



Detail from the "Wedding at Cana" by Paolo Veronese (1528-1588). The Venetian painter portrays himself playing a viola de gamba and Titian holding a bass viol. Renaissance musicians were often depicted in the paintings of the time.

## Stellar Consort Opens The Concert Season

The Stellar Consort will appear with the Long Island Baroque Ensemble in a program of vocal and instrumental music of Monteverdi and his contemporaries, on Friday, September 30, at 8:30 p.m. in Berkner Hall.

The Stellar Consort was organized by two of its present members seven years ago, following their success with similar groups in Europe devoted to the music of one of the great periods of vocal ensemble singing, the Renaissance. They have appeared at the Garden City Cathedral, the Hofstra Playhouse, Sunwood and, most recently, in a highly successful series with the Long Island Baroque Ensemble at the Frick Estate.

The Long Island Baroque Ensemble is a group of instrumentalists from New York City and the local area that has been performing on Long Island for the past ten years. Their instruments are violins, cello, harpsichord and recorders.

The program, "Monteverdi and his *Paisani*," features music of Marcello, Caccini, Frescobaldi, Tartini and Claudio Monteverdi (1567-1643). The origins of opera can be traced directly to Monteverdi, perhaps the greatest composer of the period. His early music was in the strict contrapuntal style of the time, but his later vocal compositions became "modern" with the word achieving parity with the music in

music dramas and madrigals.

Tickets are \$3 for adults, \$2 for students and senior citizens, and \$1 for persons under 18 years of age.

## Int'l Symposium

More than 50 participants are expected at the International Symposium on the Production and Neutralization of Negative Hydrogen Ions and Beams to be held at Brookhaven from September 26 to 30.

The need for such a symposium has steadily gained in importance as the requirements for neutral beam injectors into the future fusion devices are being better defined. Sponsored by Brookhaven and ERDA, the Symposium will determine the present knowledge about the fundamental processes related to the production and neutralization of negative ions and will consider different methods for an efficient and reliable production of negative ion beams as required for future neutral beams lines.

Based on the information obtained and after panel discussions of relevant problems, it is expected that the Symposium will result in suggestions on how to extend the present state-of-the-art.

According to the Symposium Chairman, Krsto Prelec, more than 40 papers will be presented and the proceedings will be published as soon as possible after the conference.

## Visitors From The USSR



Dr. G. Svalov (far right), an electrical engineer from the All Union Research Institute for the Cable Industry at Podolsk, and Dr. S. Gorbachov, cryogenic engineer from Kryogenmash, Moscow, have been visiting with the staff of the Power Transmission Project since September 12. They are here under the auspices of the US-USSR Exchange Committee on Superconducting Power Transmission and have been discussing problems of mutual interest. They also assisted with laboratory experiments involving superconducting cable samples, and participated in an extended run of the large superconducting helium refrigerator at the 5th Avenue site. With them at the site are (left to right) Jack Jensen, Steve Amoretty (BNL's interpreter) and Bob Gibbs. The visiting scientists will return to the USSR on Monday. —photo by Walton

## New Approach To Old Problem

"Saturday's most startling testimony came from Maxwell Small, a fast-talking, chain-smoking engineer from Brookhaven National Laboratory on Long Island. He presides over a radical new approach to sewage treatment developed at Brookhaven over the past five years." So stated the July 21 Congressional Record.

Small went to Vermont to appear before the U.S. Senate Subcommittee on Environmental Pollution. The Subcommittee was meeting there to gather information and opinions in regard to possible changes in the Clean Water Act of 1972.

July 1, 1977 was the deadline set by this federal law for communities to have ceased the heedless pollution of the country's waterways. Local governments across the nation have been struggling with the question of how to do this and, apparently, many of them are still leaning toward the expenditure of large sums of money on conventional treatment plants, originally designed for large cities.

Max Small has been outlining the Brookhaven alternative for some time before citizen's groups, town boards and regulatory agencies. His recent presentation before the Senate Subcommittee impressed the chairman, Senator Robert T. Stafford, and had a palpable effect on the subsequent Senate Bill S1952 to amend the Federal Water Pollution Control Act.

On Wednesday, October 5, Small will make another appearance, this time to deliver the 150th BNL Lecture at 8 p.m. in Berkner Hall, and, of course, his subject will be "Natural Waste Water Treatment Systems."

The two Brookhaven systems which have been operating around the clock every day for the past two years through warm weather and cold, require only land, the heat of the sun and the force of gravity. In his lecture, Small says he plans "to develop how we got where we are, then project the general usefulness of the 'lowlands project' as wastewater renovation for recharge systems in areas such as Suffolk County."

Although many municipal governments are reluctant to try unconventional sewage treatment systems, the voters in many areas do not hesitate in defeating costly proposals for the traditional plants. As Small says in regard to the Brookhaven plan, "all our paychecks will suffer if these systems are ignored."

Max Small majored in philosophy at Bowdoin College and then took a B.S. degree from M.I.T. in naval architecture and marine engineering. He came to Brookhaven in 1947 after several years as a production engineer for a shipbuilding company and as an engineering consultant for zoning and industrial planning for several Massachusetts towns.

He has been involved in the administration and construction of the major facilities



Max Small (right) and Project Engineer John Hennessy go over preliminary plans in 1972 for what was then called the spray irrigation project. In his BNL Lecture Small will discuss the development of this project over the last five years and its potential for use in areas such as Suffolk County.

at BNL. In 1960 he was named Business Manager of the Laboratory. He left Brookhaven in 1961 to manage the redesign, contracting and construction of the 140-foot radio telescope for the National Radio Astronomy Observatory. On the completion of this project he returned to BNL in 1966 as Assistant to the Director for Architectural Planning. Since then he has acted as Manager of Plant Engineering and Planning, Manager of Projects in Waste and Water Management, and since 1972 as Special Projects Manager in DAS.

He has maintained a life-long love of sailing and not so many years ago he sailed a 34-foot sloop with three other persons from the United States to Scotland.

A buffet supper will be served in the Brookhaven Center before the lecture beginning at 6:30 p.m. Reservations should be made in advance by calling Ext. 3541 before 5 p.m. Refreshments will be available in the lobby of Berkner Hall immediately after the lecture.

## It's Scholarship Time

Almost 50 children of Brookhaven employees are currently studying at various colleges throughout the country, as holders of AUI Trustee Scholarships. Once again it is time for high school seniors to start the process that will lead to 12 new scholarship winners in 1978.

Applications for the \$1250 per year scholarships are now available at the Office of Scientific Personnel. As described in the memorandum to all employees due for distribution today, the sons and daughters of Laboratory employees who started work no later than January 1, 1977, of retired employees, or of employees who died when in regular service at Brookhaven, are eligible.

Up to ten scholarships will be awarded on a competitive basis at Brookhaven. In addition, up to three scholarships may be awarded to minority group children of BNL and NRAO employees, one to a student from each institution and the third

may be awarded to an applicant from either laboratory on a competitive basis.

All scholarships are renewable for a total of four years while the student is working towards an associate, baccalaureate, professional or graduate degree, with the proviso that prescribed scholastic standards are maintained.

As in the past, applications will be processed by the Educational Testing Service (ETS) and the winners selected by an independent scholarship committee reporting to them. The deadline for receipt of applications at ETS is November 11, 1977.

Parents may pick up application forms and critical date schedules from the Office of Scientific Personnel, which is located on the second floor of the Administration Building, 40 Brookhaven Ave. Any questions concerning the program should be addressed to the office, Bldg. 460, or by calling Ext. 3338.

# BROOKHAVEN BULLETIN

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for the employees of  
BROOKHAVEN NATIONAL LABORATORY

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## Met Opera Tickets

Initial sale of tickets for the 1977-78 Metropolitan Opera season has been scheduled for Friday, September 30, starting at 12 noon, in the BERA Sales & Services Office in Berkner Hall.

Seats are located in the Family Circle and are priced at \$7.50, including service charge. A listing of seat numbers available for each performance is available in the Sales Office prior to the first day of sale.

An employee may purchase as many pairs of tickets as desired. All sales will be final; no tickets will be accepted for refunds or exchanges after a purchase is made.

### Schedule

**October**  
Tues. 11 Pelleas Et Melisande  
Thurs. 13 Boris Godunov  
Fri. 14 Pelleas Et Melisande  
Sat. 15 Eugene Onegin  
Tues. 18 La Boheme  
Thurs. 20 Eugene Onegin  
Wed. 26 Pelleas Et Melisande  
Sat. 29 La Boheme

**November**  
Tues. 1 Boris Godunov  
Wed. 2 La Boheme  
Thurs. 3 Eugene Onegin  
Tues. 8 Madam Butterfly  
Thurs. 10 La Boheme  
Fri. 11 Madam Butterfly  
Mon. 14 La Boheme  
Tues. 15 La Traviata  
Wed. 16 Rigoletto  
Tues. 22 Rigoletto  
Thurs. 24 La Traviata  
Tues. 29 Peter Grimes

**December**  
Thurs. 1 La Traviata  
Sat. 3 Peter Grimes  
Wed. 7 Madam Butterfly  
Thurs. 13 Madam Butterfly  
Thurs. 15 La Boheme  
Tues. 20 Der Rosenkavalier  
Wed. 21 La Traviata  
Sat. 24 La Traviata  
Mon. 26 Tannhauser  
Tues. 27 La Boheme  
Thurs. 29 Der Rosenkavalier

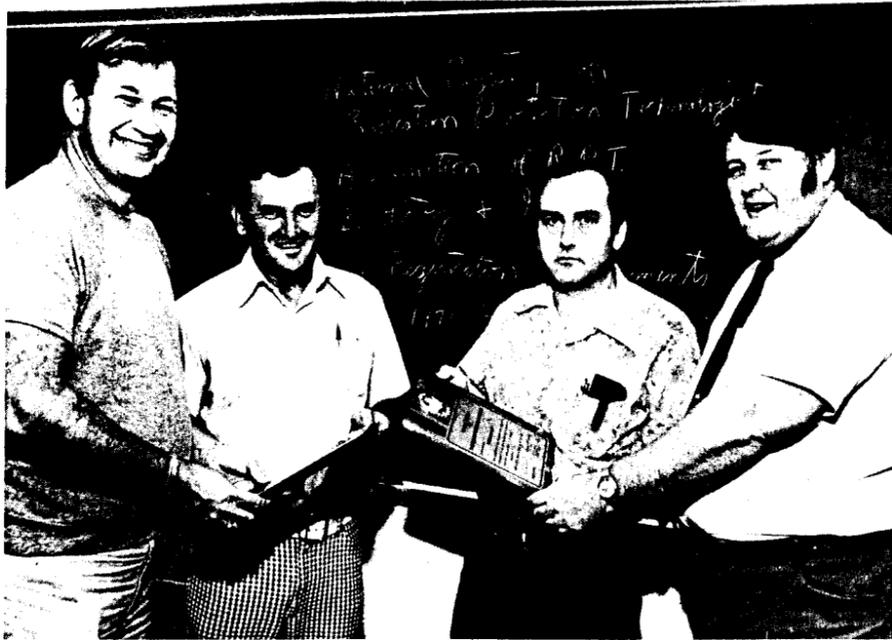
**January**  
Wed. 4 Der Rosenkavalier  
Thurs. 5 Tannhauser  
Sat. 7 Il Trovatore  
Tues. 10 Il Trovatore  
Thurs. 12 Der Rosenkavalier  
Fri. 13 Tannhauser  
Mon. 16 Cavalleria Rusticana/Pagliacci  
Thurs. 19 Cavalleria Rusticana/Pagliacci  
Tues. 24 Cavalleria Rusticana/Pagliacci  
Tues. 31 Thais

**February**  
Sat. 4 Adriana Lecouvreur  
Tues. 7 Adriana Lecouvreur  
Thurs. 9 Thais  
Fri. 10 Boris Godunov  
Tues. 14 Thais  
Sat. 18 Thais  
Mon. 20 Otello  
Wed. 22 Boris Godunov  
Thurs. 23 Thais  
Fri. 24 Otello  
Tues. 28 Boris Godunov

**March**  
Wed. 1 La Favorita  
Thurs. 2 L'Elisir d'Amore  
Tues. 7 La Favorita  
Fri. 10 Don Giovanni  
Mon. 13 L'Elisir d'Amore  
Thurs. 16 Don Giovanni  
Fri. 17 Adriana Lecouvreur  
Sat. 18 Don Giovanni  
Tues. 21 Don Giovanni  
Wed. 22 Adriana Lecouvreur  
Thurs. 23 La Favorita  
Tues. 28 Die Frau ohne Schatten  
Fri. 31 Cavalleria Rusticana/Pagliacci

**April**  
Tues. 4 Tosca  
Wed. 5 Cavalleria Rusticana/Pagliacci  
Thurs. 6 Die Frau ohne Schatten  
Tues. 11 Cavalleria Rusticana/Pagliacci  
Thurs. 13 Tosca

## Radiation Protection Technologists Recognized



Two men from S&EP are now Registered Radiation Protection Technologists and received plaques on Tuesday attesting to this achievement. Division Head Charles Meinhold (far right) presented the plaques on behalf of the National Registry of Radiation Protection Technologists. Receiving the awards were Jim Roessler (second from left) and Rudy Zantopp (second from right). Roessler is a senior technical specialist at the HFBR and Zantopp a technical associate who assists the Physics and Chemistry Departments with safety and health physics matters. According to Art Humm (left) who is responsible for safety and health physics at the HFBR, and chairman of the exam panel of the Registry, only those with at least five years experience in the field and who have successfully completed a four-hour exam can be registered. In the first nationwide exam held last year, approximately 75% of those taking the exam were successful.

## Mountain Club

The Mountain Club had its first fall meeting and planned several activities.

On Friday, September 30, just after work, there will be a beach party at Smith Point Park. Bring your own fire, food and drink. Anyone with questions can call Dolores Krupski, Ext. 2907.

On the weekend of October 1 and 2, Ben Hobbs will be up at the Gunks. Anyone interested in rock climbing or just spending some time in this lovely area should contact Ben at Ext. 2247, Bldg. 475.

A backpacking trip to Slide Mountain in the Catskills is planned for the weekend of October 8 and 9. There are two different trails up - one a 3-miler and one a 6-miler. Jeff Knighton is organizing this one, please contact him (Ext. 2907) by September 30 to arrange car pools, equipment, etc.

The annual Carmens River canoe trip is set for Saturday, October 15. Ray Tessmer is taking on the gargantuan job of getting canoes rented and people paired up. If you're interested in the trip please call Ray (Ext. 2002) by October 3. This is a good trip for beginners.

Ideas for future trips are always welcome. The next Mountain Club meeting will be held Monday, October 17 at 7:30 p.m. in the Rec Hall.

## Boating Course

The Coast Guard Auxiliary will offer a multi-week course covering the fundamentals of safe boat operation, including rules of the road, legal requirements, etc. The first meeting will be at 7:30 p.m. Wednesday, Sept. 28 at Bellport BOCES, 350 Martha Ave.

## Jets Football Tickets

Twenty tickets for each of the six Jets home games in Shea Stadium will go on sale at the BERA Sales & Services Office on Wednesday, September 28, starting at 12 noon.

Tickets are priced at \$9.50, including service charge, and an employee may purchase as many pairs of tickets as desired.

No refunds or exchanges will be made at the Sales Office after a purchase is completed.

### Schedule

October 2	New England Patriots
October 23	Oakland Raiders
November 6	Miami Dolphins
November 13	Seattle Seahawks
November 27	Pittsburgh Steelers
December 11	Buffalo Bills

## Soccer

The BNL soccer enthusiasts will be playing pickup games every Monday evening starting at 5:15 at the BERA ball fields. The start of indoor play will follow the end of Daylight Saving Time.

The BNL squad ended the summer season in 9th place in the Brookhaven Town Summer League.

## Vigorous Vegetables

The Cooking Exchange will present Vigorous Vegetables on September 28, from 12:30 to 2:30 p.m. at the Recreation Building. From hors d'oeuvres to desserts, these recipes will tempt the palate and satisfy the heartiest appetites. Scheduled to be demonstrated are ratatouille and a hearty zucchini bread.

## Islanders Tickets

New York Islanders hockey tickets will go on sale at the BERA Sales & Services Office on Monday, September 26, beginning at 8:00 a.m.

There are four tickets available for each of the home games listed on the schedule below. Seats are located in Promenade Section 321, Row A, seat numbers 1, 2, 3 and 4. The price of each ticket is \$9.50, including service charge.

There will be no restrictions on the number of tickets an employee may purchase; first come, first served. No refunds or exchanges will be accepted at the Sales Office after a purchase is made.

### Schedule

**October**  
**Pre-Season Games**  
Sat. 1 Buffalo  
Tues. 4 Rangers  
Sat. 8 Atlanta  
**Regular Season Games**  
Sat. 15 Boston  
Tues. 18 Los Angeles  
Sat. 22 Rangers  
Sat. 29 Buffalo

**November**  
Tues. 1 Atlanta  
Thurs. 10 Montreal  
Sat. 12 Philadelphia  
Tues. 15 Chicago  
Sat. 19 Vancouver  
Tues. 22 Colorado

**December**  
Tues. 6 Minnesota  
Sat. 10 Detroit  
Tues. 13 Chicago  
Sat. 17 Boston  
Tues. 13 Chicago  
Sat. 17 Boston  
Tues. 20 Colorado  
Thurs. 22 St. Louis  
Sat. 31 Montreal

**January**  
Tues. 3 Vancouver  
Sat. 7 Cleveland  
Tues. 10 Colorado  
Sat. 21 Philadelphia  
Thurs. 26 Toronto  
Sat. 28 Rangers

**February**  
Sat. 4 Washington  
Tues. 7 Minnesota  
Sat. 11 Detroit  
Tues. 14 Los Angeles  
Sat. 18 Atlanta  
Sat. 25 Chicago  
Tues. 28 Toronto

**March**  
Sat. 4 Pittsburgh  
Tues. 7 Vancouver  
Sat. 11 Buffalo  
Tues. 14 St. Louis  
Sat. 18 Atlanta  
Sat. 25 Cleveland

**April**  
Sat. 1 Washington  
Tues. 4 Philadelphia  
Sat. 8 Rangers

## Bowling

Bowling season is here again with lots of enthusiasm and great expectations. Listed below are the league secretaries.

Pink League	Colleen Holland
Black & Blue League	William Sells
Green League	Danny Stelmaschuk
Red League	Charlie Bohnenblusch
Purple & White League	Caryl Mac Dougall

### Pink League

Most got off to a slow start after the long hot summer. The Lickety Splits and Gutter Getters tied for first after the first week of bowling. K. Van Noy bowled a 184 and Colleen Holland converted the 6-7-10.

### Red League

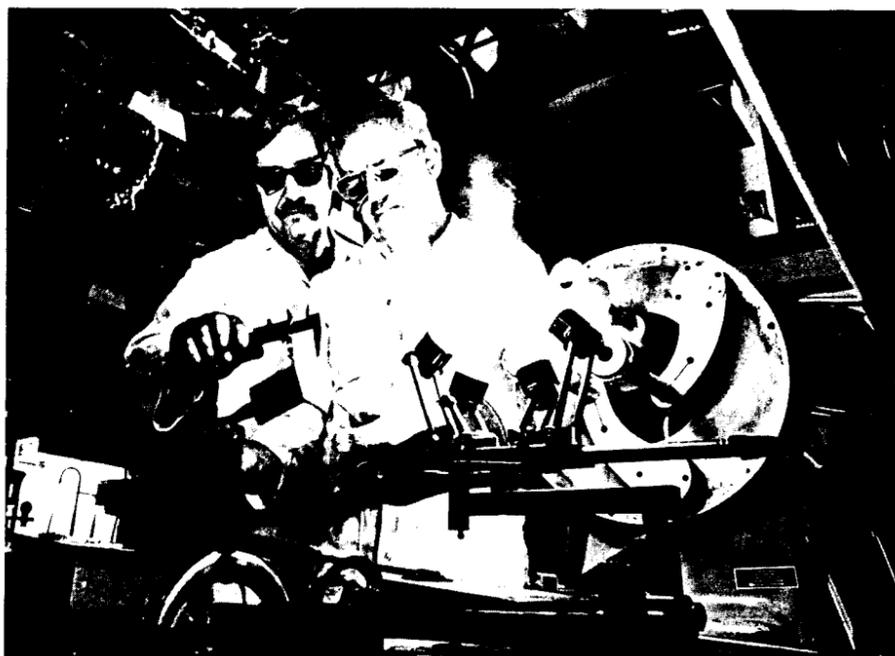
The season started off well for the Cosmos. With excellent team bowling (3043 pins and a 1069 game) they took all 11 from the Freon Loaders. C. Neuls had a 211 and N. Fewell had a great series (649 gross pins for the night). The 76'ers took 8 from the Sandbaggers in a close match. J. Scesny, with his bionic arm back in shape, bowled a 214 and C. Bohnenblusch a 201. The Anachems took 8 from the Old Timers, with R. Adams and R. Wilson each having a nice series. In the remaining contest, the Bubble Boys outpointed the Designers 6-5. A. Pinelli, with a 209 game, averaged 183 for the night. W. Kollmer bowled a 201.

### Purple & White League

Our first night started off with a bang, with James Petro bowling a 210, Roger Gileta 209, and Gene Hassell 203. High series was bowled by Roger Gileta with a 565 and Caryl Mac Dougall 491. High games were James Petro 210, and Gail Thompson 179. The only team to win all points was the Alley-Oops.



150 YEARS OF SERVICE - Members of the Photography and Graphic Arts Division got together recently to eat some cake and celebrate their 30 year anniversaries at BNL. Left to right: Paul Simack, Bob Walton, Marshall Bull, Bob Brown and Harry Maile.



The Chemistry Department's glass blowing laboratory will be the featured attraction on the public tour this Saturday, September 24. Brookhaven's glass blowers will give examples of the skill and artistry required in fashioning a large array of scientific equipment. In their daily work they make everything from tiny glass tubes to large glass dewars containing intricate masses of tubing. At left Paul Roman and Karl Walther, and at right Douglas Hof and Irving Meyer shape a piece of glass using a lathe. On the

tour, Walther and Roman will demonstrate the techniques, and Meyer and Hof will talk on the history and background of glass-blowing and show various examples of glasswork. Tour hours are 10 a.m. to 4 p.m. on Saturday and Sunday. However, the glass-blowing demonstration will be shown only on Saturday. This additional Sunday tour was scheduled because of the large public interest in the Laboratory.

**Popular Demonstration  
On View Saturday**



**CREF Values**

1976			
January	\$40.31	February	\$39.76
March	40.75	April	40.10
May	39.69	June	41.60
July	41.21	August	40.94
September	41.59	October	40.62
November	40.40	December	42.66

1977			
January	\$40.27	February	\$39.30
March	38.73	April	38.73
May	37.96	June	39.91
July	39.91		

August \$38.56

**WSU Position Open**

Applications and nominations are sought by November 1, 1977 for the position of Dean of the Division of Sciences at Washington State University. Contact should be made with Professor Calvin T. Long, Chairman, Search Committee, Department of Pure and Applied Mathematics, WSU, Pullman, WA 99164. Further information is available from the Office of Scientific Personnel, Ext. 3338.

**New System Installed  
In Word Processing**

A Daconics Visual Type System arrived at BNL last Friday. Since then, the system has been installed in the Word Processing Center in Bldg. 197B and personnel of the Center have embarked on two weeks of intensive operator training.

Daconics will perform the shared logic word processing/text editing function in a new automated "Publishing System." As such it will input from computers, an Optical Character Recognition device, or input terminals, and output to a phototypesetter as well as typewriters, and high speed printers. It is designed for organizations like the Laboratory that create a high volume of typed and printed material. It is an effective way to generate many documents in a variety of formats and to edit large documents that require frequent revision.

The features of the System will be explored in a future issue of the *Bulletin*; gas plasma display screens, automatic page numbering, block identification, automatic decimal alignment and hyphenation, arithmetic capability, footnoting and optical character recognition (OCR) will be explained in detail.

In the meantime, operator training at the Center will continue for another week in preparation for live demonstrations of the System which will probably be given the first or second week of October. Departments/Divisions/Buildings will be the basis of these group demonstrations and everyone who has a desire to get involved will be invited.

If you have any questions about Daconics or haven't received an invitation by the first of October, please call Robert Brown or William Bottinger on Ext. 2919 or 2955 respectively.

**Arrivals & Departures**

**Arrivals**

- Ora A. Colson.....Safety & Env. Prot.
- Joann M. Conte.....Medical
- Frederica Darema-Rogers.....Physics
- Joseph N. Fields, III.....Physics
- Rae Greenberg.....Physics
- Audrey M. Harson.....Tech Information
- Clarence A. Hicks.....Plant Engrg.
- Neil Katz.....Applied Science
- Masamitsu Kosaki.....Accelerator
- Christopher J. Lister.....Physics
- Thomas J. McMahon.....Applied Science
- Christopher K. Mirabelli.....Biology
- S. David Smith.....Physics

**Departures**

- Mark K. Goldstein.....Applied Science
- Thomas P. Hatsis.....Ph. & Gr. Arts
- Yutaka Ishii.....Medical

**BAFFA Chorus**

The BAFFA Chorus is in need of good men's voices. The chorus will be singing Verdi and Wagner. If you are interested, please call Glenn Price, Ext. 3336, or Ed Beardsworth, Ext. 2032.

**New York City Trip**

The Hospitality Committee is planning a group railroad trip to the city Wednesday, October 5, Departure will be at 8:32 a.m. from the Patchogue LIRR station. Roundtrip fare for adults is \$2.45, children under six years ride free.

Reserve a ticket by sending your fare through the U.S. mail to P.O. Box 322, Upton, New York 11973, no later than Friday, September 30. Make checks payable to "Brookhaven National Laboratory." Your tickets will be given to you at the train station. Refunds will be made only if cancellations are received at least two days prior to the trip.

**Cafeteria Menu**

Week Ending September 30, 1977

<b>Monday, September 26</b>	
Tomato bouillon	
Franks & beans	1.10
Barbecued fresh ham & 1 veg.	1.35
Hot deli - pastrami	
<b>Tuesday, September 27</b>	
Cream of chicken soup	
Chopped steak & 1 veg.	1.10
Chinese pepper steak on rice	1.30
Hot deli - knockwurst	
<b>Wednesday, September 28</b>	
Puree of mongol	
Beef liver, onions & 1 veg.	1.15
Hot deli - Italian sausage & peppers	
<b>Special</b>	
Fried shrimp, fr.fr., cole slaw	
Small soda or tea	\$1.87 plus tax
<b>Thursday, September 29</b>	
Split pea soup	
Chicken croquettes & 1 veg.	1.15
Short ribs of beef & 1 veg.	1.30
Hot deli - roast beef	
<b>Friday, September 30</b>	
Clam & celery soup	
Pot roast & 1 veg.	1.30
Broiled sea trout & 1 veg.	1.15
Hot deli - smoked tongue	

**Selected Reading**

- Am. Sci. 65, July-August 1977
- The frontiers and limits of science. V.F. Weisskopf. 405-11
- Bull. At. Sci. 33, September 1977
- The Oppenheimer case: A study in the abuse of law. H.P. Green. 12-16+
- The gang of four and Chinese science. J. Gardner. 24-30
- Conditions of success of international enterprises in science and technology. L. Kowarski. 44-8
- Nat. Rev. 29, September 16, 1977
- The case for the breeder reactor. B.L. Cohen. 1004-5+
- New Sci. 75, August 25, 1977
- Hiroshima and Nagasaki: The survivors. F. Barnaby. 472-5
- New Sci. 75, September 1, 1977
- A dip in the energy store. J. Dawes. 520-2
- Sci. Am. 237, September 1977
- Microelectronics and the personal computer. A.C. Kay. 230+
- Sci. Gov. Rpt. 7, September 1, 1977
- OSTP reorganization assailed in Congress. D.S. Greenberg, ed. 1-3

**A Job Well Done**

John Millener, a theoretical physicist at Brookhaven and a cricket player of some repute, was invited to play in an international cricket match on Saturday, September 3 at the Giants Stadium. This match was organized by the Long Island Cricket League in an effort to promote the game in the USA. The opposing team consisted of famous West Indian cricketers of the present, or recent past, nearly all household names throughout the cricketing world.

Millener plays primarily as bowler. Bowling may be likened to pitching in baseball. A fast bowler takes a long run, winds his arm, bends his back to give force to the ball and release it with a straight arm. The ball, which is as hard as a baseball, can travel up to 90 mph.

In the American innings of 194 runs, John scored 19 but his major contribution was to take three West Indian wickets in his first spell of bowling. The West Indians were then in the difficult position of having lost half their batsmen for only 55 runs making an unexpected victory for the Americans a possibility. In his second spell, John took another wicket before the West Indians were all out for 170 runs to complete the upset.

An admittedly biased spectator from BNL noted that the announcer repeatedly complimented Millener's skill: "We have just witnessed the very accurate bowling of John Millener." The crowd perked up when Millener came in to bowl and after his masterful bowling performance, he was asked to lead the American team from the field.

Millener began playing cricket as a schoolboy in New Zealand. In high school he played on the First XI, the equivalent of the first string in a football team. At the same time he played for the Auckland area

team in both the under 20 and under 23 age categories and soon after played for the full Auckland representative team in first class cricket.

He attended the University of Auckland where he majored in physics and mathematics and received both his bachelor and master of science degrees. In addition to playing cricket he also participated in soccer, basketball, golf, tennis and squash.

As a Rhodes Scholar in nuclear physics at Oxford, Millener found playing cricket and pursuing a doctorate extremely time consuming. At Oxford, team members are required to play from 10 in the morning until 7 in the evening, six days a week for two full months of the year. The cricket schedule plus the work required to complete a doctorate in nuclear physics was too taxing. Millener played for one year and a second and then stopped playing on a regular basis.

For his participation in two Oxford-Cambridge games, Millener received his "blue," an Oxford blue blazer with insignia. The Oxford-Cambridge game is the most critical of the year, because of the traditional rivalry between the two schools. This annual match is played at the Lords, the most prestigious cricket field in the world.

In 1970 Millener "retired" from play and continued at Oxford doing postdoctoral research. He came to work with the Nuclear Theory Group at Brookhaven in March 1976 and when the BICC (Brookhaven International Cricket Club) was formed during the spring of that year, he took up the bat and ball once again.

Although Millener considers himself "retired," he is able to play a skilled, professional game when called upon. It seems this gentleman has not lost his touch.



This is an illustration of a cricket game during the late 19th century at the Lords, a famous cricket field in London where John Millener played. It is reputed to show King Edward VII (then Prince of Wales) and his wife (the lady with the parasol). The story goes that he is looking at Lillie Langtry, a famous actress of the day (at the far left) in whom he had more than a passing interest.

## Classified Advertisements

### Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position, with consideration given to candidates in the following order of priority: (1) present employees within the department, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside applicants.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all nonscientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment, as indicated below. Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Personnel Placement Supervisor, Ext. 2874 or 2882.

**LABORATORY RECRUITMENT:** Opportunity for present Laboratory employees.

323. DEVELOPMENT ENGINEER - BS or equivalent in electronics with background in the design, construction and testing of apparatus for particle accelerators. Accelerator Department.

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

324. MECHANICAL DESIGNER - Requires a thorough knowledge of engineering fundamentals and standard design formulae covering such subjects as machine design, strength of materials and fluid flow. Background in the design of electromechanical instruments and high vacuum systems is desirable. Tandem Van de Graaff, Physics Department.

325. DATA SERVICES ASSISTANT - Requires data processing background using CDC product software in library, data base and documentation file maintenance. Applied Mathematics Department.

326. RESEARCH SERVICES ASSISTANT - Glass washing. Biology Department.

327. OFFICE SERVICES ASSISTANT - AAS or equivalent with good skills and knowledge of office procedures. Affirmative Action Office, Directors Office.

328. OFFICE SERVICES ASSISTANT - Requires library background, preferably in circulation. Technical Information Division.

329. OFFICE SERVICES ASSISTANT - AAS or equivalent with substantial background dealing with telephone billings, services and customer service. Staff Services Division.

330. PATROL OFFICER - Rotating shifts. Safety & Environmental Protection Division.

331. OFFICE SERVICES ASSISTANT - Temporary position. Instrumentation Division.

### Autos & Auto Supplies

VW WHEELS - W/tires, not much tread, 5 hole 15". \$6. Ext. 4676.

FENDER MOUNT MIRRORS - For r/v used, \$11 pr; truck tire, new recap, 7.0 x 17, 8 ply, \$8. 727-1617.

KNOBBY MOTORCYCLE TIRES - 4.0 x 18, 4.5 x 18, 3.0 x 21. \$10 ea. 653-5989.

74 DODGE VAN - Swivel seats, roof rack, std trans, 6 cyl, new radials, new battery. \$3200. 286-2575.

65 DODGE CORONET 500 - Reliable, trans, needs tires. \$225. Ext. 3791, 928-5124 eves.

67 AMER MOTORS SEDAN - 6 cyl, auto, ps, good gas mileage. Best offer. 289-8182.

CAP - Winnebago, paneled, insulated, fits all 8' jeep pickups '63-77. \$175. Mitch, Ext. 3084.

68 MERCURY - Montclair, 428 engine, runs ok, almost new tires, body shot, sold for parts. \$150. Josh Kopp, Ext. 3778.

TIRES - Used & recaps, most sizes, extra rims. Ken, 289-8212 eves.

68 HARLEY DAVIDSON - 1200 cc, completely customized, custom paint, excel cond, must see. \$2650. Rick, 727-7304.

74 HARLEY DAVIDSON - 175 cc, road & trail, low mileage, excel cond. \$400. Rick, 727-7304.

72 YAHAMA - 650 cc custom springer, hard tail, many chrome extras, good cond, needs minor work. \$795. Rick, 727-7304.

73 FORD LTD - Ps/pb/ac, excel cond. \$1000. Tom, 325-1033.

70 FAIRLANE 500 WAGON - Ps/pb/ac, new brakes, tires, muffler, battery. \$850. Tom, 325-1033.

67 PICKUP - 1/2 ton International, stick, hi mi, many new parts, some rust, good trans. Rich, Ext. 2982, 363-6845.

TAPE DECK - Sonic cassette, new, has fast forward. \$30. 588-8492.

75 MERC MARQUIS - Excel cond, ps/pb/ac, am/fm stereo, white w/vinyl top. Nick, Ext. 4810, 588-6417.

69 CHEVY IMPALA - 2 dr, full power, ac. 475-3491.

68 CAMARO SS - New motor, clutch, brakes, exhaust & paint, excel body. \$1200. 289-5544 after 5.

71 CAPRI - 4 spd, low mi, am/fm radio, radials. Kim, Ext. 2468, 475-6728.

77 HONDA 400 - Super sport, excel cond, low mi, many extras. \$1500. Donna, Ext. 3604.

70 FORD - Sm V8, 77,000 mi, ps, good. \$610. Ext. 3130 days & eves, Ext. 3998 days.

75 AMC PACER - Std, am/fm, bucket seats, excel cond. Asking \$1900. Ext. 3653, 878-4664 after 5.

USED TIRES, RIMS, REPAIRS - Low prices, free installation & testing. Fred Usack, Ext. 4597 lunch only, 475-4935 eves.

69 FORD GALAXIE - New front tires & water pump, ac, snow tires, running good. \$500. Jean, Ext. 3817, 345-3096 eves.

72 FORD PINTO - Std trans, 58,000 mi, excel cond, new tires & mufflers. Ext. 3583, 928-8398 after 6.

RIMS - White 8 x 15 for Chevy Blazer. \$10 each; 4 new rally wheel covers. \$10. 821-1148.

MOUNTING BRACKET - For spare tire, Chevy Blazer, \$5. 821-1148.

PEUGEOT DIESEL - Drive in luxury & style, sunroof, am/fm, 38 mpg. \$8500 new. Barbara, 924-4162.

69 VW BUG - Clean, radio, 2 snows, 2 brand new Pirellis front. \$750. Ext. 4275.

74 BUICK ELECTRA - 225, ps/pb/pw/ac/p seats, tinted windows, am/fm stereo, steel belted radials, excel cond. \$2700. 473-6386.

73 PLYMOUTH - 4 dr Fury 1, good running cond. \$1200 or best offer. 924-7044.

68 OLDS 98 - 4 dr, ps/pb, ac, good cond. \$500. George, 475-7193.

68 VW SQUAREBACK - Needs some work, otherwise good cond. \$450. Ext. 3128, 928-7344.

70 FORD FAIRLANE 500 - Excel running cond. \$475. Helen Kelly, 345-3366.

68 CHEVY NOVA - Body fair, mech fair. \$190. Steve, Ext. 2019.

74 NOVA - Needs valve job, lg dent in front fender. \$1000. Ellen, Ext. 3725 after 4.

77 ASPEN WAGON - Ac/at/ps. 363-6734 after 5.

MOTORCYCLE HELMET - Bell super mag, size 7, new & in box. Jack, Ext. 2253.

67 BUICK LE SABRE - Good trans. \$100. Charlie, Ext. 4526.

69 FAIRLANE WAGON - 351 eng 8, auto, ps/pw, excel running cond, snows on rims. \$600. 472-0558.

75 PORSCHE 914 - 1.8 lt, 5 spd, excel cond. Bob, 744-8980, 473-5522.

76 SUZUKI - RM 250, motorcross, never raced, very good cond, a runner. \$800. Mike, 473-2608.

SPEED CONTROL - Elec semi-automatic, fits any car or truck, \$5; set steel belted radial snows, E70-14, \$40. John, Ext. 4680.

73 BUICK CENTURY - Ps/pb/ac, 4 dr, 37,000 mi. \$2500. Dick, Ext. 4313, 929-4551.

68 FORD FALCON WAGON - 6 cyl, new brakes (front), new muffler & tail pipe, good cond. \$500. Ext. 3499, 929-6156.

68 FORD LTD - 302 V8, 3 spd automatic, 89,500 mi, 2nd owner, excel cond. \$500. Walter, Ext. 3358, 732-1913.

73 OLDS VISTA CRUISER WAGON - Auto, ac, ps/pb, am/fm, s/b radials, 62,000 mi, excel cond. \$2400 firm. 751-6946.

72 FORD ECONOLINE 300 - 6 cyl, equipped for camping, insulated. \$2500. Kathy, 473-2197.

70 TORINO GT - Convertible, high mi, 351 cu in eng, std trans. C. Nielson, Ext. 3954.

67 FORD WAGON - Will sell for parts. Mike, Ext. 4851.

2 TIRES - Michelin, HR165 x 13 used under 2000 mi & 1 new Gordini wheel. Make offer. 821-0303 eves.

69 CORVETTE - 48,000 mi, 2 tops, side exhaust, 4 spd, 427 eng, excel cond. 298-8537.

2 TIRES - Atlas J78-15, whitewall, excel cond. \$40. Ext. 4701, ARI-2877.

66 PONTIAC LEMANS - Good cond. \$275. H. Rhodus, Ext. 3284, 924-3522.

68 BUICK LE SABRE - Hi mi, good running cond, good tires. H. Rhodus, Ext. 3284, 924-3522.

66 BUICK ENGINE - 300 V8 & auto trans. H. Rhodus, Ext. 3284, 924-3522.

68 FORD WAGON - V8, 390 eng, very good running cond, new trans, ac, radio. \$550. Ext. 4762.

65 PONTIAC - 2 dr, 6 cyl, good tires, new battery, runs well, needs new front seat. \$150. John McCafferty, 475-1008.

13" RIMS - For Vega w/hubcaps. \$10. Ext. 2032, 286-3455.

68 OLDS - 400 cu in eng, 9 pass, only 45,000 mi, good cond, priced to sell. 281-6468.

70 HORNET - 6 cyl automatic, 2 dr, very good cond, 22 mpg. \$575. Richie, Ext. 4254, 734-7342.

71 PLYMOUTH DUSTER - Ps/ac, auto, 8 cyl. 981-0664.

70 OLDS 98 - 4 dr, 60,000 mi, excel cond. 627-4452.

2 TIRES - Goodyear power streak 78 w/w, H78-15, never used. \$55. G. Woodson, Ext. 4033.

75 FORD PICKUP - F100, low mi, excel cond, am/fm 8-track stereo, insulated cap, 6 cyl. \$3000. 727-5697.

73 PLY ROAD RUNNER 318 - 40,000 mi, automatic, gold/brown w/white racing stripe, excel cond. \$2500. Linda, Ext. 3199, 727-7304.

73 PLY BARRACUDA 318 - 28,000 mi, automatic, ps/pb. \$3000. Greg, 727-6351 after 5.

70 CHEVY MALIBU - 4 dr, ps/pb/ac, must sell. Asking 700. Ext. 3663.

MOTORCYCLE - Kawasaki 350, 8000 mi, new battery, chain, sprocket, quartz light, custom seat, air horns, roll & sissy bars. \$700. 289-6700 days.

70 GREMLIN - Deluxe model, lg 6 cyl, lugg carrier, new brakes, clutch, alternator, exhaust sys. \$850. George Meinken, Ext. 4460/4453.

76 PICKUP - GMC, 3/4 ton, 4 wheel dr, automatic, ps/pb/ac, heavy duty, 10,600 mi. Ext. 3085

68 PONTIAC - Custom S, 6 cyl, 2 dr, sport coupe, auto, radio, ps/ac, 2 new tires, w/snows on rims, extras, good cond, clean. \$575. Ext. 4459, 463-6118 eves.

76 FORD VAN - V8, auto, ps/ac, am/fm cassette, capt chairs, finished int, roof vent, more. 399-0836.

### Boats & Marine Supplies

33' ULRICHSON - Sport Fisherman, twin screw, F/B, D/F. 475-3491.

MUSHROOM ANCHOR - 75 lbs, with chain. Richard, Ext. 4396.

10 hp ENGINE - Gold Jubilee 1959 model gas tank. \$125. Ext. 2028, 473-6063.

ROW BOAT - Wood, fiberglass bottom 13', home-made trailer. \$75. Ext. 2028, 473-6063.

17' COBIA - 1971, 55 hp Chrysler, ob, full elec, 1977 E-Z roll trailer, all C.G. equip, many extras. \$2700. 281-3122 after 6:30.

19' STAINLESS DAY SAILOR - With trailer. \$450. Ext. 3922.

ICEBOAT - Shingle type w/sails, needs mast & boom. Asking \$65. Ext. 4069.

14' ALUMINUM BOAT - Trailer, 7 hp motor, accessories, excel cond. 698-6376.

SAILBOAT - 18' Cape Cod, recently refastened in water, completely equipped. \$450. Ralph, Ext. 2485.

19' MFG - 1973, 115 hp Evinrude, full canvas, tach, 4 tanks, new seats. \$2000. 473-3296.

31' BALTZER - Ideal family or fishing boat, with camper back, sleeps 4, twin 125 Chrysler engines with 60/hrs, head, galley, dinette. \$2500. 331-1718.

19 1/2 LARSON - 1968, 120 hp, Mercruiser, new stern drive, cuddy cabin, navy top, extras, 1976 Shoreline trailer. \$3250. 727-5168 after 6.

18' ISLANDER SKIFF - 4 cyl eng, seats 8, 20 gal tank, lights, new paint, battery, marine head. \$250 firm. Tom, 325-1033.

### Miscellaneous

YARD SALE - Dayton Ave, Manorville, Sept 24 & 25, all kinds of goodies.

FURNITURE - Lady's 2 drw vanity, \$10; gilt framed mirror, \$7; 3 prs red 90" insul drapes, \$20. Kathi, Ext. 2907, 589-8410 eves.

LEROY LETTERING SET - Templates, scribe, lead & ink. \$15. Kathi, Ext. 2907, 589-8410 eves.

SHOWER CURTAIN - Red, wet-look, \$3; woman's handmade black wool full length cape, red satin lining & hood, medium, \$20. Kathi, Ext. 2907, 589-8410.

CHAIRS - 2 high-backed caned arm chairs, off white, \$50 pr; med club chair, gold, \$35; all excel cond. Jack, Ext. 2907.

COCKTAIL TABLE - Mahogany, good cond, glass top, Provincial. \$10. 727-3608.

TV - 19" b&w, \$75; 8 servings stoneware, \$10; Kodak Instamatic camera, \$10. Sara, 281-2095.

10" TABLE 1/2 AW - Sears, cost over \$300, asking \$150. 736-2728 after 5; Ext. 3284 before 4:30. Joe Bush.

VAC CLEANER - Canister w/attach, Macys, like new. \$35. Ext. 3284 after 4:30. Joe Bush.

TROMBONE - Good for student. 751-5893.

GOLF CLUBS - One complete set of mens, Pings - one complete set of womens, Titlests. B. Vogt, Ext. 4241, 584-5198 after 6.

FRANKLIN STOVE - Takes 20" wood, all cast iron, loaded with brass, 2 yrs old, ex cond. \$150 firm. Jo Candiano, Ext. 4144.

FULL SIZE MATTRESS - & box spring, \$75; 8000 btu air cond, \$70; kit table, \$5. Sara, 281-2095.

WHIRLPOOL - Washer & dryer, \$400; lamp, \$2; Entertainment center, \$5. Sara, 281-2095.

BICYCLE - Girls 3 spd, 26" Raleigh, basket, hand brakes, candy apple red. \$45. Jack, Ext. 3075 or 473-7049.

70 YELLOWSTONE SLIDE-IN CAMPER - Refrig, oven, stove, sleeps 6, 11 1/2 ft, ex cond. 732-1913.

AIR-O-SPACE HEATER - Recovers lost heat from chimney, also 25' of duct work. Orig cost, \$145. Sale price, \$75. Ken, Ext. 3574.

DINING RM SET - Pedestal table, 1 leaf, 4 chairs, china closet, walnut, ex cond. \$200. 581-5733.

GE TRASH COMPACTOR - Like new, free stdg or built in, Harvest gold, key lock. \$60 or best offer. Hill, Ext. 3154.

CAR RADIO - New Audiovox deluxe, am pushbutton, fits most GM model cars. \$20. Ext. 4532.

AIR COND - Philco, 5 yrs old, 8700 btu, 11.4 amps, works good. \$95. Ext. 4532.

MINI-BIKE - Ex cond. \$100. 286-0761.

PEDESTAL TABLE - Pine bottom w/round formica top, ex cond, make offer. 281-8274.

RADIO - Grundig Majestic, hi-fi, oldie but goodie, plays. \$25. Ext. 4532.

SOFA BED - Foam, rolls out to sleep 2 comfortably. \$100. Ext. 4532.

LAWN MOWER - 22" cut, works gd. \$30. Ext. 4532.

WELL PUMP - For shallow well. \$40. Ext. 4532.

FIREPLACE SCREENS - Brass trim, black draw screen, 78" wide, 31 1/4" high, used 2 mos, like new. \$30. 289-6490.

POST HOLE DIGGER - Twist type, like new, easy to use. \$18. 289-6490.

TOASTMASTER - Auto broiler, auto thermostat, adjustable. \$18. 289-6490.

76 SLIDE IN - Truck camper, 11 1/2', sleeps 6, shower, heater, stove. 744-9085.

TV STAND - Brass portable, fits up to 18" width on wheels, new. \$7. 289-6490.

PARTS - For a 1963 Rambler Classic. Pat, 281-1364, Ext. 3376.

AZALEAS - & Rhododendrons, all sizes. Pat, 281-1364.

TWO TICKETS - Marriage of Figaro, NYC Opera, Sat mat, Oct 15, dress circle, 3rd row center. \$9.50 ea. Ext. 4472, 941-9115.

BICYCLE - Men's 3 spd, Schwinn 26", excel cond. Bill, Ext. 4774.

CLARINET - Student wood Buescher, excel cond. Bill, Ext. 4774.

TV - Motorola 21" B&W, needs some work. Free. Bill, Ext. 4774.

DINING RM - 8 piece contmp, excel cond. 744-2821.

BOOTS - Riding, handmade, leather, girl's size 3 1/2. \$15. Ext. 3600 or 289-8182.

KENWOOD RECEIVER - KR 4200, 19 watts per channel, excel cond. \$175 but will haggle. Ext. 2017.

COUCH - 8' blue velvet w/rounded end section, very gd cond. \$150; coffee table, Spanish style w/hidden drawer, \$50. 472-0900.

REFRIG - W/sep freezer comp, gd cond, \$50; kit table w/leaf & 6 hi-back chairs. Tom, Ext. 4597.

CB RADIO - Cobra 139 XLR, sideband, 40 channel base, 1 1/2 mos old w/Turner desk mike. \$350. 929-4450.

TRUMPET - King excel cond, \$110; darkroom, complete, \$85. John, 929-4450.

### Real Estate

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

### For Sale

ROCKY POINT - The Terraces, 3 bedrm, 2 story, fam rm w/fp, 2 baths, bsmt, w/w carp, much more. \$63,000. 744-9343.

BELLPORT VILLAGE - 1/2 acre, 3 bedrm, 2 baths, garage, screened porch, greenhouse, many extras. 286-2724.

N SHIRLEY - 2 bedrm ranch, fp, treed 1/2 acre w/6' fence, adj Southaven Pk. June, Ext. 2970, 399-0836 after 5.

PORT JEFF - Harbor Hills, 3 bedrm, study/bedrm, 2 1/2 baths, bsmt, fp, 1/2 treed acre, beach rights, high 50's. Ext. 2028, 473-6063.

S SHIRLEY - Near water, 3 bedrm, bsmt, storms, landscaped, 50 x 285. \$29,500. 281-5328.

RIVERHEAD - 4 bedrm, 1 1/2 story cape, 2 baths, bsmt, 2-car garage. \$45,000. 727-3249.

YAPHANK - Lakefront acre, 3 bedrm ranch, brick/mahogany, deck, many extras. \$69,000. 924-3178.

SHIRLEY - Smith Point area, 2 bedrm, nr beach, artesian well, full bsmt. \$27,500. 924-7044.

8 RM HIGH RANCH - 1/2 fenced acre, treed, garage, ac, 1 1/2 baths, deck, fp, w/w carp. Asking \$45,000. 331-1773.

TOWNHOUSE - 3 bedrm, w/w carp, cent ac, all appl, 5 min to Lab. 924-4070.

MASTIC BEACH - 3 bedrm ranch, 1 1/2 baths, 100 x 100