

Bubble Chamber Happenings

"Neutrinos, Charm and Sex" will be the title of the 136th BNL Lecture presented by Robert B. Palmer, Physics Department, May 19 at 8 p.m. in Berkner Hall.

Palmer started bubble chamber research early in his career. With another student, he built a hydrogen bubble chamber four inches in diameter, proposed and ran an experiment, built a film measuring machine, scanned and measured the film, analyzed the result and published.

These experiences prepared him for a career which has ranged from engineering design to theoretical physics. He has worked on bubble chambers and counter experiments and written papers on topics as far out as the acceleration of particles by laser beams and quark parton theory.

After finishing his thesis work at Imperial College in London, Palmer came directly to Brookhaven in 1960 to work under Ralph Shutt. He shared an office with Nick Samios and the teamwork between the two has continued almost unbroken to the present. His lecture will report on work done with Samios and others.

In 1964 Palmer was a participant in the experiment, headed by Samios, that led to the discovery of the Omega Minus particle. Shortly after this discovery, they became interested in neutrinos. The first neutrino experiment, using counters, has just been successfully run at Brookhaven and a conference on weak interactions was held. The two physicists became convinced that a



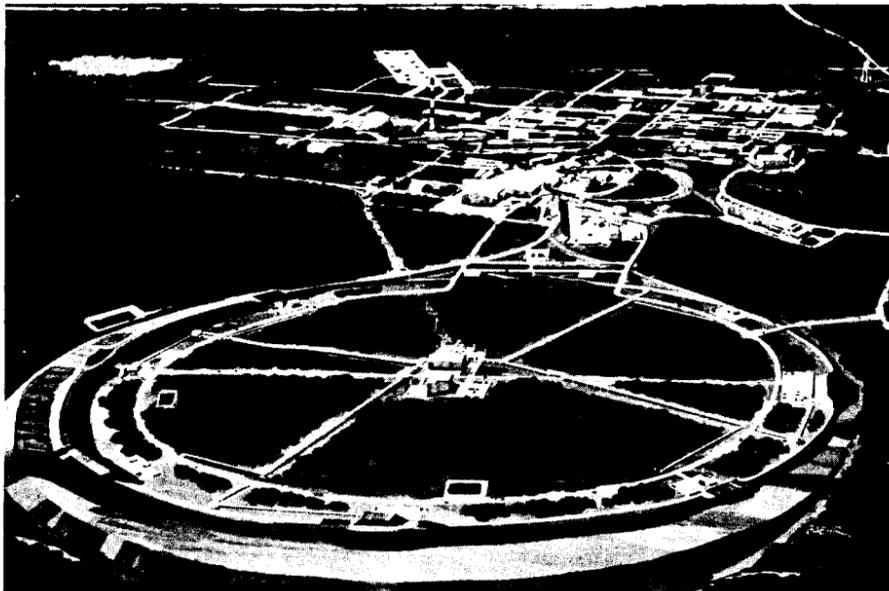
Robert B. Palmer

very large hydrogen bubble chamber was needed. Palmer's design incorporating such then radical ideas as wide-angle fisheye lenses and a hydraulic expansion system, was taken up by the group leaders and resulted in a proposal to build a 14-foot diameter chamber. This proposal was never approved, but a 7-foot chamber was built which, despite its smaller size and delayed completion, has been of immeasurable value, as Palmer will show in his lecture.

The work on the neutrino experiment proceeded with the 7-foot chamber. By the summer of 1974, pictures were being taken and the first crude measurements of those pictures were made. The idea of "charm" was known then, but certainly not widely accepted. Even if "charm" were true, it was not at all clear that this experiment could observe it, and when Samios told Palmer that one of the first events looked like charm, he just did not believe it. "There must be a missing Kaon," he said. It took nine months of hard work on that one event to rule out that Kaon, and any number of other explanations. The group published the event last spring and it remains probably the best evidence of charm yet observed.

This event will be the subject of Palmer's lecture, but he says he has a highly irreverent way of presenting physics ideas. For him a bubble chamber is like a pressure cooker with the lid suddenly removed. Tracks left in a chamber are like footprints in the sand left by invisible (because too small beach bugs; and quarks, the fundamental constituents of matter, are no more

(Continued on page 2)



Artist's conception of the proposed project. To get an idea of its size, compare the ISABELLE ring to the smaller AGS ring in the background.

ISABELLE — Act II

Quarks are what protons and neutrons seem to be made up of, and present research facilities allow scientists to look inside the proton for its constituents down to one-tenth, perhaps one-twentieth, the size of the proton. No one has ever seen a quark. Some theorists say that you can't bring a quark out and look at it. If that is the case, theorists ask, can there be deeper investigations inside quarks? Or are quarks the end of the line?

"ISABELLE might determine that," says Associate Director for High Energy Physics, R. Ronald Rau. "With this machine we would probe the inside of protons for constituents of about 1/100 the size of the proton. It provides the possibility of advancing the understanding of particle physics by an enormous amount."

Although ISABELLE is still on the drawing board, preliminary plans for its construction are moving right along. In February, Brookhaven received \$950,000 from ERDA for construction planning and development of this intersecting storage accelerator. To improve on Brookhaven's preliminary design and present the best possible cost estimate on the construction of the three-kilometer tunnel and buildings, \$220,000 is earmarked for study by an architect-engineer. The tunnel will encircle a central building containing the control system, various other buildings and seven experimental areas, on a site three and two-thirds times the diameter of the AGS. Now in process of selection, an architect is expected to be at work by July 1.

By far the biggest chunk of money, \$630,000, will be for the final preliminary

Cryopump Tops Specs

A high capacity vacuum pump, believed to be the largest of its type ever built, has exceeded its design pumping speed of 100,000 liters per second. The pump is installed on the Accelerator Department's neutral beam injector system which is under development for future fusion devices. The cryopump contains a large polished aluminum surface cooled to liquid helium temperature. Both hydrogen and deuterium gases can be pumped by "freezing" the gas molecules on the 4.2 degree K (minus 452°F) surface. A liquid nitrogen cooled shield, cooled by a closed cycle refrigeration system, surrounds the inner container to minimize liquid helium boil-off. Preliminary tests have shown that the helium boil-off rate is sufficiently low to require refilling only after more than two weeks of continuous operation.

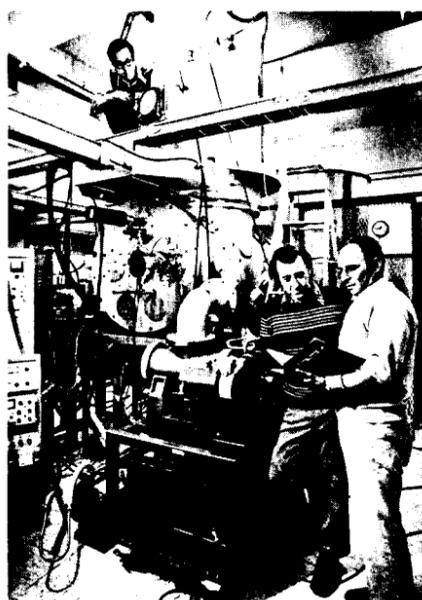
The cryopump was developed by cooperative efforts of members of the ISABELLE Division and the H⁻ Group. Henry Halama and Joseph Bamberger provided the vacuum and cryogenic expertise for design and development of the pump which was built to BNL specifications by Cryenco, in Denver, Colorado. Extensive testing is now underway with the assistance of Calvin Lam. Ray McKenzie-Wilson and Ronald Clipperton supervised the installation. An earlier prototype pump was built and tested at BNL with the assistance of Vernon Buchanan.

design and cost estimate of the machine itself. The work on this will be done under the leadership of the ISABELLE Division of the Accelerator Department, aided by consultants who are expert, for instance, in cryogenic systems, vacuum systems and magnet design. Industry will be asked to fabricate superconducting material and to offer quotations on this and other items in order to make the cost estimate as precise as possible.

The remaining funds will be allocated for the inevitable unforeseen circumstances. It is expected that the work using the CPD funds will result in a complete report on the design and cost estimate of ISABELLE which should be in ERDA's hands by late fall.

Since its inception five years ago, plans for ISABELLE have engaged the time and energies of a lot of scientists, engineers and technicians. The high energy physics community has participated in two large-scale summer studies devoted entirely to the design and uses of ISABELLE, and two subpanels of the High Energy Physics Advisory Committee have recommended its construction at Brookhaven, first in June 1974, then again in June 1975. Both the Accelerator and Physics Departments have worked continuously on the ISABELLE design over these five years. To handle the development of this unique accelerator, an enlarged ISABELLE Division was created within the Accelerator Department last year. James R. Sanford, recently appointed Associate Director and charged with the responsibility for the ISABELLE project, is expected to take up his new post on Monday.

A request to build ISABELLE is being submitted to ERDA for inclusion in its budget for Fiscal Year 1978. Their decision should be known by the beginning of 1977.



Henry Halama (left) and Joe Bamberger check the cryopump's performance while Calvin Lam (above) measures the helium gas rate. The cryopump is mounted on top of the main vacuum tank and may be isolated from the system by the 36-inch diameter slide valve whose automatic operator is visible in the center of the equipment.

Academy Elects Courant

Ernest D. Courant, senior physicist and a co-discoverer of alternating gradient focusing, has been elected to the National Academy of Sciences. He is one of 75 new members recognized for distinguished and continuing achievements in original research.

Courant has been on the scientific staff of the Laboratory since 1948 and has been principally concerned with the theory of design and operation of particle accelerators. His contributions to the design of the Cosmotron and the AGS were significant in the successful operation of these machines.

Born in Goettingen, Germany, Courant came to the United States in 1934. He received his B.A. degree from Swarthmore College in 1940, and his graduate study was at the University of Rochester. Immediately after obtaining his Ph.D. degree in 1943, he joined the Canadian Atomic Energy Project and worked in Montreal and Chalk River until 1946. The following two years were spent as a Research Associate in theoretical physics at Cornell.

He has held visiting professorships at Princeton, Cambridge, and Yale. Since 1967 he has been a Professor at the Institute of Theoretical Physics at the State University of New York at Stony Brook. He has also done considerable research at CERN and FermiLab.

The National Academy of Sciences was established in 1863 by a Congressional Act of Incorporation and is dedicated to the furtherance of science and its use for the general welfare. Election to membership in the Academy is considered one of the highest honors that can be accorded an American scientist or engineer. At present, 1,190 scientists are so honored.



Ernest D. Courant

Official & Special Events

- Tuesday, May 11
 - ERDA High Energy Review (11-12)
- Wednesday, May 12
 - Energy Fair (May 12-16)
 - Navy Meeting
 - Builders and Architects Conference & Exhibit House Tour
- Thursday, May 13
 - High Energy Advisory Committee Meeting
- Friday, May 14
 - ESCA Users Meeting
 - Long Island Association Meeting
- Saturday, May 15
 - Open House (10 a.m. - 4 p.m.)
- Sunday, May 16
 - Open House (10 a.m. - 4 p.m.)

- Monday, May 17
 - Safety Environmental Protection Workshop (17-21)
- Tuesday, May 18
 - CSWEG Meeting - Berkner Hall (18-20)

Watch For

American Paintings Show from Hecksher Museum at Berkner Hall, opening May 28 at 8 p.m. Show will run through June 17.



The masonry house is being rushed to completion for the Energy Fair and the signs are up which will designate exhibition areas to the public. At right, a BNL-AUI banner hangs from a skylight in the Cafeteria. Other



banners will be suspended from the ceiling in the Exhibition Hall. The logo was designed by Assistant Director R.C. Anderson.

A Burst Of Energy

Put out the welcome mat and gird your loins, because next week the public is going to pay a visit to Brookhaven. Thousands of people are expected to attend the Energy Fair and Open House.

Opening ceremonies are scheduled for 10 a.m. on May 12, outside Berkner Hall. Laboratory Director George Vineyard will preside and will welcome guests of honor Brookhaven Town Supervisor John Randolph, Suffolk County Legislator Floyd Linton and exhibitors at the Fair.

The Energy Fair will not only act as a display case for more than 70 exhibitors, but will acquaint the private citizen with what he can do to conserve energy. Along these lines, four seminars will be given daily in Berkner Hall and movies will be shown every half hour at Stage II. The exhibits will be displayed in Berkner Hall, the gymnasium and in adjacent outside areas.

Other seminars have been planned to appeal to more technical groups. Co-sponsored by the Long Island Builders Institute, the Long Island Chapter of the American Institute of Architects and Brookhaven, a conference on energy conservation in residential construction will be held on May 12 from 1:00 to 4:00 p.m. in the Chemistry Department Seminar Room.

On May 14, starting at 9:00 a.m., a day-long series of energy seminars and panel discussions to investigate several critical aspects of the future of energy sources for Long Island, will be held at the Center. Businessmen, concerned citizens and local government officials are expected to attend these seminars sponsored by the Long Island Association of Commerce and Industry, and Brookhaven.

Laboratory staff will be readying 14 different research areas for inspection by the public on May 15 and 16. A complete tour of the High Flux Beam Reactor is planned and shipping casks for spent fuel elements, which received so much recent publicity, will be on display.

The first atomic "pile," the Brookhaven Graphite Research Reactor, is being transformed into an Exhibition Hall, and will contain numerous exhibits and a science store. The public will now be able to view the decommissioned reactor at all former working faces.

Laboratories in Medical, Chemistry, Physics, Accelerator, Applied Mathematics and Applied Science Departments will open their doors on the weekend. Scientists and technicians will explain and demonstrate research methods and tools, as well as answer questions about their work.

Hours for both the Energy Fair and Open House will be 10 a.m. to 4 p.m.

Speaking Of Lunch

You may want to brown-bag it next week from Wednesday through Friday. Keep in mind that hundreds of school children are expected to attend the Energy Fair on those days, and the Cafeteria is likely to be overrun.

BNL Lecture

(Continued)

than girls and boys who get married (to make mesons), or join in coffee groups (to make baryons). He argues that it is not so much that high energy physics is complicated - it's really quite simple - but that the terms are unfamiliar (quarks, mesons, hyperons). He believes that, if by analogy one can talk of coffee groups and long-haired couples, then everybody can understand.

Palmer has a lot of interests outside of physics. He broke his leg while skiing this spring, and now says he will probably stick to sailing. He built his own 32-foot sailboat which he has been sailing for a year. His dream is to follow Frank Pechiar's solo across the Atlantic (see *Bulletin* April 30).

A buffet supper will be served in the Brookhaven Center before the lecture beginning at 6:00 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.

Arrivals & Departures

Arrivals

Arthur J. Cooney..... Plant Engr.
 Robery J. Cooney..... Plant Engr.
 William D. Ellenson..... Physics
 Robert J. Hoppe..... Applied Science
 Robert J. Kennett..... Applied Science
 Lawrence I. Kleinman..... Chemistry
 Lee H. Linton..... Applied Math.
 Brian D. Mayo..... Plant Engr.
 Jack M. Preses..... Chemistry
 Joseph W. Zahra..... Plant Engr.

Departures

Peter O. Mazur..... Physics
 Frederick O. Pallas..... Mech. Engr.

Frazier-Foreman Fight

The Nassau Coliseum is offering to Long Island Industrial Recreation Association members (BERA is a member) advance sale tickets for the Frazier-Foreman fight on June 15. Prices of tickets are from \$25 to \$200. Anyone interested should call Toni at (516) 729-9300, Ext. 286.

Safety Glasses

On Wednesday, May 12, 1976, the Optician will fit and issue previously ordered eyeglasses only. Prescriptions for new safety glasses will not be accepted on that day.

Following that date all transactions involving safety eyeglasses will take place every Tuesday with the Optician providing service on a full day basis from 9 a.m. until noon, 1 p.m. until 5 p.m. This expanded service will begin May 18, 1976.

Any questions regarding safety eyewear may be resolved by calling Ext. 2969.

Cooking Exchange

"Fabulous Desserts" will be the subject of the next meeting of the Cooking Exchange on Wednesday, May 12. Talented bakers will show us all just how easy it is to make terrific tarts, fabulous flans and beauteous bombs.

The last meeting of the year will be on May 26 when all the men are invited to display their culinary talents. To volunteer, and secure an invitation to the International Dinner call Judy Mills at 281-4472.

Remember - Wednesday the 12th at 12:30 p.m. at the Recreation Building. Babysitting provided at 75¢ per child.

Bicentennial Calendar

May

(The *Bulletin* plans to publish Bicentennial events on a monthly basis through August)

Now - Aug. 1

Exhibit: "Air, Earth, Fire and Water," Hall of Science, Flushing.

Now - June 5

Life Styles: East Hampton: 1630 - 1976. Guild Hall, Main St., East Hampton.

May 9 - Sept. 6

Exhibits: A Parade of Children's Vehicles, Carriage Museum; Crafts 1776 - 1976, Craft Center. The Museums at Stony Brook, Route 25A, Stony Brook. Info 751-0066.

May 9

Lecture and slide presentation on shipbuilding in the Three Village area during 19th century, at 3 p.m., Room 001, Earth & Space Sciences Bldg., SUNY, Stony Brook.

May 14-16

All-community presentation of Thornton Wilder's play "Our Town," Shoreham-Wading River H.S. at 8 p.m. 14th & 15th, 2:30 p.m. on 16th. Roles will be taken by members of the community, as well as by students in the district. \$2.00 adults, \$1.00 senior citizens and students. Info 727-2608.

May 15

After Dinner Opera Company presents "A Revolutionary Celebration" at Belle Terre Community Center. Dessert & coffee, 7 p.m., performance 8:00 p.m., \$7.50/person, benefit of Gate House Restoration.

May 16

BAFFA Symphony Orchestra, Pops Americana Concert, Our Lady of the Snow auditorium, Blue Point Ave., Blue Point, 8 p.m. \$4.00 at door, \$2 if bought in advance. Info 567-3182, 472-1419.

May 19-23

N.Y. State Bicentennial Barge docked at Oyster Bay Harbor. (Note: Barge visit to Port Jefferson, May 14-17 has been cancelled).

May 21-23

Music Festival: May 21, 8:30 p.m. Jan and Kathy Oosting. Folk singing: May 22, 12-4 p.m. May 22, 8:30 p.m. Orlando Ballet. May 23, 2 p.m. Colonial Dancer, American Music and Ensemble. Picnicking, refreshments. Shoreham-Wading River School. Info Betty Hygem, 929-8500.

May 23

Muster of Fife & Drum Corps & Pipe Bands, Brookwood Hall, Irish Lane, East Islip. 2 p.m.

May 26-28

Historic Tour: "Up and Down Main Street," East Hampton.

May 29-31

Festival: Music, dancing, games, food and drink - 3 p.m. - midnight, at Smithtown Firematic Track, south side of Jericho Turnpike, ¼ mi. west of Lake Blvd. in Smithtown. Info Bill Weingand 543-4000, 941-3941.

Sticky Wicket

All those interested in playing cricket for fun, please contact Debu Majumdar Ext. 2633, or Sue Montague Ext. 2017. We already have a bat and a ball!

Cafeteria Menu

Week Ending May 14, 1976

Monday, May 10

Tomato Bouillon
 Franks & Baked Beans 1.00
 Barbecued Fresh Ham & 1 veg. 1.30

Tuesday, May 11

Cream of Chicken Soup
 Chopped Steak & 1 veg. 1.05
 Chinese Pepper Steak on Rice 1.25

Wednesday, May 12

Shrimp Chow Mein on Rice 1.10

Special

Cup of Split Pea Soup
 Corned Beef & Cabbage
 Boiled Potato or Mashed Turnip
 Choice of Pie
 Small Beverage \$1.87 plus tax

Thursday, May 13

Puree of Mongol
 Spanish Omelet & fr. fr. 1.10
 Short Ribs of Beef & 1 veg. 1.30

Friday, May 14

Clam & Celery Soup
 Seafood Cakes & Spaghetti 1.05
 Pot Roast & 1 veg. 1.30

Wanted -

Softball Players

Last call for softball players who would like to join a team for the upcoming season. Call Karen Schach on extension 3623.

BROOKHAVEN BULLETIN

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In Memoriam

Worth Austin, Sr. died suddenly at his home on May 2. He was a valued member of the Hot Laboratory for over 24 years, and during that time he made many friends. A man of strong principles and of quiet stubborn devotion to them, he was the very personification of reliability and dependability. He was more than ready and willing to help; he saw what needed doing and did it without being asked. His many friends, who will mourn his sudden passing without the opportunity to say "Goodbye," will take comfort in remembering the many little ways in which he made Brookhaven a better place.

—Louis Stang

The British Are Coming

General John Burgoyne, Major Swindon and their troops will be at Brookhaven during the last weekend in May and the first weekend in June to conduct the trial of Richard Dudgeon, accused of treason. But was Richard the man they thought he was? And why did Judith, the minister's wife, seal the fate of Richard with a kiss?

Join the townspeople of Websterbridge at the trial as described by Bernard Shaw in *The Devil's Disciple*, the BNL Theater Group's Bicentennial Production to be produced on May 28-29 and June 4-5 at Stage II (Exhibit Hall).

The leads will be played by Mike Losquadro, Jr. (Richard Dudgeon), Sharon Smith (Judith Anderson), and Robert Kinsey (Mr. Anderson). The supporting cast includes Rita Straub, Doug Gunwaldsen, Pat Gubbins, Gail Thompson, Tony Tatakis, Jane Love, Josh Kopp, Ed Beardsworth, Carolyn Hench, Tony Feinberg and John Binnington.

Did you know that the British used the noose rather than the musket for executions because the British soldier would never hit the target more than half the time? Still better than the ethnic army whose firing squad always formed a circle before shooting at the prisoner!

La Poésie Française

The next meeting of the French Group of BNL will take place on May 20, at 8:00 p.m., in Room C of Berkner Hall. At this meeting, Dr. Pierre Chanover will speak on "Un aspect de la poésie Française contemporaine." His talk will include readings of new French poetry, some of it written by the speaker himself.

In addition to teaching the French language, Dr. Chanover is a widely-published author, of both poetry and literary studies; truly bilingual, he has written poetry in French and English. His book of poems "Clapotis d'Outre-Mer" (Ripples from Overseas) was published by the Librairie Saint-Germain-des-Près in Paris, and a new book "Noeuds et Reflets" (Knots and Reflections) is to appear soon. With all his other activities, Dr. Chanover finds time to serve as president of Le Cercle Français de Huntington.

All members of the BNL community are invited to attend this event. Those who are not members of Le Cercle Français du BNL will be asked for a small donation to help cover the cost of refreshments, which will be served after the meeting.

Tournament Winners

Congratulations to the winners of the Scotch Doubles Tournament held last Saturday at Port Jeff Bowl.

1st place - Dick and Ellie Murgatroyd, 2nd place - Jere and Mary Austin, 3rd place - Charles Sells and Kay Hunt, 4th place - Howie Bell and Terri Blackman and 5th place - Jerry Pringle and Pam Spencer.

In addition to winning 1st place, Dick and Ellie Murgatroyd were celebrating their 33rd wedding anniversary.

Faces, Places



Bob Ferguson, X-ray technician at Medical, "shoots" 3500 patients a year and spends anywhere from 30 seconds to one hour with each. He has been at Brookhaven for four years and spent 20 years in the Navy as a Chief X-ray Technician and an instructor. He says, "at BNL everyone seems to be interested in everybody else. There are a lot of happy people here. I like that." He is married, has three children and lives in Wantagh.



Pat Van Wormer is the first woman buyer at Brookhaven. She was promoted to that position four years ago, after seven years as a secretary in Purchasing. She buys biomedical laboratory supplies for the laboratory and spends from \$1 to \$65,000 on these items. She says "it's really a good job. I like being able to talk to and meet a lot of different people. Besides, being a woman, I love to buy." She is married, has four boys and lives in Lake Ronkonkoma.

Bowling News

Cathy Van Noy

Pink League

"Congratulations" to the "Pinsplitters" who won the rolloff against the "Spares" in a very close match. The total wood was a mere 49 pin difference. High games the last night of regular bowling were C. Van Noy 209-198, M. Stoekel 200-160, S. Vander Kolk 177, J. Gazzola 172, M. Susa 171, P. Oster 169, D. Bartelt 163 and L. Boyd 160. If you didn't win this year, remember, there is always next year.

Black N Blue League

"Congratulations" to the "Good Guys" on winning the third third. May 12 will be the rolloffs between the "Good Guys," "Odd Balls" and the "Question Marks" to determine the league champion. Bill Sells waited until the last game of the last night for his big game of 244. He also made his club award with a 699. Other highs for the night were Fred Hohmann 204, Diane Schug 181, Pat Lebitski 168, Renee Flack 162 and Debbie Antonio 161.

Red League

The week of April 20th found the "Sandbaggers" moving into first place by winning eleven. This makes eleven times this half that the lead has changed with two more nights left. "Congrats" to J. Sauls on winning a club award with a 692 gross. 200 games were J. Scesny 222, F. Hohmann 215, R. Wilson 206, S. Kiss 205, C. Buzzeo 205, W. Kristiansen 203 and R. Jones 200. The week of April 27th found the "Lucky Strikes" taking over the lead from the "Sandbaggers" who are now one point behind. The "Designers" out by 2½ and the "Neutrons" 6½. The last week should be very interesting as this is one of the closest leagues at BNL in a long time. 200 games were E. Meier 232-605, J. Scesny 211-200-600, C. Buzzeo 208-200-596, K. Asselta 213, J. Ferrero 212, N. Anderson 209 and F. Pachinger 203.

Green League

The week of April 20th found the "Got-A-Hit-Ums" maintaining the first place lead with the "Charley Browns" 1½ points out. The "Blue Jays" are in third only 7½ points out. Jay Stahman had a good night with a 217, 224-638 scratch and 710 gross for his club award. Other 200 games were T. Iarocci 201, L. Jacobson 201-211, B. Belligan 208 and G. Speidell 210. The week of April 27th finds one week of bowling left and the "Got-A-Hit-Ums" are still in first place with the "Charley Browns" in second. Roy Marlow had a good night with a 211-223-601 and 704 gross for his club award. Tom Iarocci had a 234-615 scratch. Other 200 games were H. Marshall 201, L. Jacobson 205, G. Schuette 207, J. Gaffney 209, G. Speidell 217 and V. Bilms 221.

Purple and White League

The week of April 22nd found the "Alley Oops" still maintaining the lead with the

"Flounders" only two points behind. High games were Penny Austin with a 179-452, Ruth Duffy 164-412 and Linda Asselta 156-443. Frank Short 214-564, Ed Sperry 199-572 and Marshall Bull 191-478. The week of April 29th the "Alley Oops" are still in first with the "Sea Gulls" in second behind by five and the "Lucky Strikes" out by seven. Hank Henck had a night long to be remembered with a 180-231-195-606. Congratulations, Hank! Other nice games were Denny Klein 210, Ben Belligan 208, Art Lipman 195, Gene Hassell 191, Ed Sperry 188, Betty Roche 198-483, Madeline Windsor 182, Gail Thompson 170 and Marge Belligan 163.

Point of Interest - At the WIBC National Convention held in Denver Colorado last month the delegates voted to change the state team event from a five woman to four if your state so desired. This is a change we have tried to pass for some time. I also hope some of you will be thinking about entering the state tournament next year in Binghamton, N.Y.

Highlights of the Industrial Tournament for Women

BNL women finished in ninth place in the championship division and eleventh in the incentive division. Lindora Boyd won the most valuable player award for the BNL team. Better luck next year girls.

Gymnasium

Due to the scheduled Laboratory Energy Fair and Open House, the gym is closed to all activities until Wednesday, May 19 at 11:00 a.m.

Starting on that date, the following schedule for general activities will be in effect until further notice. The gym will be closed on Sundays.

Monday through Friday

11:00 a.m. - 1:30 p.m.

5:00 p.m. - 9:30 p.m.

Saturday

10:00 a.m. - 6:00 p.m.

Film Processing Deposit

Effective as of May 1, a deposit is required on all film processing done through the BERA Sales & Services Office by Lemarant Arts, Limited.

The deposits are as follows:

\$1.00 - 12 exposures

\$2.00 - 20 exposures

\$3.00 - 36 exposures

50% on reprints and enlargements

Exercise Equipment

Various pieces of exercise equipment will go on sale at the BERA Summer Recreation Office in the Gym. Anyone interested in looking over the equipment prior to the sale (date has not yet been set) please call the Recreation Office, Ext. 2873, for an appointment.

Golf Tournament Results

The golf season started under questionable weather conditions as 33 BNL's answer to the P.G.A. teed off in the 1st tournament of the year. The results follow:

Low gross - Edward O'Connell, 2nd - Robert Feindt; Net winner - George Kornhut, 2nd - R.P. Brown; Longest drive - Edward O'Connell; Closest to pin - Joseph Mayeski.

BNL Bicentennial Run

The 17.76 relay is all set to go as scheduled on Sunday, May 9, 1976. The race will start (rain or shine) at 10 a.m. at Berkner Hall.

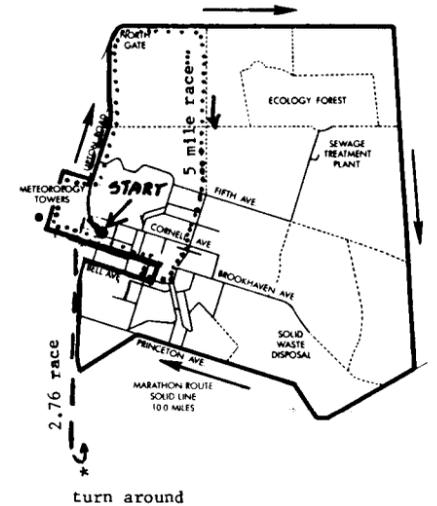
Entrants are urged to report by 9 a.m. for registration and notification of line in respective teams. The gym will be open for changing and showers. Runners may participate as part of a team or as independents in any of the three legs (10, 5, and 2.76 miles).

The teams will be chosen at random and assigned their appropriate handicaps based on the past performances of the members.

The entry fee is \$1.00. Free refreshments will be served for participants only. Observers are asked to provide their own.

The 5 and 10 mile courses remain the same as for previous races. The new distance of 2.76 miles will start and end the same place as the 5 and 10 mile, with the route shown on the accompanying map.

Awards will be made available to the winners and certificates for all finishers. A special award will also be given to the first mother who finishes, so run you mothers!



turn around

Classified Advertisements

Placement Notices

Each week the Personnel Office lists personnel placement requisitions, currently being processed. The purpose of these listings is, first, to give notice of all non-scientific staff positions being filled and, second, to give employees an opportunity to request consideration for themselves through the Personnel Office. In filling vacancies, the Laboratory's objective is to give first consideration to present employees, as follows: employees within the immediate group having the vacancy, employees within the department or division, employees within the Laboratory as a whole.

For further information regarding a placement notice, or to request consideration for an available position, contact Supervisor, Personnel Placement & Development, extension 2874 or 2882.

87. DEVELOPMENT ENGINEER - BS degree or equivalent in electrical or mechanical engineering with experience in fabrication of lapped insulation power transmission cables. Familiarity with modern taping machines and a knowledge of the mechanical and electrical considerations underlying the design of flexible cables. Accelerator Department.

92. COMPUTER SCIENCE ANALYSTS - Minimum BS degree or equivalent in Computer Science/Mathematics with approximately two years' experience in scientific programming. CDC SCOPE operating systems experience desirable. Applied Mathematics Department.

93. DATA SERVICES ASSISTANT - Temporary position. Plant Engineering Division.

94. LABORER - Temporary position. Application deadline: May 19, 1976. Plant Engineering Division.

95. POTENTIAL OPPORTUNITIES - New projects directed toward the investigation of energy related problems are being planned in the Department of Applied Science. Potential opportunities exist for individuals with backgrounds in metallurgy, mechanical and nuclear engineering to provide a broad spectrum of technical assistance to the Nuclear Regulatory Commission. The Process Technology Division of DAS is also interested in individuals with backgrounds in chemical engineering and chemistry for assignments associated with the investigation of fossil, geothermal and energy related processes for synthetic fuels and chemicals production. Individuals wishing further information regarding these potential opportunities may contact the Placement Supervisor at Extension 2882.

Classified Advertisements

Autos & Auto Supplies

64 T-BIRD - All power. \$400. 732-6173 after 6.
 69 CHEVELLE - 4-dr wagon, auto, 96,000 mi. \$425. 588-5833.
 69 FORD - Galaxie, 302 V8, ps/pb, 88,000 mi. Hans, Ext. 3583, 744-4305 eves.
 50 MGYT - 4-seater convertible, rare, partially restored, losing storage, priced reasonably. 878-8919 eves.
 63 CHEVROLET - Belaire, 2-dr, standard, economical trans. \$295. Ext. 3246, 325-1961.
 VW - Beetle, good running cond. \$125. Hank, 924-4706.
 64 FORD - 4-dr, auto, ps, good running cond. \$250. Bob, Ext. 4679.
 71 TOYOTA - Corolla, good cond, new clutch, 53,000 mi, good tires. Wholesale \$650. Ext. 4008.
 64 JEEP WAGONEER - 4-wheel drive, new 3 spd trans, recent paint, good cond. \$800. Roger, 286-9197.
 48 PLYMOUTH - Club Coupe Delux, 2-seater, need a little restoration. \$300. 281-4475 eves.
 66 PLYMOUTH - Wagon, high mi, many new parts, ps/pb, auto trans, new tires. \$225. Steve, Ext. 4308.
 47 PLYMOUTH - Special Delux, 4-dr sedan, r/h, good cond, run daily. \$775. 281-4475 eves.
 73 CHEVY VEGA - Hatchback, excel cond. \$1095. 281-3963.
 TIRES - (4) 11L-60 Firestone balloon beach tires, excel for beach. Orig \$280, asking \$100 or best offer. 281-7230.
 72 VEGA - Manual trans, radio, new brakes, muffler, good tires. \$600. E. Weinstock, Ext. 2943, 286-0263 eves.
 72 MG - Blue w/tan interior, am/fm, excel cond, always garaged. \$1800. Lorraine, Ext. 3595.
 67 OLDS - Delta cust, a/c, pb/ps, p/wind, p/seats, p/trunk, p/ant, vinyl top, radio/rear speakers. \$700. 249-8382.
 72 OPEL - Rallye, 4-spd, am/fm 8-track. \$1500. 473-5833.
 75 TRIUMPH - Spitfire, 9000 mi, excel cond. \$3500. 744-7625 eves.
 68 VW - Orig owner, new paint, tires, clutch, shocks & carburetor, excel cond. Stephanie, 924-4833.
 63 CHEVY PICK-UP - 66 motor, good cond. \$275. Russ, 666-7756/744-3792.
 VW PARTS - Sedan, early-mid 60's, rear bumper, \$10; right rear fender, \$10. Jay, Ext. 2022.
 71 PONTIAC - Catalina, 4-dr, sedan. Warner, 475-7025.
 74 DATSUN - 260Z, red, new tires, excel cond. Adam, Ext. 3241 eves.
 74 KAWASAKI - 125 cc, Enduro, expansion chamber exhaust, 950 mi, excel cond, hardly used, never abused. \$590. P. Hichborn, 929-4133.
 66 CHEVY - Convertible, 283 eng, 2 brand new tires, runs good. \$450. Ext. 2957.
 TIRES - Recaps & used, most sizes, extra rims avail. Ken, 289-8212 eves.
 RALLY WHEELS - 1 pr 13" to fit Vega. \$15. Ken, 289-8212 eves.
 TIRES - Like new, (1) 850x14, (1) 775x14, on Chevy rims, tubeless, reasonable. Ed, 585-7448.
 70 MERCURY - Montego, pb/ps, ac, auto, 392 V8, rear air shocks, 2000 class B hitch, elec hook up, good tires. \$1200. 588-5688.
 INTAKE MANIFOLD - & carb (2 Bonol) for Pontiac 400 series, alt & reg, power steering pump, air cond compressor, radiator, air cond radiator, etc. Ext. 4227.
 37 CHEVY - 2-dr, low mi, orig owner, exterior, interior & mechanically excel. \$1850. Bob, 281-6839 after 6.
 67 VW - Beetle, good running cond. \$550. Al, Ext. 3941, 744-9866.
 74 DATSUN - 610, 4-dr sedan, a/c, am/fm, reclining bucket seats, 110 hp, new steel radials, excel cond, must sell. \$3250. 744-2404.
 68 PEUGEOT - 404, 4 dr sedan, sunroof, 4 speed, new clutch, 28 mpg, 62,000 mi, good transportation. 727-5168 after 6.
 GENERATOR - 12 V Ford. \$5. M. Tesla, Ext. 3284.
 RIMS - (2) 15" VW, \$5; (2) 14" Ford, \$4; (2) 13", \$3. O. Booker, Ext. 4719.
 75 FORD PICKUP - ¾ ton, 4x4, automatic, V8, am/fm stereo tape, many extras, low mileage, must sell. Ext. 4068, 298-5092.
 72 DODGE - Dart, swinger, 2-dr hdtip, auto, p/s, r&h, excel cond. Asking \$2000. Ted, Ext. 4163/4126.
 71 CHEVY - Station wagon, Kingswood Estate, 9 pass, a/c, ps/pb, air shocks, 4 steel belted tires, class #3, complete Reese hitch. \$1695. 585-8395.
 67 SUNBEAM - Minx, 4-dr, 4 cyl, r&h, 25 mpg, runs good. \$450. Ext. 4532.
 UTILITY TRAILER - 4x7', excel cond. \$125. 473-4043.
 63 VW - Good running cond, needs some body work. \$225. 473-4043 after 6.
 71 MG - Midget, 52,000 mi, am/fm, tonneau, new clutch, wire wheels, needs brakes. \$900. Ext. 4103.
 73 HONDA - 350 road bike, elec start, excel. \$750. Alan Jr., 653-4632.

Boats & Marine Supplies

34' BALTZER - 1953, twin Chrysler crown eng, camper back, excel family or fishing boat. \$3700. 331-1718.
 14' HOBIE CAT - W/beach wheels, like new. \$1100. 751-1097.
 9' DYER DINK - #675, sailing dinghy, needs repair, brass fittings, approx. 68 sq ft Egyptian cotton sail w/battans in tact, slotted mast, boom, tiller. Best offer. 653-5989.
 EVINRUDE - 40 hp w/harness, elec start & controls, '64, \$250; 6 step folding ladder, teak, \$30; 6 step folding ladder mahogany, \$20. Ext. 3498.
 18' WINNER BARONET - Cudy cabin, 80 hp merc powertrim, full instrumentation, 4-wheel gal trailer. \$2500. 265-5565.
 25' TROJAN - Fiberglass, '69, 250 hp FWC, low hr, camper canvas, hardtop, all equipment, radio, 6' sportyak, 6K in water. Ext. 4217/4223.
 16½' FUNCRAFT - '71, fiberglass w/trailer & acces, hull only. \$1300. Ext. 3652, 286-8175.
 EVINRUDE - '74, 4 hp, swap + \$ for larger motor up to 10 hp. Bob, 744-9832 after 5:30.
 12' ALUMINUM BOAT - New, V bottom. \$135. Ext. 2957.
 25' OWENS - Cabin cruiser, sleeps 5, 283 Flagship engine, acces, very good cond. Fred, 281-6468 week-ends & eves.
 TRAILER FENDERS - Pair. \$6. Ext. 2485.
 14' ALUMINUM BOAT - 10 hp motor & trailer. \$450. Ext. 2485.
 16' SAILBOAT - Fiberglass day sailer, dacron sails, outboard, trailer. \$1500. 751-1097.

Miscellaneous

ROYAL BALLET TICKETS - 2 dress circle, May 10, A Dream (Mendelsohn), Song of the Earth (Mahler), H. Brown, Ext. 4773.
 AIR CONDITIONER - 5000 btu, used one season. \$75. 744-3764.
 POOL TABLE - 7', used 3 months, balls, cues, ball return, folding supports. \$100. 751-0835 eves.
 ARMSTRONG FLUTE - New cond, French keys, bargain at \$250. 751-0835.
 POOL FILTER - Filter Flo 1050. \$30. Mike, 281-6070.
 SURFBOARD - 7'6" Hobie, very good cond. \$55. Ted, Ext. 4163, 4126.
 ELEC HEATING UNITS - Baseboard convection type, enough for 3 bedrm house. Ted, Ext. 4163, 4126.
 TELESCOPE - 6" reflector, very good cond. \$60. Ted, Ext. 4163, 4126.
 FLUTE - Antley, silver plated, good cond w/velvet case. \$50. 924-3082.
 DOG HOUSE - 48x48, 40" high, colonial siding wood, hatch roof, suitable for shepherd or large dog. \$25. 924-3082.
 ANTIQUE MORRIS CHAIR - Solid oak, adjustable back rest, in family 100 yrs. \$45. 924-3082.
 YORKSHIRE TERRIER - Male puppy, 10 weeks, personality plus, good temperament, guaranteed sound. Alyce Daly, Ext. 2902, 475-2627.
 HEMLOCK SHRUBS - 24" high, about 100. \$2 each. 472-1473.
 PINE FURNITURE - 2 end tables, 2 lamps, 1 sleeper couch, newly covered, 1 dry sink, 1 rocking chair. Doris, 581-4318 after 5.
 REFRIGERATOR - Hotpoint, self-defrost, harvest gold, 15 cu ft, excel running cond & appearance, like new. Asking \$175. 281-5205.
 CLASS II HITCH - For trailer. \$50. 281-5205.
 STOCKADE FENCE - 32 running feet, 5' high, milled and peeled. \$40. Ext. 4047, 4090.
 WINCHESTER RIFLE - Model 70 caliber .243 heavy barrel w/3 boxes ammo, excel cond. \$125. Frank, Ext. 4581.
 STEREO AMP - Paco, 40 watt, tube type w/extra tubes. \$35. Ext. 3593.
 BACK PACK - In excel cond, used once. \$15. Bob, 878-1731.
 BOY SCOUT UNIFORM - Size 12, 1 short sleeve shirt, size 14, 1 beret, trousers slightly worn, others good cond. Bob, 878-1731.
 WALNUT DRESSER & CHEST - Very good cond. \$100 takes both. Bob Dee, Ext. 2582.
 FAMILY RM SET - Sofa, rocking chair & chair, Maple & plaid, reasonable. Paul, 878-1486.
 2 TRAILER HITCHES - Universal, \$3 each. Ext. 2485.
 CHILD'S BICYCLE SEAT - Excel cond. \$7. Ext. 2485.
 16" BICYCLE - Child's w/training wheels, \$5. Ext. 2485.
 B&W 23" TV - Zenith, small console, excel cond. \$45. Will deliver. Fred, Ext. 4597, 475-4935.
 GO CART - 3½ hp Tuc eng, disc brakes, slicks, mags, live axil. \$115. Tom, 475-8211.
 PIONEER SX-1010 RECEIVER - BSR 810QX turntable. Dennis Turner, 929-3283/4, 744-4055.
 LIGHTS - Outdoor pale, outlet, all metal, new, \$30 each; mirror, mount on dresser or hang, \$15; storm door, small size, new 65"x30", \$10. Dunning, Ext. 4285, 732-4068.
 WINDOWS - 2 aluminum louver 46"x20", 5-pane frosted, \$15 each. Dunning, Ext. 4285, 732-4068.
 DISHWASHER - Sears, good cond. \$75. Ext. 2902.
 LAWN MOWER - Rider, 24", 4 hp, good cond, \$75; 21" power mower w/bag, excel cond, \$50. Bill, Ext. 4665, 732-9102.
 COUCH - Danish walnut w/attached end tables, new foam, \$35; baby items, crib, playpen, etc. Bill, Ext. 4665, 732-9102.

ROLLER RINK SKATES - Ladies Arrow, size 8, leather uppers & soles, like new w/case. \$25. Steve, Ext. 3469.
 BICYCLE - Girl's, Schwinn, 24"x1.75" tires, side baskets. \$25. J. Olson, 289-8629.
 IRISH SETTER - Lovable, 3½ yrs old, looking for a good home. 289-1969.
 HEAD PHONES - For your stereo, 2 types. \$10 & \$15. Ext. 3155, 698-7647 eves.
 STROLLER - Canopy windshield. Orig price \$29.95, asking \$15. Becky, 289-8212.
 BED SPREADS - Quilted, queen size; 2 pairs matching curtains, each 2'x6", green & white. Joe, Ext. 2063.
 AREA RUGS - (2) Green, good cond, 9½x12' & 3½x5'. Best offer. Joe, Ext. 2063.
 SOFA & CHAIR - Danish style, good cond, needs re-covering. \$100. Hugh, Ext. 4078, 744-8901.
 TYPEWRITER - Royal, standard office, manual, good cond. \$55. Ed, 585-7448.
 TYPEWRITER - Smith Corona Electric, 13", very good cond. Ext. 2972.
 MILLIAMMETER - EICO 565 volt-ohm, new, never used, EICO list price \$49.95. \$35. Paul, Ext. 2023.
 OSCILLOSCOPE - EICO 460, Heathkit test chassis model EF-2 & all manuals, brand new in cartons. \$125. Paul, Ext. 2023.
 PACHYSANDRA - Excel ground cover. 50 plants/\$5. Peter, Ext. 2540, 744-5448.
 TRUCK CAP - 8'. \$150 firm. 732-4031 after 5:30.
 TROMBONE - King Cleveland 605 w/case. Asking \$125. Ext. 4547, 281-7485 after 5.
 TRAVEL TRAILER - CREE, 18', self-contained, excel. 475-1111 after 6.
 BOYS BICYCLE - Schwinn Sting Ray, 20" tires. \$35. 286-3815.
 FISHING SEAT - Sears folding, folds to 10x7", used twice, good buy at \$2.50. 727-3608.
 TOMATO PLANTS - In 3" peat pots. Izzy, Ext. 3696.

Ads left out of this issue because of lack of space need not be re-submitted in order to run in next week's issue

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

RIDGE/LAKE PANAMOKA - 3 bdrm ranch, full basement, 16x20 sun deck, 110x113 wooded lot, lake rights, Tarkill Rd. \$33,000. Ext. 4308, 727-9334 after 6.
 YAPHANK - Claradon built ranch on ½ acre, 3 bedrms, 3 baths. \$44,000. 924-4192.
 SETAUKET - 4 bdrm, 2 bath ranch, family rm w/fireplace & skylight, eat-in kitchen w/self-cleaning oven, full basement, 2 car garage, brick patio, heavily wooded. 751-7416.
 SHIRLEY - Ranch w/porch & patio, 4 yrs old. 100x125, fenced, carpeting, 4 bedrms, living, dining rm, 2 baths, basement, near stores, transportation. \$33,000. 281-3721.
 HANDYMAN'S SPECIAL - Solidly built 2-story mother & daughter house, separate entrances, 2 bedrms, dining rm, kitchen, bath on second floor, 2 bedrms, living & dining rm, kitchen, bath on first floor, oil/steam heat, 2 car garage, trees, corner lot, needs painting, must sell. Charley, 281-5385.
 SHOREHAM - North, 3 bedrm, living & dining rm, den, colonial, fireplace, carpeting, deeded beach rights, 2 baths. Ext. 3308.
 STRATHMORE RIDGE - 2 bdrm condominium, central a/c, upgraded carpeting, immaculate cond. \$3500 takes over \$20,000 mortgage. 924-3666 eves.
 CUTCHOGUE - 1 acre building lot, water view, beach rights, near schools & shopping. Asking \$14,500. Must sell. G. Laird Stubbings, Ext. 4068, 298-5092.
 PATCHOGUE VILLAGE - 3 bedrm ranch, expansion attic, finished basement, most appliances, country kitchen, attached garage, exterior maintenance free. \$34,000. Ext. 2290, 475-7694.
 CLEARWATER BEACH - Building lot, 100x150 deep near Gardiner's Bay, East Hampton Township, walk to private beach, marina rights. \$13,500. Ext. 3469, 281-4371 after 5.
 WADING RIVER - 3 bedrm ranch, 1380 sq ft, oil heat, new well, all appl, basement, finished & carpeted, 4 rms w/elec heat & individual controls, completely paneled, 1.8 acres in Woodland Acres. Helen, Ext. 3415.
 CENTEREACH - 4 bedrm colonial, dining rm, laundry rm, 1½ garage, fenced yard, patio, concrete driveway, many extras, low taxes, must see. \$29,990. 981-6580.
 WADING RIVER - Near Sound, fully deeded beach rights, 6 rm ranch, 2 bedrms, bath, oil/hot water heat, fireplace, full basement, rear patio, taxes \$988/yr. Asking \$46,990. 929-6465.
For Rent
 VERMONT - Furnished chalet, Londonderry, sleeps 14, washer, dryer, stone fireplace, modern kitchen, 500 acres of hiking, swimming, closeby summer stock, Marboro Music Festival. 757-5599.
 MEDFORD - 2 furnished rms, private entrance, share kitchen, living room, full bath, immediate occupancy. \$160/mo each. 929-6442 after 6.
 PATCHOGUE - Furnished house for summer rental starting June 26. Katcoff, Ext. 4341, 475-4005.
 BELLPORT VILLAGE - Furnished, 3 bedrm, 200 yds from bay, 1 yr lease, avail July 1. Ext. 4122, 4132.

EAST PATCHOGUE - 3 bedrm house, furnished, 9/1/76-9/1/77. \$300/mo. 289-3023.

FURNISHED RM - Patchogue Village, private home, off-street parking, village conveniences, suitable congenial mature woman. 475-2627 after 6.

RI VACATION COTTAGE - 281-8296 after 6.

SHOREHAM - Summer rental, end of June to Labor Day, hi-ranch, 1 acre land, private beach rights. 744-2514.

PUERTO RICO - Penthouse, 1 hr from San Juan, shore-front, sleeps 6, 2 bedrm, 2 baths, take advantage of off-season rates. Ext.3482.

Wanted

FEMALE PERSON - To share house expenses for summer. Sharon, 878-2591.

MUSIC LOVERS - To attend LI Symphonic Choral Assoc. presentation of "The Mighty Casey", Shoreham-Wading River HS, 8:30 pm, May 8. Tickets \$2, avail at door.

STORMWINDOWS - Old wooden, w/glass. Adams, Ext. 2540, 744-5448.

GARDENS TO ROTOTILL - Any size, very reasonable. 588-5833.

HOME - For 6 week old all white kitten. Ext. 3651, 698-9465.

HOUSE - 2 bedr in Miller Place, young couple w/child. Chris, 981-5772.

HOME - For 1 or 2 Guinea pigs, both female, one very long hair, free. Mitch, Ext. 3298.

PROPANE TANK - 20 #. Steve, Ext. 4008.

BABYSITTER - Light housekeeping, reliable, for 7-9 yr old in Bellport, weekday afternoons, 3-5:30 pm. Ext. 2016.

TAPE RECORDER - Reel to reel in good working cond. 589-1145 after 6.

HOME - For adorable kittens, box trained, males & females. 751-2097 eves.

SUNFISH - In good cond, fiberglass, trailer for right price. 286-9257 after 6.

HOUSE/APT - Furnished 2 bedrm for month of June. 744-2594 after 6 or weekends.

BIKE RACK - For car, used, cheap. Ext. 2445.

LAWN CHAIRS - Wooden. Marjorie, Ext. 3369.

HOUSE/APT - To rent or sit, 2 bedrm. 473-6900 between 9 & 5.

USED ITEMS - For Cub Scout Fair, used clothing, books, games, toys, other attic treasures. Ext. 3887, 286-0353 or 286-1255 after 6.

BABYSITTER - For 6 yr old boy, Fri-Sat, 5-10 pm, must have own transportation. 281-4397.

UPRIGHT VACUUM CLEANER - Or used Electrolux in good working cond, can be old as long as it works well & reasonably priced. Ext. 3156.

POOL COVER - 24' round above ground, good cond, reasonable. Ext. 4532.

MENS BICYCLE - 3-speed, good cond. J. Olson, Ext. 3382. 289-8629.

GOLF CLUBS - Set of second-hand irons & woods. Loretta, Ext. 3420, 234-6967 after 5.

CAR - Automatic, fair cond, \$150. Kathy, Ext. 3857, 281-4705 after 5.

SLICING MACHINE - Electric; 2 old storm sashes. Ext. 3146.

Car Pools

STONY BROOK - New employee desperately needs car pool beginning May 13. Ed Kaplan, Ext. 2007, 345-3070 eves.

CORAM/STRATHMORE EAST - North of Pine Rd, share rides or ride only. Joe, Ext. 2063.

Lost & Found

FOUND - Woman's sneaker & sock for right foot in parking lot near Bldg 120. Mon-Thurs, Ext. 2441.

LOST - Set of carpet installation tools in vicinity of either Personnel or Staff Services on Thurs, Apr 28, reward. Bonnie, Ext. 4512.

Services

YARD SALE - May 7 & 8, 177 North Wading River Road, Wading River (¼ mi east of Little Flower).

TILT BED TRAILER - For tractor or cars, excel cond, 4000 lb cap. Paul, 744-3807.

ALUMINUM SIDING - Gutters, windows, doors installed. 368-0538.

ASPHALT PAVING - Driveways sealed. Bob, 475-4382.

VW MECHANIC - All work guaranteed, good rates. Pete, 281-0268.

ROTOTILLING - Reasonable. Ken, 289-8212.

TREE REMOVAL - Cord wood. Ken, 289-8212.

DRYWELLS INSTALLED - Reasonable. Mike, 289-5704 after 5.

AUTO BODY - Parts & painting. Lou, 727-9669.

YARDS - Cellars, garages cleaned. 727-1329.

YARD SALE - Large yard & garage sale, Fri & Sat, May 7th & 8th, N. Halsey Manor Rd, Manorville, 1 mile off Exit 70.

FRAMING - Complete custom framing, reasonable prices, results guaranteed, 15% artist, 50% group discounts, home service also. Ext. 4046 or 744-0591 after 6.

DOMESTIC WORK - Mrs. O'Connell, 744-5821.

GENERAL HOUSEKEEPING - Doreen Bell, 732-1097.

BABYSITTING - Doreen Bell. 732-1097.

ROTOTILLING - Modest rates. Bob, 732-9517.

TREWORK - Removal, pruning, topping, stumps, best prices. Paul, 744-3807.