

## A House That Saves Energy

A house is being built on site. Not a futuristic, way-out kind of house, but an everyday sort. The difference is that this house is being built with better construction techniques and incorporates many new energy conserving ideas that are presently available and economically feasible. The house will be ready for inspection next to Berkner Hall at Brookhaven's Energy Fair May 12-16.

It has been called the "Arkansas Energy Conservation House" because a builder in that state pioneered the techniques and worked with the Department of Housing and Urban Development (HUD) in Little Rock on experimental homes in that area. When the energy crisis became apparent, there was an accelerated interest in these homes. There were eight plans available, most of them one-story houses, and in Arkansas, HUD gave funding and technical assistance to any builder who followed the plans.

The Long Island Builders Institute is cooperating with the Laboratory in building this house on site for the energy fair. It will be the only house of its kind on the East Coast.

What makes this house unique? For one thing, it uses 2" x 6" studs in wall construction which are 50% larger than those in general use. With the larger studs, thicker thermal insulation can be installed - approximately 6" instead of 3 1/2". Insulation is a major factor in the design.

There is a reduction in the area space of windows and more thought given to the placement. The east and north sides of the house have the smallest amount of window space and the south and west a moderate amount. One of the windows will be a thermally improved type, designed by the Energy Storage and Conversion group at Brookhaven, which will have aluminized mylar strips running horizontally between the thicknesses of glass, spaced every one-half inch, rather like a venetian blind, the length of the window. It will be made so that the entire assembly can be removed from the frame and various other windows inserted and compared for heat loss.

The plumbing is centralized. In the case of the Brookhaven house, it will be built in the middle of the house. The practical application of the electrical wiring is unique; the wiring will run along the floor stud plate so that it does not compress insulation, or interfere with the thermal design of the wall structure.

The house is equipped with a heat pump for both heating and cooling, which can be very efficient in this house because of the insulation. Many motel rooms have the heat pump system and most people are familiar with the panel of buttons in those rooms which indicate either heat or air conditioning, and varying degrees of same.

Landscaping, besides being decorative, can also be a key factor in energy conservation. For instance, tall trees on the north side of a house act as windbreakers.

Bruce Morrison, who is in charge of energy conservation programs for Owens-Corning Fiberglas Corp., is coordinating the construction of the house at Brookhaven. He has an office in the Administration Building and can be contacted on extension 3314 for further information or comments.

Past experience in Arkansas indicated a 60% energy savings in this house. On Long Island, because of the difference in climate, "we are looking for about 50% reduction in heating and cooling costs," says Morrison.

The house is being built on a concrete block foundation so that it can be removed to another location on site after the fair. It will then be occupied and extensively monitored for energy use and performance over the next 12 months.

### French Film

The film "Forbidden Games" (Les Jeux Interdits) will be shown at Berkner Hall on Friday, April 9, at 8 p.m. The film is in French with English subtitles. Sponsored by the French Group of BNL, the presentation is open to all members of the BNL community, but those who are not members of the French Group will be asked for a \$2 donation (\$1 for students). Following the film, refreshments will be served.



The Japanese National Laboratory for High Energy Physics near Mt. Tsukuba.

## Proton Accelerator A Success in Japan

The high energy community has received word that the Japanese high energy proton accelerator at Tsukuba attained not only its initial design energy of 8 GeV, but on March 19 reached an energy of 10 GeV. With the addition of greater capacity for the accelerator power supply and water cooling for magnets, an ultimate design energy of 12 GeV is expected to be just around the corner.

The accelerator laboratory, known as KEK, Ko Enerugi Kenkyusho (High Energy Laboratory), and located about 60 kilometers northeast of Tokyo, will be formally dedicated on April 24, culminating a decade of intensive planning and work. Although design studies were begun in 1964, actual construction did not start until 1971. The original intention of building a 40 GeV synchrotron for 100 million dollars in the 1960's met the same fate as did similar proposals in France, Britain and Germany. Although the KEK accelerator is in the same energy range as the ZGS at Argonne, it should provide higher quality and more intense secondary beams since it is a strong focusing machine with a particularly simple separate function lattice design.

So far, the construction program is on schedule. For the immediate future it is planned to have a 4 GeV  $\pi^-$  beam from an internal target by July 1976, as well as a fast external beam for the already operational one-meter hydrogen bubble chamber. A slow beam has been designed, and start-up of counter experiments is scheduled for July 1977.

The success of the accelerator is particularly gratifying to the Brookhaven physicists who have worked on the project in Japan and with visiting Japanese scientists at Brookhaven. In particular, Theo Sluyters, Per Dahl and Roy Blumberg of the Accelerator Department and Satoshi Ozaki of Physics have been directly involved with the accelerator and have spent time at the Japanese laboratory. Blumberg recently returned to Brookhaven after spending four months at the KEK site with his family. His three daughters all attended Japanese schools. Professor T. Nishikawa, who is now chairman of the KEK Accelerator Department, spent the years 1964-65 here as a visiting scientist with the advanced accelerator design group.

The 2 square kilometer accelerator site is adequate for future planned expansion with the present accelerator used as an injector into high energy proton storage rings. In addition, the University of Tokyo has proposed construction of a 2 GeV electron linear accelerator at the site, primarily for injection into an electron storage ring where use will be made of the synchrotron radiation produced by the circulating electron beam for molecular and solid state physics studies.

The preliminary design work for this machine has been underway for several

years at the Institute for Nuclear Studies of Tokyo University and funding is proposed for the current fiscal year. The proposal is presently under study by the Japanese government. — Leroy Blumberg

## Recombining DNA

"Gene Swapping" will be the subject of the 135th BNL Lecture by Jane K. Setlow, Biology Department, on April 21 at 8:00 p.m. in Berkner Hall.

Living creatures have developed clever ways to exchange genes with each other, a process that contributes to the diversity, and thus, the adaptability of plants, animals and lower forms of life. They have also developed ways to exclude genetic material that is very different from their own. Exchange of genes in DNA can be readily investigated in bacteria, because with such systems it is simple to use molecular biology techniques such as radioactive and density



Jane K. Setlow

labeling of the DNA, velocity and equilibrium centrifugation.

Setlow says that what may be concluded from such studies is that most DNA recombination involves pairing of DNA from two different microorganisms which is almost, but not totally, homologous. Other DNA which is not as homologous may be excluded.

What the cell cannot do with DNA that comes from a very different creature, the biochemist can now do with the aid of enzymes from bacteria called restriction enzymes. The biochemist can recombine DNA from any creature with DNA from any other creature.

Setlow indicates that although there are a host of technical problems at present which prevent us from making a purple cow with a giraffe's neck that can carry out photosynthesis, it is expected that in the future this technique will be of tremendous importance in agriculture and in medicine. At the same time, many individuals are worried that the scientists using this technique will cause a fearful disaster to befall

(Continued on page 2)



Concrete blocks coated with Bloc-Bond, a bonding agent which eliminates the need of mortar joints, was tested for strength and demonstrated that it was able to sustain its own weight. It will be used for structural framing in the exhibit house. From left, Bruce Morrison, Associate Director Vincent O'Leary, Walt Milian and Lou Harson of Plant Engineering.

# From The Frying Pan To The Fire

At a recent accident on site, when a truck was overturned, a diminutive figure in fire-fighter's garb was on hand hauling fire hose and extinguisher. Under the big hat, the rather large coat and in the outsize boots was Joanne DeLise, the first woman fire-fighter at Brookhaven. This was her first day on the job as a full-fledged firefighter.

She didn't just suddenly wake up one morning and decide she was going to be a firefighter at Brookhaven. She has been a volunteer member of the Nissequogue Fire Department for three years and is a certified Emergency Medical Technician. But she did decide one day that she would like to make firefighting her career. After hearing about an opening at the Laboratory, she applied for it and was hired. "I'm not the sort of person who likes to sit around inside," she says, "and firefighting is exactly what I want to do."

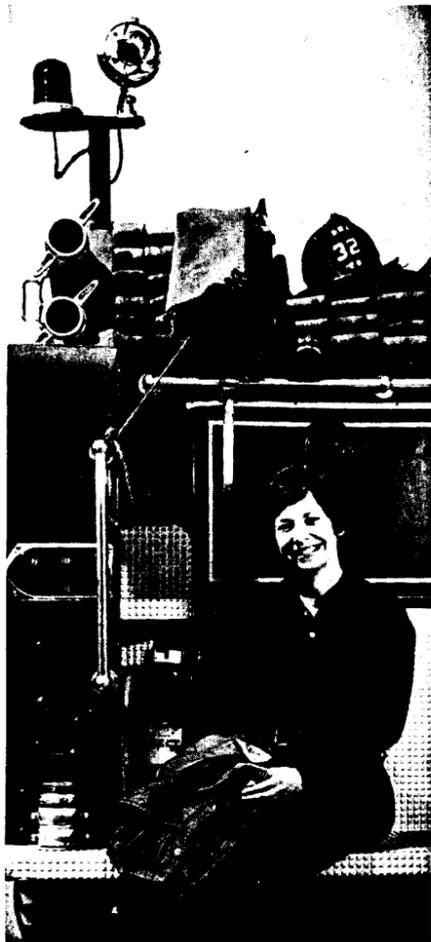
Joanne, 35, is married and has five children ranging in age from 15 to 4, four of whom are girls. A housewife for many years, she has always been interested in doing a lot of other things, not just so-called "women's work." She hopes her daughters will feel the same way. "If one decides she wants to be a plumber, then that's just fine," she says. Her family is used to her whipping out of the house on a fire call, and her husband is also a volunteer fireman.

Though physical strength is an advantage on the job, and she is a small woman, Joanne says it requires more effort from her than from a man, but she can handle it. She has kept in top form by being an avid sports lover and participates in many on a regular basis.

Joanne started her training on January 19 of this year with another new member of the Fire Department, William Leigh-Manuelli. She is glad they started as a team. "It would have been harder if I'd started alone," she says. She was quite aware that being the first woman in a previously all-man fire department would not be all fun and games, but, she says, "I really didn't have as much trouble as I thought I would." There has been a lot of cooperation from the other firefighters and by now everyone seems to have accepted the situation.

Leigh-Manuelli is 24 years old, and according to Joanne, he was a big help to her in the difficult first weeks. He has been conversant with fire departments since the age of eight, starting out as a member of the West Sayville Jr. Fire Department. At age 17 he joined the regulars and is now Captain of Engine Co. #1 in that area. He is a member of the West Sayville racing team that won last year's state championship. Even in the Army he continued his fire fighting career. He was chief of the fire department on a NATO base in Germany. Leigh-Manuelli also holds an Associate's degree in Fire Technology from Suffolk Community College.

She and Leigh-Manuelli are on the Red shift. There are three - Red, White and Blue. The shifts operate seven days a week, with 24 hours on and 48 hours off. Joanne



Joanne DeLise

finds these hours ideal for blending in with her family responsibilities.

Little by little, women are being accepted in fire departments around Long Island, particularly in the smaller communities where the women are usually the only ones around during the day. In Nissequogue there are three other women besides Joanne fighting fires and 17 women on the ambulance squad. Proper gear is a problem and women have to fit in the smaller men's sizes. Designers have not yet got around to creating fire fighting clothes for women.

Joanne DeLise looks on her new career as a job she wants to do well. "I don't want to be the Mary Poppins of the Fire Department," she says, "I just want to fit in as a regular firefighter."



William Leigh-Manuelli



First day on the job as a career firefighter, Joanne DeLise (right) holds the fire extinguisher at the ready in case of fire from a gas leak in the overturned truck.

## Setlow Lecture (Continued)

mankind. As a consequence, many nations have set up committees to attempt to decide how the new technique may be used safely.

With her husband, Richard, Jane Setlow joined the Biology staff of the Laboratory in the fall of 1974 after spending 14 years as a biologist at Oak Ridge National Laboratory. She is a Senior Geneticist but considers herself more properly a molecular biologist. She received her Ph.D. in biophysics from Yale in 1960 and is the current president of the Biophysical Society.

A buffet 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.

## Answers To What Did He Say? (April 2)

1. Many hands make light work.
2. Look before you leap.
3. Silence is golden.
4. Beggars can't be choosers.
5. Make love not war.

## A Birthday Party

The theme of the next Hospitality Committee Tea and Sherry Party, to be held on Thursday, May 6, at the Brookhaven Center, is "Happy Birthday America."

We are looking for arts, crafts and antiques to exhibit at the Tea. If you can lend us any exhibition pieces that deal with colonial America, or if you know anyone who can, please let us know. We will handle all loaned articles with great care.

If you would like to help, call Lela Radeka, 286-0854; Stephanie Morris, 981-8370; Lucy Kinne, 941-9352; or Ruth Dimmler, 751-6342.

## Cooking Exchange

"Salads" will be our subject on Wednesday, April 14. Come and try some new and unusual recipes as well as old favorites with exotic touches. How about avocado and papaya? Or pear-creme de menthe mold? Or perhaps Russian chicken salad Olivier?

That's Wednesday, April 14, at 12:30 p.m. in the Recreation Building. You'll be delighted!

## Arrivals & Departures

### Arrivals

Arlene F. Benkenstein ..... Plant Engr.  
Joseph F. Fortugno ..... Plant Engr.  
Keiji Igi ..... Physics  
Anthony A. Kossiakoff ..... Biology  
Charles P. La Salla ..... Plant Engr.  
Jean-Louis Lemaire ..... Accelerator  
Ira Snapper ..... Applied Science

### Departures

Richard L. Klobuchar ..... Chemistry

## Cafeteria Menu

### Week Ending April 16, 1976

**Monday, April 12**  
Tomato Bouillon  
Franks & Baked Beans 1.00  
Barbecued Fresh Ham & 1 veg. 1.30

**Tuesday, April 13**  
Cream of Chicken Soup  
Chopped Steak & 1 veg. 1.05  
Chinese Pepper Steak on rice 1.25

**Wednesday, April 14**  
Shrimp Chow Mein on rice 1.10

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

**Thursday, April 15**  
Puree of Mongol  
Spanish Omelet & fr. fr. 1.10  
Short Ribs of Beef & 1 veg. 1.30

**Friday, April 16**  
Clam & Celery Soup  
Seafood Cakes & Spaghetti 1.05  
Pot Roast & 1 veg. 1.30

## Official & Special Events

**Monday, April 12**  
ERDA Solid State Physics Materials Science Program Review (April 12-13)  
**Tuesday, April 13**  
Special Librarian Association Meeting  
**Wednesday, April 14**  
Navy Meeting  
**Thursday, April 15**  
Passover

**Sunday, April 18**  
Easter  
**Wednesday, April 21**  
BNL Lecture - Jane Setlow - Berkner Hall - 8 p.m.  
**Thursday, April 22**  
Transportation of Radioactive Materials Meeting - Room B, Berkner Hall  
East Stroudsburg State College Tour  
**Friday, April 23**  
US Military Academy Cadets Tour

## Get It Together

The Badminton Group will wind up the season with a get-together at the Recreation Hall at 5:30 p.m. on Thursday, April 15.

John Elmore has been able to obtain an excellent film of men's singles and doubles of tournament badminton. All are welcome. Be sure to bring your own refreshments.

## New Apprentice



Joseph Buscemi has been selected as an air conditioning and refrigeration apprentice to replace Donna White who has withdrawn from the program for personal reasons. Buscemi, who is 29 years old, has been at the Laboratory since November 1974 and has been employed as a custodian. He is an army Viet Nam veteran and lives with his wife and child in Selden. He will start on-the-job training April 19.

## Bike Tour Date Change

The beginners bike tour planned for Sunday April 18, has been changed to Sunday, April 25th (rain date May 2nd). Bring a lunch, meet at Berkner Hall at noon sharp, lunch at Wildwood Park and return past the Shoreham reactor. Total distance is about 25 miles, time 3 to 4 hours. Contact Gerry Morgan, Bldg. 815, Ext. 4841.

## Tennis News

BNL has been invited to form a team to play mens' doubles in the Long Island Industrial Recreation Association Tennis League. There will be 15 matches over a period of 18 weeks requiring 6 players for each match. The games will be scheduled on various days, Monday through Thursday at 6 p.m. Each match will last 2 hours and consist of 3 sets. The winner of the match will be determined by team tennis scoring rules.

Those interested in joining the team should contact one of the tennis committee members before April 14. It is hoped that 11 or 12 players can be found so that no one will be committed to play all 15 matches.

### Tennis Committee

Allan Auskern	3049
John Elmore	3626
Eena Mai Franz	4337
Tom Koetzle	4384
Tom Luhman	3525
Larry Passel	3825
Edward Platner	3922
Marge Stoekel	2459
Gail Williams	3336

**BROOKHAVEN BULLETIN**

**Week Of The Young Child at Upton Nursery School**

Published Weekly for the Employees of Brookhaven National Laboratory

BERNICE PETERSEN, Editor

DOUG HUMPHREY, Photo-Journalist

CAROL PETRAITIS, Copy Preparation

40 Brookhaven Ave. Upton, N.Y. 11973  
Telephone 516 345-2345

CARL R. THIEN, Public Relations Officer

**In Memoriam**

Diane O. Sautkulis, 27 years old, who was a Guest Research Assistant in Biology since 1970, and earlier this year transferred to the Medical Department, died on April 5. She is survived by her husband, Richard, who is on the professional staff of the Biology Department.

**Letters To The Editor**

To the Editor:  
As an old miner myself I was quite interested in the article entitled "Keeping The Roof Up 1000 Feet Down." I had quite a lot of experience with injuries sustained by miners being caught under falling roofs. My position in the mine was as a motorman on the long haul to the foot of the mine, a one-way trip of nearly four miles. In addition to being a motorman I was also a crew chief of a safety crew. My first experience with a fatal accident was on my first day on the job back in 1926. On a Monday morning three of us started to work at 7:00 a.m. I as a blacksmith helper, the second one as a mucker (a man who loads cars) and the third as a pump man, whose job was to put the suction hoses in the low spots where the water collected under low roof so the working areas could be pumped dry. This individual was doing his job when the roof fell in and killed him. I helped jack the fallen rock and we pulled his body clear. It was quite a shock to me at the time but I stayed on the job for four years and during that time helped another eight men out; one more fatality, the others with broken arms, legs and one with a broken pelvis. This was before expansion bolts. We used mine props then and even then the roof collapsed leaving the prop standing. You might ask why did I stay? A matter of economics. I was making ten dollars a day when standard wages were four dollars a day, as simple as that. Maybe I'm a fatalist but I've survived some serious heart attacks, had to retire 16 years ago, am now 76, a veteran of two wars, an ex-flier of World War I and an instructor in tanks World War II.

Enjoy the *Bulletin*. Best regards to my friends.  
Respectfully,  
Bill Ware, Sr.  
Life #497

P.S. I ride a bike 100 miles a month, play golf twice a week, walk at least four miles a day and I feel fine. And as Satch Paige used to say, "Don't look back or the devil will catch up to you."

**Nets Playoff Tickets**

Tickets for the 4th home game of the Nets playoff series are now on sale at the BERA Sales & Services Office.

A group sales price of \$3.00 for \$7.00 tickets was made possible through the Long Island Industrial Recreation Association. There is no limit on the number of tickets you may buy. Sales deadline is April 22.

**Volleyball**

Joe Mead

**Men's League Results  
Week of March 31**

Easy Aces	2	Cool Tools	1
Circuits	3	Atom Spikers	0
Spikers	3	Busters	0

**Men's League Standings**

	Won	Lost
Spikers	23	4
Cool Tools	19	8
Atom Spikers	14	13
Easy Aces	9	18
Busters	8	19
Circuits	5	22

**Mixed League Results  
Week of March 29**

	Won	Lost
Trolls	41	7
Terabits	40	8
Diamonds	28	20
Nuts & Bolts	25	23
Set Ups	24	24
Spikers	18	30
Medicine Ballers	10	38
High Balls	6	42



"Construction engineer" Steven Fuller and his creation which, according to nursery school rules, cannot be built higher than his chin. Parents were invited to visit the school yesterday and today to observe the children and their activities.



Anne Hsieh and Ping Ping Lin

**Slo-Break Basketball**

Dr. K

In the first game of the double-header on March 17, the Browns were defeated by the Persuaders in the last two minutes of the game 65-56. The scoring for the Browns was provided by the "Moose" with 32 points and Les Lawrence with 12. Greg Donaldson and Wayne Smith led the Persuaders with 16 and 13 points, respectively. Leroy James, Brant Johnson and Jim Garrison all got an even dozen of points.

In the second game, despite excellent play in the first half, the Condors were defeated by the Spuds 65-61. The Spuds were paced by Bob Doty and Jeff Gaffney with 21 and 28 points, respectively. The Condors had five men in double figures - Jim Vaughn (14 points), Mac Thomas (10 points), Mike Dagg (12 points), Dr. K (10 points) and Bob Brown, who played his best game (13 points).

In the last game of the season on April 1, the Browns defeated the Condors in overtime, 75-71. This time the "Moose" pulverized Dr. K and Mac Thomas who guarded him and scored 47 points. Gordon Smith and Bob Schumann put in 11 and 8 points, respectively. The Condors had four men in double figures - Mac Thomas (17 points), Mike Dagg (18), Dr. K (18) and Jim Vaughn (16).

The last game for the league leaders was an exciting one. Although the lead changed hands several times, the Persuaders were not to be denied defeating the Spuds 54 to 53 on a last second 30-footer by Leroy James. Bob Doty and Jeff Gaffney paced the Spuds with 13 and 17 points, respectively. Dick Sutter played excellent ball and scored 12 points. The Persuaders in double figures were Gregg Donaldson (17), Wayne Smith (12) and Brant Johnson (10).

**Final Standings (Second Half)**

	Won	Lost
Persuaders	7	1
Spuds*	5	3
Browns	3	5
Condors	1	7

\*First Half Champs



Katy Bieber and Heather Lynn



Andrea Trondle and Tracy Gangwer



Mai-Britte Beerman

**Golf League**

An organizational meeting will be held today, Friday, April 9, at 5:00 p.m. in the Recreation Building to discuss the coming golf season.

Those who have received membership applications may return them at the meeting or any time before April 16 to Herman Vargo, Building 515. Prospective new members can receive information about joining the league by coming to the meeting or calling Tony Baltz, Ed O'Connell or Herman Vargo.

To encourage attendance at the meeting, refreshments will be provided.

**Scotch Doubles Tournament**

The annual Scotch Doubles Bowling Tournament is set for Saturday, May 1, from 2:00 to 6:00 p.m., at the Port Jeff Bowl.

**The Rules**

1. A team will consist of two bowlers, one male and one female. At least one member of each team must be a BNL employee (per BERA definition).
2. The tournament will consist of 4 games per team. Each team will bowl a single score for each game with the team members alternating balls rolled. The first ball to start each game will be rolled by the female member of the team.
3. Team handicap will be determined by averaging the two bowlers' handicaps calculated from the regular season BNL League rules (80% of the difference between bowler's average and 200).
  - a. Bowlers in BNL League this season use BNL averages as of March 27, 1976.
  - b. Bowlers not in BNL Leagues this season use highest current average as of March 27, 1976.
  - c. Bowlers without current averages may use some earlier averages. (Check with Tournament Committee for applicable rules.)
  - d. Bowlers with no averages will be assigned blind scores for handicap purposes;

**Bowling News**

Cathy Van Noy

**Pink League**

The "Pinsplitters" have edged a nice lead against the second place "Spare" who are 8 points out of first. Nice games were rolled by Cathy Van Noy 179-213-536 series, Noelwah Netusil 178, Betty Jellett 169, Joyce Vail 167, Marie Brenner 165, Alice Alberico 155, Rosalie Piccione 152, Renie Rosati 151 and Grace Fales 150. Cathy also converted the 4-10 split and Marie converted the 4-8.

**Black N Blue League**

The "Good Guys" are still in the lead with the "Question Marks," "Maybes," "Nocounts" and the "Fudpuckers" close behind. High games were Debbie Antonio 170, Ellie Murgatroyd 164, Mary Austin 163. Pots were won by Bill Sells 227 and Ellen Jacobson 225.

**Red League**

The league is still fairly close together as we enter the last month of bowling. A nice night for Ralph Nelson with a 236 and 584 scratch. Other 200 games were R. Jones 211, J. Scesny 211, R. Adams 203, C. Buzzeo 203, E. Meier 203, J. Roesler 203, R. Meier 202, M. Punda 201 and S. Kiss 200.

**Green League**

The "Got-A-Hit-Ums" still maintain first place as they took eight from the "Super Cools" which dropped the "Charley Browns" took eight from the "Old Timers." The "Blue Jays" moved into third by taking eleven from the "Bubble Boys." L. Chirco won his club award with a nice 694 gross series. 200 games by D. Plows 200, V. Bilms 202 and L. Chirco 210.

**Purple and White League**

Standings remain the same as the "Alley Oops" maintain their three point lead over the "Flounders" and the "Sea Gulls." The "Sea Gulls" had a great night led by "Super Sub" Danny Klein and "steady" Betty Roche. The Gulls gained a new league high with a 916 team game and 2591 team series. Danny led the team with a 235 593 scratch and a 291 761 gross to win his club award. Betty rolled a 200-199-559 and a 681 for her club award. Other nice games were rolled by Marge Belligan 163, Linda Asselta and Gail Thompson 162, Ed Sperry 201-208-568, Ben Belligan 204-547, John Usher 215-544, Ken Asselta 220, Art Lippman 214 and Marshall Bull 211.

**Highlights of LI Industrial Tournament**

With all of the excitement of winning the trophy, I forgot to report the nice games that were bowled the last two weeks of the tournament. In the third week Ed Meier rolled a 210, R. Jones 185, E. Sperry 191, R. Nelson 195 and Joe Scesny 193-235-202-630. The final week Ed Meier 180-218, Bob Jones 224, Ed Sperry 236-191 and a 606 series and Joe Scesny 212.

Beautiful bowling fellas.

110 for women and 140 for men.

4. Trophies and substantial prizes will be awarded to the top five teams, and souvenirs will be given to all team members. Prizes will be based on the actual number of team entries, and announced prior to the beginning of the tournament. There will be no ABC or WIBC prizes.

5. Team entry fee is \$10.00 which includes the cost of bowling. Entry blank and fee must be presented at the BERA Sales & Services Office in the Cafeteria not later than 2:30 p.m. on Friday, April 23, 1976. No entries will be accepted after the first 64 have been received. The fee is non-refundable; only in the event that the minimum number of team entries (30) is not reached will the fee be refunded and the tournament called off. Teams not present and ready to bowl at the start of the tournament will forfeit the team fee.

6. The rules of the BNL Bowling Association are adopted for this tournament except as otherwise stated herein. Entrants are responsible for familiarizing themselves with tournament rules.

7. Decisions of the Tournament Committee will be final.

8. Matchmaker Service, call Cathy Van Noy, extension 2456, or Marie Brenner, extension 2457.

9. For additional information call Irving Montanez, Tournament Chairman, extension 3582/3553.

## Classified Advertisements

### Autos & Auto Supplies

74 CAPRI - 14 months old, 12,000 mi, am/fm, 8 track stereo, 4 spd, 27 mpg, show room cond. \$2850. Ext. 4255, 929-4450.

68 FORD STATION WAGON - Country sedan, auto, ps/pb, radio, air. \$495. David, Ext. 3501, 286-8097 after 6.

65 SAAB - 57,000 mi, economical motoring for only \$495 or offer. David, Ext. 3501, 286-8097 after 6.

KARCKECK TACH & DWELL - \$5; Bosch tune up kit for VW 1500 beetle, \$5. Fred, Ext. 4597.

72 CAMARO 350 - Dark green, tan top, sb radials, ac/ps, pos trac, mint cond. \$2800. L. Suydam, 345-3027 after 5.

70 VALIANT - 4 dr, automatic, very good cond, w/ snows. Nancy, 722-3387 after 5:30.

76 BUICK - Century custom, white w/red interior, radials, mags, am/fm stereo tape deck, ac, Hearst hatch sun roof. \$5500. 981-5993 after 6.

68 VW BUS - 81,000 mi, very good cond, 1 owner, reliable, reasonable, on-site Fri. O'Brien, Ext. 2271.

70 TOYOTA MARK II - Well maintained, good econ transportation, am/fm radio, auto trans. \$1000 or best offer. Rich, Ext. 3588.

73 SUPER BEETLE - Am/fm stereo, 28,000 mi. \$2100. Joe, Ext. 3696.

67 VW - W/73 engine, needs brakes but otherwise mint. \$600. Steve, 669-5838 after 6.

2 TIRES - F78-14, brand new Dunlop snows on Mercedes rims at 1/2 price. \$30 ea. 473-0599.

73 JEEP WAGONEER - V8, 4 wheel drive, 4 dr, pb/at/ps/ac, tinted glass, luggage rack, deluxe interior & exterior, excel cond. 20,000 mi. 654-0863.

71 YAMAHA DTIE - 250 cc Enduro in good cond, extra tires & fenders. \$365. P. Hichborn, 929-4133.

72 MIDGET - 36,000 mi, am/fm, tonneau, new clutch, new brakes, excel cond, blue w/tan interior & floor mats, garaged. \$1800. Lorraine, Ext. 3595/3640.

73 BLAZER - 4 wheel drive, 350 V8, 10x15 white spoke rims, am/fm tape, excel cond. 281-4808 after 6.

71 TOYOTA COROLLA - New clutch, tires, carburetor, body in good cond. \$700. Steve, Ext. 4008.

2 TIRES - E70-14, raised white lettering, like new, used 2 months. 589-1069.

63 CHEVY BELAIRE - 2 dr, 6 cyl, standard, economical transportation. Ext. 3146, 325-1961.

64 JEEP WAGONEER - 4 wheel drive, new 3 spd trans, recent paint, good cond. \$800. Roger, 286-9197.

74 HONDA XL 70 - Road & dirt. \$390. Bob, 744-7170 after 6.

71 CHEVELLE - 350, 4 spd, am/fm, mags, black w/black interior, excel cond. Asking \$2500. Bill, 298-4204.

69 HONDA - CB 160, very clean, red, low mi, \$300 firm. Gene, Ext. 4670, 744-3945.

67 LINCOLN - No dents or rust, good engine, good tires. \$500. Ext. 4615, 744-6482.

73 VEGA - 3 spd manual trans, 8 track, am radio, asking \$1350. 475-8724.

69 CHEVY IMPALA - Very good cond. \$850. Frank, 929-8317.

69 AMERICAN WAGON - 6 cyl, excel gas mi, very good cond, no rust, etc. \$950. John, Ext. 4666, 324-0220.

RIMS - (2) VW, \$7; (2) 13", \$5. O. Booker, Ext. 4719.

72 YAMAHA 175 CC - Street or dirt, street legal, under 2000 mi, \$400 or best offer. Frank, Ext. 4095.

TIRES - Recaps & used, most sizes, extra rims available. Ken, 289-8212 eves.

69 VW SEATS - & interior. \$40; many other parts. 589-9103.

73 SEDAN DE VILLE - \$3700. Gwathney, Ext. 2238.

2 RIMS - Plymouth Fury, \$3 ea. Jim, Ext. 2012, 472-0136.

66 PONTIAC - Bonneville, excel cond. \$450. 286-8249.

2 SNOW TIRES - 8.55x15, 1/4" thread, \$35. Bob, Ext. 4551.

69 AMC AMBASSADOR - 4 dr, 343 cid, ps/pb/ac, good shape, good gas mi, uses no oil. Asking \$675. Ernie, Ext. 4255.

71 PINTO - Runabout, 4 spd standard, green, am/fm radio, excel cond. Asking \$950. 475-1485 after 4.

73 PINTO - Station wagon, standard 4 spd, 26 mpg, Jim Nekerman, Ext. 4810.

72 CHEVY - Custom camper, 3/4 ton, 350 eng, 4 wheel drive. \$2800. Pat, 744-8425 after 6.

2 SNOW TIRES - Goodyear polyglass belted, L78x15, mounted on GM wheels, used 1 season. \$75. Ext. 3828, 751-7250.

68 JAVELIN - Auto trans, ps, good running cond, clean body, 2 dr hdtip. \$495. Ext. 3156.

74 DATSUN 610 - 4 dr sedan, ac, am/fm, reclining bucket seats, 110 hp eng, new paint, new steel radial tires. Asking \$3700. 744-2404.

73 OLDS TORONADO - 23,000 mi, fully equipped. \$3800. 472-0531.

75 KAWASAKI K2 - 1800 mi, luggage rack, crash bars, 2 helmets, leather jacket. \$1100 firm. Roger, 732-9815.

66 CHECKER MARATHON - New tires, jump seats. \$375. Ext. 3688.

### Boats & Marine Supplies

17' SAIL BOAT - Planing hull, mobjack class, main, jib, spinnaker & trapeze w/trailer, excel racing cond. Asking \$1100. Joe, Ext. 4069.

23' INCA IMP - 73, 225 hp OMC eng, in & out board, convertible w/camper top. \$7300. 475-2253, 249-7665 after 6:30.

17' AMERICAN FINN - Lapstrake, needs repair, good for handyman. \$100 w/50 hp Johnson motor, \$250. Mona, Ext. 3747.

O'DAY DAYSAILER II - Outboard, trailer, mooring, winter cover, used only 5 hrs. \$3000. J. Ballard, 929-6830.

15' GLASS OVER PLYWOOD - In water, hull sound, cabin poor. \$60. Levine, 929-8725.

18' THOMPSON OUTBOARD - No motor, needs paint. \$125. 878-2860.

23' PEMBROKE - Sportfisherman, flying bridge, d/f, canvas, 6 cyl, extras, good cond. \$1500. Laird, Ext. 4068, 298-5092.

74 STARCRAFT - 16' aluminum boat & galvanized trailer, excel. \$700. 589-9103.

25' OWENS - Cabin cruiser, sleeps 5, 283 flagship engine, accessories, very good cond. Fred, 281-6468 eves & weekends.

34' BALTZER - 1953, twin 125 Chrysler crown engine, camper back, excel family or fishing boat. \$3700. 331-1718.

### Miscellaneous

LIVING RM SET - Old fashioned, couch & 2 chairs, hand carved, heavy & clean. \$100 firm. 727-1617.

40'S SPARTON RADIO - W/police short wave, 78 auto, record player, mahogany, but painted, 34x16x29. \$25. 727-1617.

AUTOMATIC WASHER - Sanyo, 7 lb capacity, brand new. \$125. 281-8497 after 5.

SINGER SEWING MACHINE - 60 yrs old, foot pedal model, in working cond, cabinet needs work. \$60. Bob, Ext. 4551, 289-2159.

RECLINING CHAIR - In near perfect cond except for a few tears in vinyl. Bob, Ext. 4551, 289-2159.

COFFEE TABLE - Mahogany w/leather top; Tennis racket, Davis Imperial, excel cond. Rudy, 751-3883 after 6.

HONDA CT 70 - 72 cc, mini trail, excel cond. \$250. Ext. 3676, 727-3869 after 5.

73 DODGE MINI MOTOR HOME - Tioga, 18', completely self-contained, mint cond. Asking \$7500. Arnie Kreisberg, 289-1870 after 5.

BOOKS - Used physics & math texts, good cond. Adam, Ext. 3241 eves.

COFFEE TABLE - Pennsylvania House dark pine, best offer. 698-5818 after 6.

LAVENDER PANTS SUIT - W/white trim, never worn, size 10-12; blue/green long gown, size 12. 698-5818 after 6.

DRAPES - Triple width, 84" long, gold w/matching valence, also choc brown sheer panel, new, still in pkg. \$60 for all. Gail T, Ext. 2902.

ROLLER RINK SKATES - Ladies Arrow size 8, all leather, padded tongue, like new w/case. \$25. Steve, Ext. 3469.

LIGHT FIXTURES - \$4 & \$5, plant hangers, \$3 each; spring coat, size 14, \$10. 744-5871.

BLAZER - Blue, good cond, size 12, \$4; melon spring coat, size 12, \$10. Ext. 3609.

SHOES - Men's 9M, brand new, \$15; never worn shirts, l.s. 15-33; l.s. 15-34; h.s. 15. \$3 each. Ext. 3609.

CHESAPEAKE BAY RETRIEVER - Female, 7 wks old, champion sire, champion dam. 698-1176 after 6.

35 MM DARK RM EQUIP - Enlarger trays, etc. \$50; Novaflex 35 mm bellows close up lens, \$50. Fred, Ext. 4597.

FREE PUPPY - Shepherd terrier. 924-7143.

CRIB - Good cond, \$10. 924-7079.

GE PORTABLE TV - 12", excel cond. \$40. Fred, Ext. 4597.

23" ZENITH B&W TV - UHF/VHF, small console, good picture, will deliver to your door. \$50. Fred, Ext. 4597.

MEN'S BICYCLE - 25" Raleigh, Grand Prix, 10-speed racer, like new. \$125. 473-0178 eves.

2 AIR CONDITIONERS - 5000 btu, excel cond. \$50 each. Mani, Ext. 2456.

DINING RM SET - 9-piece contemporary, light walnut table, leaf, 4 chairs, china cabinet, buffet & mirror. \$290. 744-2821.

PORTABLE WASHING MACHINE - Kenmore, 2 spd, 3 cycle, large capacity, saves time & money, excel cond. \$125. 289-8167.

BEDRM SUITE - &/or furniture, good cond, negotiable price. 363-7119.

GRETCH ELEC GUITAR - W/case. \$125. Ext. 2534.

LAST CHANCE - To order sweet potato plants. Izzy, Ext. 3696.

FERTILIZER - 10-6-4, 50 lb bag, \$3.25. Izzy, Ext. 3696.

PA SYSTEM - 6 channel, sep controls, 8-12" speakers, excel cond. Asking \$525. 289-0753.

YORKSHIRE TERRIER - Male, AKC, health guarantee, sturdy toy breed, ready April 3. Daly, Ext. 2902, 475-2627 after 6.

SWIMMING POOL - 15'x42", brand new, still in boxes, includes: ladder, filter, skimmer, liner, cover. \$400. Joanna, 281-1983 after 5.

SHAKER REPRODUCTION - Pine hutch secretary, 82"x26"x48". \$395. 472-0136.

AIR CONDITIONER - Fedders, 10,000 btu, 7 1/2 amp, 110 V, excel cond. \$125. 472-0136.

EASTER EGGS - Wood, hand painted, \$1 ea. Mike, Ext. 4851.

KITCHENETTE - Table & 4 chairs; desk, wooden w/book shelves. Best offer. Jolie, Ext. 3723.

DINING RM SET - Antique mahogany, 6 high back chairs. Ext. 3688, 363-7032.

CORNER DESK - White; 5' electric baseboard heater; garage/workshop kerosene heater. Ext. 3688.

FISH TANK - 10 gallon, never used, in carton, fully guaranteed, Triton. \$5. 589-1069.

PRIME TOP SOIL - Walt Chornoma, 325-0567 after 5:30.

TENT - Attaches to van or free stands, \$100; dining canopy, 10x10, \$10; 473-9180 after 1.

PHONO CARTRIDGE - Shure V15 type 3, slightly used. \$40. Ext. 3828, 751-7250.

MOVIE CAMERA - Bell & Howell 8 mm w/sound, best offer. Mary, 281-0268.

TARGET RIFLE - Winchester model 70, cal 30-06, heavy barrel lyman sights, \$150; model 70 varmit rifle, cal 243. \$125. Both excel cond. Frank, Ext. 4581.

CABINET - Provincial style, for bar or stereo. \$60. 928-2560.

MEDICINE CABINET - \$7; green ceramic soap dish, toothpaste holder, toilet paper holder, \$5; bathrm sink. \$20. 928-2560.

REFRIGERATOR - Old model, good working cond. \$25. Levine, 929-8725.

PLAYPEN - W/matching mattress, mesh sides, 40"x40", good cond. \$20 or best offer. S. Spark, Ext. 4111.

FOR ADOPTION - English pointer, male, field trained. 924-8547 after 6.

FURNITURE - Walnut dresser & chest, very good cond. \$100 for both. Bob Dee, Ext. 2582.

BABY GRAND PIANO - Sears 17" chain saw; chopping block. 473-3532.

OVEN - Electric, wall or counter, self enclosed, use as extra to keep kitchen cool, very good cond. \$10. Ext. 4240, 286-0295.

ROLLER SKATES - W/shoes, size 9. \$15. Pat, 924-8766.

SWIMMING POOL - Above ground, 21' round, 48" deep, aluminum w/accessories, cover, 3 yrs old. \$400. Hoffman, Ext. 2443, 751-0637.

STROLLER - 2-seater w/swivel wheels & canopy. 289-1754.

BICYCLE - Girl's 20" Murray, excel cond. \$25. Bev, Ext. 2345, 929-8313.

DINING RM SET - Mahogany, seats 10 w/leaf, includes 6 chairs, \$180; chair-bed, sleeps 1, \$25. Ext. 2874.

PORTABLE PHONOGRAPH - \$20. Ext. 3922.

CHILD SAFETY HARNESS - Sears, 2 each & hook ups for 2 cars, \$10 for all. Richie, Ext. 4254 or 734-7342.

STOCKADE FENCE - 6' high, 32 running feet, milled & peeled, \$50; 42" high, 30 running ft, \$25. Cal, Ext. 4047/4090.

TRAVEL TRAILER - Holiday Rambler, 27', rear bath, excel cond. \$4750. Ext. 3830, 286-9209 after 6.

BEER BARREL - Aluminum, excel for mooring. \$15. 473-0178 eves.

LANTERNS - Several old kerosene globe lanterns, excel cond. \$10 each. 473-0178 eves.

STEREO - 8 track, 12V w/speakers, \$25; 8 mm movie camera & projector, \$30. 2 wheels, 15" Chevy 6-holes w/good snow tires. \$40. Ext. 4265 lunch time.

2 METER FM TRANSCEIVER - Link 2210 10 watt (out) base station in desktop cabinet w/crystals & manual. \$35. Alan, Ext. 2928, 924-4551.

PINE COUCH - Ethan Allen w/6 black naugahide cushions. \$250. 878-0123 after 5.

SHAG RUG - W/pad, 12'x20', brown/gold/rust, 1 yr old. \$200. 878-0123 after 5.

DINING RM SET - Solid cherry, drop leaf table, 45"x68" open, 4 ladderback chairs w/new rush seats. \$250. 878-0123 after 5.

BOY'S BICYCLE - Raleigh Cold, 3 spd, 26" wheel, 20" frame, hand & coaster brakes, excel cond. \$55. James Watson, 286-3679.

STROLLER - Red & blue, very good cond, \$15; spring coat, girl's size 12, red, white & blue check, like new, \$13. Stan, Ext. 2428.

ANTIQUA BED - 4 poster, single. \$10. 472-0136.

WINDOWS - 2 aluminum louver 46"x20", 5 pane, frosted. \$15 each. Dunning, Ext. 4285, 732-4068.

LIGHTS - Outdoor pole, outlet, all metal, new, \$30 each; mirror, 36x24, mount on dresser or hang, \$15; storm door, small size, new 65"x30", \$10. Dunning, Ext. 4285, 732-4068.

### 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

W. ISLIP - 4 bedrm, 3 1/2 bath colonial, 3-car garage, heated in-ground pool, reduced for quick sale. \$57,990. 878-0130.

CALVERTON/RIVERHEAD - Townhouse, 3 bedrm, 1 1/2 baths, ac, all appl. Asking \$25,500. Ext. 2445, 488-2497.

STRATHMORE RIDGE - 2 bedrm condominium, central ac, upgraded carpet, immaculate cond. \$3500 takes over \$20,000 mortgage. 924-3666 eves.

160 SURVEYED ACRES - Cooperstown vicinity, mountain top, secluded on town road, bldgs, 1/2 tillable. 363-7032.

LEVITT STRATHMORE - Duplex townhouse, 3 bedrm, 1 1/2 baths, wooded location, ac, w/w carpet, 5 appl, fenced patio, landscaped, low maintenance, owner sacrifice, low 30's, Ridge. 924-3361.

BELLPORT - 100x175 lot, split level, 11 rooms, 2 separate entrances, 2 kitchens. 286-9051, after 7.

MEDFORD - Birchwood Blue Ridge, kitchen, dining, living rm, bedrm, w/w carpet, washer, dryer, thermo-pane windows, screens, central air, patio club house, below cost. \$30,500. 732-5252, 475-2306.

PATCHOGUE VILLAGE - 3 bedrm ranch, expansion attic, finished basemen, most appl, country kitchen, attached garage, exterior maintenance free. \$34,000. 475-7694, Ext. 2290.

SHIRLEY - Ranch w/porch & patio, 4 yrs old, 100x125, fenced, carpeting, 4 bedrms, 2 baths, basement, near stores, transportation. \$33,000. 281-3721.

LAKE RONKONKOMA - 3 bedrm ranch, full basement, 20x16 sundeck, 100x113 wooded lot, lake rights, Tarkill Rd. \$32,500. Ext. 4308, 727-9334 after 5:30.

CUTCHOGUE - 1 acre bldg lot, water view, beach rights, near schools & shopping. Asking \$14,500. G. Laird Stubbings, Ext. 4068, 298-5092.

NORTH SHORE - Waterfront, contemporary 6 bedrms, 3 baths, 1 car garage, Miller Place, principals only, eves & weekends. 928-0348.

CLEARWATER BEACH - 110'x150' deep building plot near Gardiner's Bay, East Hampton Township, walk to private beach, marina rights. \$13,500. Ext. 3469, 281-4371.

### For Rent

3 VILLAGE AREA - Well furnished, 2 bedrm ranch, lovely property, central air, finished basement w/bar, priv community beach, 12-14 month lease, begin 6/1. S. Lindenbaum, Ext. 3918.

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

ROCKY POINT - 2 bedrm house, lg living rm, near LI Sound, no pets, see to appreciate. 744-9724.

WADING RIVER - Lg 1 bedrm basement apt, furn, ac, priv beach, 15 min to Lab. \$250/mo incl util. 929-8443.

### Wanted

5 STRING BANJO - Ext. 4231.

ROTOTILLER - In reasonable cond or w/burned out engine. Bob, Ext. 4551, 289-2159.

NEWSPAPERS - Girl Scout newspaper drive, Sat, Apr 10th, 9-3, Bellport village parking lot, magazines, newspapers, tied separately, aluminum.

FILING CABINET - 1-2 drawer. Jo, Ext. 4210, 286-9482.

SURF CASTING - Rod & reel, 8-10' length, must be top quality and in good cond. Peter, Ext. 4094.

HOUSE/APT - 2 bedrm furn to rent or house sit, Ext. 3609, 473-6900.

OLDER WORKING FREEZER - Prefer chest type. 744-4611.

JEWELRY DONATIONS - Old, used, no longer wanted for church fair. Cheryl, Ext. 4231.