, all appl., w/d, l/r-d/r area, gas heat, wood deck off master bdrm., pool, tennis, clubhouse, main. fee 85% tax ded., ask. $77,500, neg. Bob, 924-7316.

MIDDLE ISLAND - 1-bdrm. condo, 2 baths, all appl., cac, w/w, priv. location, pond view, low taxes and common charges, $89,500. Ext. 2746 or 345-5476.

PATCHOGUE - near everything, many extras, town water, fenced, $150,000. 758-9835.

RIDGE - 2-bdrm. duplex, 1½ baths, eik, cac, w/w, all appl., 5 min. to Lab, $79,900. Erik, Ext. 2437 or 924-2898.

RIDGE - 3-bdrm. townhouse, 1½ baths, cac, w/w, all appl., upstairs newly carpeted, encl. redwood patio, storage room, low monthly main., 5 min. to Lab, price reduced to $93,000. Mary, 924-4328.

RIDGE - mother/daughter, 4-bdrm. hi-ranch, l/r w/cathedral ceiling, eik, oversized 2-car gar., gas heat, all appl., min. to Lab., $135,000. 744-0345.

SHOREHAM - 3-bdrm. ranch, 2 baths, d/r, l/r, eik, fam. rm., 1-car gar., open plan, good light, very priv. back yard & patio, $179,000 neg. Ext. 5154 or 744-2373.

YAPHANK - 2-bdrm. townhouse, fin. bsmt., cac, gar., ask. $118,500. 444-3921 days or 924-8630 eves.

HOMMASSA, FL - 2½ acres off Rte. 19, west coast, $15,000. 281-5565.

PALM BAY, FL - 2-bdrm. condo near Melbourne, 2 full baths, l/r, d/r, kitchen, w/d, pvt. screened patio, completely furn., heated pool, near beach, malls, ask. $65,000. 698-8514 after 5 p.m.

TAMPA, FL - Paradise Village Mobile Home Park, 1982 Liberty mobile home 14'x56', 2 bdrms., 1 bath, fam. park, all appl., cac & heat, awning & shed, excel. cond. Glenn, 477-8699.

Wanted

LAWN MOWERS - gas engine, old, will buy depending on cond., etc. Dan, Ext. 4987 or 698-7322.

HOUSE TO SIT - free, experienced, reliable, any period after May 15, enjoy peace of mind while on vacation. J. Allentuck, Ext. 2412.

GROCERY RECEIPTS - Finast & King Kullen for BNL food drive, ask others to save them. Send to Carole Kerr, Bldg. 460.

TUBED AUDIO COMPONENTS - working or not, by Marantz, Macintosh, Futterman, Western Electric or Altec. Jim, Ext. 4584.

PEOPLE TO JOIN - non-denominational Christian fellowship group, every Thurs. at noon in the Rec. Bldg. in the apt. area. Pete, Ext. 3297.

BOBCAT - any condition. Tony, 698-9274.

CLAM RAKE - Ann, Ext. 2666 or 283-5376.

HOUSEMATE - to share 3-bdrm. house, Mastic Beach, w/2 other professionals, $400/mo. incl. heat, electric & cable. Jonathan, 395-5221.

LIONEL & AMERICAN FLYER TRAINS - & access., top $ paid. Bruce, 924-4097.

SIGNERS - fluent in American sign language, on call to translate for Gallaudet University students this summer. Don Metz, Ext. 3054.

RIDE FROM ISLIP - for H.S. student during summer for a few weeks, will pay. 581-1629.

BOAT - alum., 12' or 14' w/trailer to fit if possible. 924-6751.

PLASTIC HUB CAPS - 14", four, reasonable. Bob, Ext. 7238.

APARTMENT - small Manhattan apt., co-op or condo, for purchase. John, Ext. 7671 or 765-1299.

HOUSE SITTER - avail. from July to Aug. 15. Xuan, Rm. #21, Ext. 3004, eves.

ELECTRIC GUITAR - to be used in a physics and music sound. Pam Burris, 632-8066 off., or 331-3419 home.

DRUM PROGRAM MACHINE - 399-1868.

YARD WORKER - $5/hr., Ridge, weekends, teenager OK, some lifting and carrying. Susan, Ext. 2168 or 744-4948.

3-BEDROOM HOUSE - Rocky Point or Sound Beach, year-round resident, $800/mo. Betty, 821-2515.

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