



BROOKHAVEN BULLETIN



Published by the Brookhaven National Laboratory Public Relations Office

1946 - Twenty-five Years of Dedicated Research - 1971

Volume 26 - Number 7

February 17, 1972

A Tale of Whales In Picture and Song

The largest mammal on earth, the whale, has fascinated Dr. Roger S. Payne for the past 15 years. Since his first encounter with a dead porpoise on a Massachusetts beach, Payne has dedicated himself to research on whales.

On Thursday, March 2 in Berkner Hall at 8:30 p.m., Dr. Payne will deliver the 15th AUI Distinguished Lecture on the culture and distribution of whales. His lecture will be illustrated by films of whales and recordings of "songs" by a large number of humpback whales.

AUI Distinguished Lectures are open to the public as well as the Laboratory staff. There is no admission charge, and tickets are not required.

AGS Record Intensity

Over the past weekend, the AGS reached an intensity record of 5×10^{12} protons per pulse. This new level culminates the initial goals of the AGS Conversion program. It will be recalled that the new 200 MeV linear accelerator became operational as an injector in 1971. Since that time, a great deal of effort has gone into increasing the intensity from about 2×10^{12} protons per pulse to the present levels as well as increasing the basic reliability of the synchrotron.

Brookhaven On The Air

A weekly program titled "The World of Brookhaven Laboratory" will have its premier airing on WBLI-FM on Sunday, February 20 at 8:15 a.m.

The 15-minute interview with Dr. Howard Curtis will also be broadcast on WGLI-AM on Sunday evening at 11:15 p.m. This is the first in a series of interviews with Brookhaven scientists that will be broadcast on the two stations every week.

Flying Research Mission

Harry Munkelwitz (DAS) is participating in a geophysical sampling mission with researchers from the Naval Research Laboratory and the Atmospheric Research Center, SUNY-Albany. The trip takes them on flights across country to the West Coast, on to Hawaii, and then Alaska.

The atmospheric sampling missions include numerous flights of over twelve hours' duration during a three-week period. Samples of SO_2 and sulfate particles will be collected, the results of which will be useful in establishing the relative man-made and natural contributions to the stratospheric Junge particle layer.

During the trip, an attempt will be made to dive through and sample the plume of an erupting volcano. Other major portions of the mission are planned for making magnetic and electrical earth field measurements, studying atmospheric condensation nuclei, and investigating radon distribution in the atmosphere. Harry reports from Honolulu that the long sampling missions are tiring but that he is well and enjoying the many experiences encountered.

French Group of BNL

The next meeting of the French Group will feature an evening of French chansons. Such favorites as Piaf, Brassens, Montand, Brel, Ferrat, Barbara and others will be heard in some of their greatest performances.

Refreshments will be served, and everybody is welcome. Admission is \$1.50 for non-members.

Date: Friday, February 25

Time: 8:15 p.m.

Place: Recreation Building

(note change in location)

Cooking Exchange

The next session of the Cooking Exchange Group will be on Thursday, February 24, 3 to 5 p.m., in the Recreation Building in the apartment area. The art of Chinese cooking will be demonstrated.

There is a charge of 75¢ per session for each person attending to cover the cost of recipes and for the babysitters.

\$2.35 Million Increase In AEC Funds Reverses Downward Trend Of Budget No Layoffs Anticipated For This Year

A cautious optimism was evident throughout the memorandum issued by Laboratory Director Maurice Goldhaber last Friday explaining AEC's proposed FY 1973 budget of \$49.3 million for BNL.

The \$2.35 million increase in the FY 73 budget reverses the downward trend in AEC funding that started in 1970. While the increase does not match the amount needed to offset escalating costs, careful planning has removed the necessity for any layoff of Lab personnel.

In addition to the increase in AEC funds, there has also been a rise in funds received for work for agencies other than the AEC. Dollar amounts received in this category have been steadily increasing, and have grown to a total of 3 million dollars a year.

Since the first budget reduction, announced in February 1970, a cost savings program has been in effect that has helped to offset some of the increasing costs of operating the Laboratory. Under-utilized buildings have been shut down, motor vehicle use is being reduced, some shift work has been eliminated, and overtime has been sharply curtailed. These savings have helped, and will continue to be necessary throughout FY 73.

As in past years, more than 75% of the Laboratory's total budget is devoted to salaries and wages. In FY 73, salary adjustments will follow the pattern established during the current fiscal year, with the result that all employees will have their salaries reviewed within 12 months of their last review.

In his memorandum to all employees on February 11, Dr. Goldhaber said, "On January 24, 1972, the President forwarded

his FY 1973 budget to Congress. The total allotments provided by this budget for Brookhaven's AEC operations are about \$2,350,000 more than our allotment for the current fiscal year, which is \$46,949,000. Our High Energy Physics Program is slated to receive \$2,050,000 of this increase. Other changes range from an increase of \$275,000 for the Biology and Medicine Program to a decrease of \$223,000 for the Chemistry Program.

"The budget for FY 73 is of course not final because it depends upon Congressional actions and subsequent allocations by the Office of Management and Budget and the AEC. It is hoped that the financial support earmarked for Brookhaven will not be reduced during this budget review process.

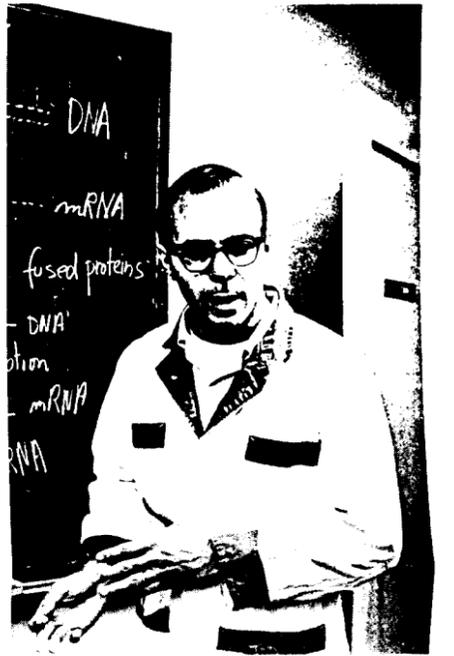
"We are pleased," said Dr. Goldhaber, "that the overall allotment proposed for

(Continued on page 2)

"Slang" Breaks Into The Genetic Code

Existence of four-letter "slang" words in the genetic code that controls the makeup and amount of cell proteins and other molecules, ultimately affecting the cell's ability to divide, has been conclusively demonstrated by Joseph Yourho and his colleagues in the Biology Department at BNL. As a result, the gene containing the four-letter "slang" word produces protein at an efficiency of only two to ten percent of a normal gene containing all three-letter words.

It is conceivable that this is related to the mutational process by which chemical carcinogens cause cancer and, if so, it is also conceivable that ultimately the process could be deliberately reversed. Yourho said, however, that although his experiments did not have that result as their immediate goal, the findings could provide a valuable clue to further research in that direction. As such, it is an excellent example of how basic research can open the



Joseph Yourho

way to future applied research that could have widely based beneficial results for mankind. A more immediate benefit is the unusual opportunity it now provides to study the genetic code itself and the basic processes by which its blueprints are converted into cell proteins.

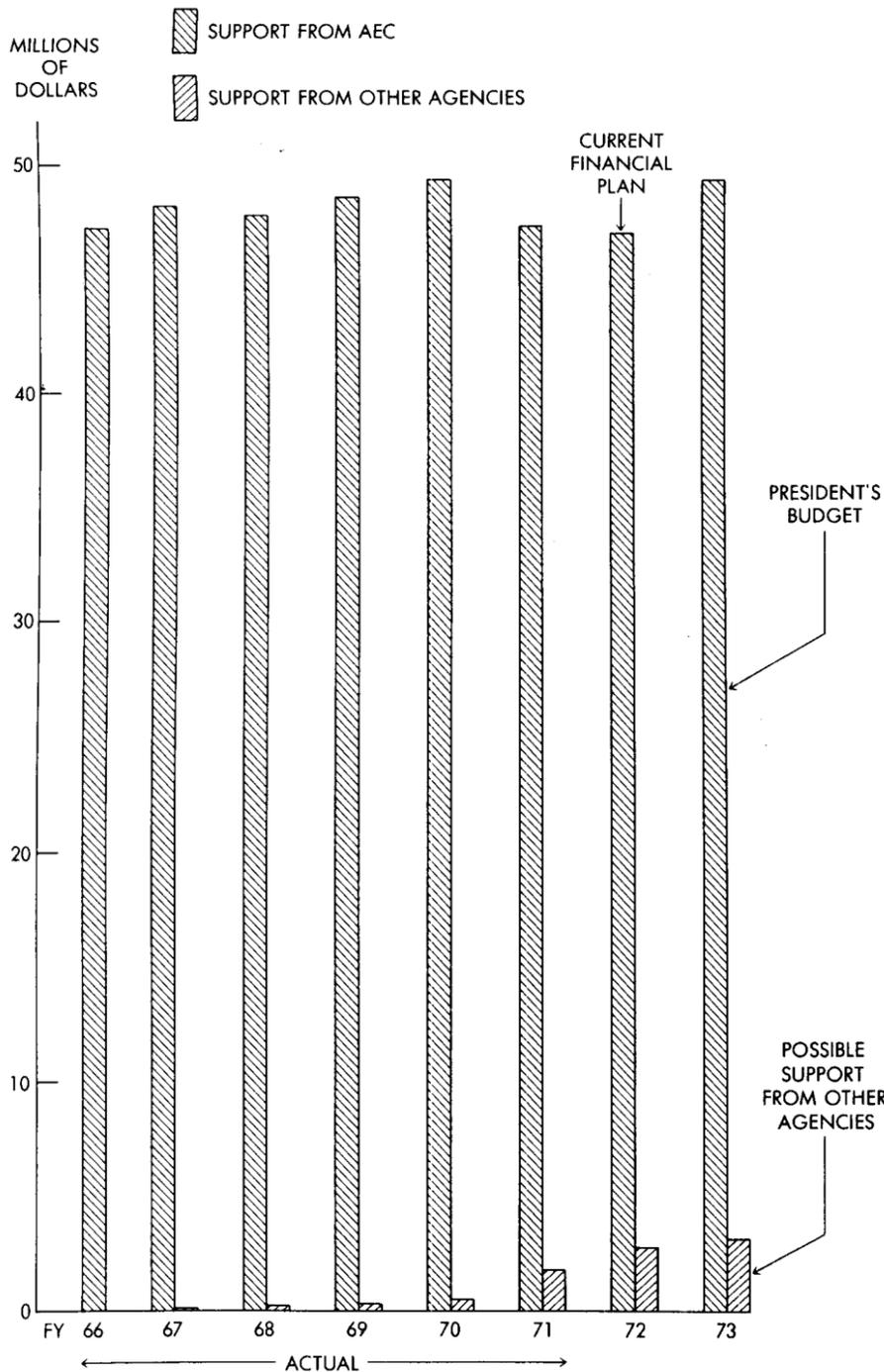
The genetic code normally uses three-letter "words" to produce everything from viruses to man. Genes are composed of DNA, a long chain of four kinds of nucleic acids, each of which represents one of the four different kinds of letters in the genetic alphabet. Each successive group of three letters represents a word, which specifies one of the twenty amino acids. Proteins are long chains of amino acids, precisely sequenced according to their gene blueprints. Yourho used a chemical called ICR, produced by Dr. H. J. Crech at the Institute for Cancer Research in Philadelphia, which adds or deletes letters from genes. He and his colleagues altered nature's course and by exposing the bacteria to ICR produced four-letter words at several different spots within one gene.

Yourho's research, which is reported in the Feb. 11, 1972 issue of Science as "Externally Suppressible Proline Quadruplet CCCU," began with the histidine genes of the bacterium, *Salmonella*, which control synthesis of the amino acid histidine. These have the sequential gene order of O, G, D, C, B, etc. This simply means that the G gene must complete its full cycle of protein production before the D gene can start, the D before the C, etc. When all the genes of the bacterium have completed their cycle, the cell reproduces either an exact copy of itself or a different cell according to the directions it receives from the DNA.

In Yourho's experiments, all four-letter mutations occurred in the D gene, which normally contains about 400 three-letter words that must be read in sequence before the process moves on to the next gene. The first four-letter word occurred in code position number 12, the second at least 30

(Continued on page 2)

BNL OPERATING EXPENSES



The above chart reflects actual and projected support for BNL operating expenses from the AEC and other agencies for fiscal years 1966 through 1973.

Increase In Funds

(Continued from page 1)

BNL for FY 1973 is increased, reversing a downward trend that started in FY 1970. The increase, however, still falls substantially short of the amount needed to offset many items, in particular the continuing escalation of costs of salaries and wages, fringe benefits, social security, fuel oil, electric power, and telephones.

"In addition, with the AGS Conversion project nearing completion, most of those people still supported by construction funds will have to be transferred to the operating budget at the start of FY 1973.

"During the past several weeks, we have been assessing the specific effects of the budget on the Laboratory's individual programs, and working out plans for next year's operations. Purchase of materials and supplies will be further reduced, and all possible cost savings will continue to be explored.

"After weighing a number of plans concerning salaries, which are the major operating expense of the Laboratory, we have decided that our schedule of salary changes in FY 1973 should follow the pattern of the current fiscal year: Salary adjustment for senior staff members will take place January 1, 1973, and adjustments for other monthly employee groups will take place on August 1, 1972, and November 1, 1972; weekly employees will receive wage adjustments in the first week of July, 1972. Thus, salary reviews for all groups of employees will occur within twelve months of the last review, although overall adjustments are expected to be somewhat more modest than before.

"In addition, a very small number of people will be shifted to other departments. As a result of this plan of action, and assuming that the amount allotted in the Presidential Budget is actually forthcoming, no employee will have to be involuntarily terminated.

"While the overall increase in financial support proposed for BNL for FY 1973 is insufficient, I nevertheless see a number of encouraging signs in next year's AEC funding levels. Furthermore, support from other federal agencies continues to rise. We are now involved in projects for other agencies with support totaling three million dollars a year.

"Brookhaven, as a multidisciplinary Laboratory, represents a vital national resource. After considerable challenge and change, our momentum again shows signs of picking up. I ask your continued understanding and cooperation in this great enterprise."

Slang In Genetic Code

(Continued from page 1)

words into the gene, and the third at least 45 words into the gene. Normally, these four-letter words are not read and the cell dies.

When Yourho started these experiments four years ago, his original concept was to remove the fourth letter and restore the gene to a normal functioning three-letter word code. However, about three years ago, his results suggested that a fourth letter could be added to the tRNA anti-word, which would then cause the cell to elude death and continue functioning while containing the four-letter mutation with an altered efficiency of protein production. His subsequent research bore this prediction out.

Commissioner Daub Is NY-ANS Speaker

On Tuesday, February 8, AEC Commissioner William O. Daub addressed the members of the New York Metropolitan Section of the American Nuclear Society at their regular Second Tuesday luncheon meeting at the New York Academy of Science. His talk on "Quality - The Name of the Game" dealt with current problems facing the nuclear power industry.

According to Daub, "Voluntary cooperation is going to be an essential ingredient of our Quality Assurance Program. In fact, it would be pleasant and relaxing if we could just depend on enlightened self-interest to carry out the whole job. Between now and the millenium, however, government will expect to continue its regulatory mission. The industry can expect increasing surveillance by our regulatory staff to assess and evaluate management performance in terms of its emphasis and implementation of quality assurance programs."

Presidential Intern



The first intern to check in at Brookhaven under the Presidential Internships in Science and Engineering, is Dr. Iris A. Mastrangelo, who will study the techniques of electron microscopy in Dr. Myron Ledbetter's group in the Biology Department. She received the Ph.D. degree from NYU in 1971 and after a short-term appointment at Cornell found it hard to get a job. Various laboratories throughout the country had space for her but there was "a crunch on funds." While getting her degree she also worked as a Research Technician at Beth Israel Medical Center in NYC, studying the effect of different drugs on macromolecular synthesis. She says women are no longer intimidated by science and are willing to take all the hard courses. Being female did not create any problems in graduate studies and one benefit of being in science is that "you are always surrounded by men." That state of affairs will continue as it appears she will be the only woman in the program. At the completion of her internship, Dr. Mastrangelo would like to apply what she learns here in the study of chromosomes on the electron microscopic level.

Women's Lib Strikes At Men Of Science

The publishers of the *American Men of Science* have succumbed to the inevitable and the 12th edition of this biographical directory bears the title *American Men and Women of Science*. They have added a subtitle, presumably for the blockheads who couldn't possibly make the connection, "Formerly American Men of Science."

Now, if they were formerly men, how are they all of a sudden, men and women? How'd they get away with it all these years and how did it come to light? But we shall probably never know. It will remain one of the mysteries of science.

In these impoverished days when science needs money and the volumes were going to be retired anyway, I should think the publishers could have come up with a more provocative title which would have made scientists a swinging group. Look what a little publicity has done for Professor Kissinger.

After all, what does the title reveal? Only that these people are American, male and female and of science. With this new edition, they could have walloped in with "American Science Goes Co-ed," or "He and She in U.S. Laboratories."

The present administration would probably have showered money on scientific research had the volumes been titled "The All-American Team in Science: Includes both the Theoretical and Experimental Leagues." Sporty.

A good all-purpose title which could be used indefinitely simply by inserting the appropriate year would be "American Scientists Revisited-1972." Or possibly, "Minds Over Matter in the U.S."

The patriotic theme always goes over big. For instance "Scientific Researchers for Uncle Sam." Or how about "The Stars and Stripes of Science"?

To be more dignified, they could have tried the slightly pompous "Illustrious Per-

sonages in American Scientific Research," or "Names to be Reckoned With in U.S. Science." After all, these guys and gals are not the bottle washers in the laboratories, they are the guiding lights, the ones who have "arrived."

To please the State Department and to help cement China-U.S. harmony, they could have used "American Scientists in the Year of the Rat."

The slick magazine style would be "The Jet Set of American Scientific Research," and/or "The 'With-It' Investigators of American Science."

To borrow from a well-known business manual, a Horatio Alger slant would give us "Americans Forging Ahead in Science."

The show-biz approach could generate "Stars of the Scientific Theatre*" printed in phosphorescent ink on a brilliant paper, or, à la Variety, "Socko Names in US Sci-Biz."

This is just a sampling of possible titles geared to the 70's and public relations techniques. Who knows, with a piquant title and some rewriting of the biographies, we could have a best seller.

—Bernnice Petersen

Letters To The Editor

Dear Sir:

Mr. Frank Marrone, a former chauffeur with the Staff Services Division and retired from BNL, is presently at Memorial Hospital recovering from the removal of his larynx box. He is very depressed, and it sure would be nice if some of his friends at BNL sent him a letter or card. I am sure that hearing from some of his old buddies would be a great remedy for cheering him up. You may write him at Memorial Hospital - Room 438, 425 E. 68th St., New York, New York 10021.

John Cross

BROOKHAVEN BULLETIN

Published Weekly for the Employees of Brookhaven National Laboratory

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BERA Concert Group

The next concert in the BERA Concert Series will be presented by the Philadelphia String Quartet on Tuesday, February 29, at 8:30 p.m. in Berkner Hall.

The Philadelphia String Quartet was formed 16 years ago by former members of the Philadelphia Orchestra, and has received tremendous critical acclaim both at home and overseas. The Quartet was noted for the epic six-concert Beethoven-Bartok-Schoenberg cycle it gave in New York in 1963-64, sponsored by Carnegie Hall.

Since 1966 the Philadelphia String Quartet has resided in Seattle as the Quartet-in-Residence to the entire State University and College system of Washington, a unique appointment in the history of music in the United States.

The program at BNL will feature quartets by Mozart, Debussy and the contemporary Chilean composer Gustavo Becerra. Admission is \$4.00 for adults, and \$2.00 for those under 18.

The Best Time to File Says IRS - EARLY!

Refund checks are less likely to be delayed when tax returns are filed early, the Internal Revenue Service says.

IRS urges taxpayers to send their tax returns in now if they have not already done so. It will help taxpayers to get their refunds sooner.

The IRS refunded over \$857 million to New York area taxpayers last year.

IRS reminds taxpayers to use the pre-addressed name label which came with the tax package containing the Form 1040. By placing this label on the 1040 form which is filed, it will expedite processing.

Returns for New Yorkers should be sent to the Service Center, Andover, Mass. in the envelope provided.

Jazz At The Center

The Isotope Stompers, a jazz group formed from staff members and friends of Brookhaven National Laboratory, play for your cocktail hour enjoyment each Monday evening at the Brookhaven Center. The music starts at 5:30 and continues till 8 p.m. The bar at the Center opens at 5 p.m.

Arrivals & Departures

Arrivals

Joshi Anne Applied Science
Jesse E. Becker A.U.I.
Ping-Kay Hon Biology

Departures

Gyles Harrison P.E.P.
Thomas E. Ward Chemistry

Service Awards - January

25 Year

Vario, Olga C. Fiscal

20 Year

Burns, Mary Physics
Gillespie, Norma Fiscal
Montag, Martin Reactor
Sayre, Edward Chemistry
Sternheimer, Rudolph Physics

10 Year

Auerbach, Elliot Physics
Carciello, Neal Appl. Sci.
Curto, James Accelerator
Davis, Jeffrey Health Physics & Safety
Diem, Robert Accelerator
Fenton, James Mech. Engr.
Weiss, Antonia Physics
White, Thomas Accelerator
Wikan, Josephine Purchasing
Wyche, Fannie Physics

Stony Brook Events

A discussion of the future of modern poetry and a jazz concert are among the events open to the public this week at the State University of New York at Stony Brook.

Saturday, February 19

A jazz concert sponsored by the Stony Brook Sickle Cell organization begins at 8 p.m. in Room 110 of the Lecture Center. Donation, \$2.00.

A Children's Folk Concert series begins at Toscanini College at 1:30 p.m. in the college lounge.

Monday, February 21

Associate Professor of History Herman Lebovics continues his lecture series on major developments in modern history, "From Marxism to the 20th Century," at 5 p.m. in Lecture Center Room 103.

Philosopher David Benfield continues his lecture series on "Logic" at 5 p.m. in Lecture Center Room 101.

The Department of Philosophy's Dialectical Thought Series presents Dr. Andrew Arato in a discussion of "Lukacs' Concept of the Dialectic" at 4 p.m. in Room 183 of the Earth and Space Sciences Building.

An exhibition of oils and acrylics by Christine Zackrone opens at the Stony Brook Union Gallery, from 10 a.m. to 5 p.m., and will continue through March 3.

Tuesday, February 22

The International Film and Lecture Series presents a lecture on "Castro's New Foreign Policy" by Professor Raymond W. Duncan of the State University College at Brockport, at 7:30 p.m. in the International Residential College (Stage XIIB Dormitory) Upstairs Lounge.

Professor Francis Palmer, Provost for Educational Research and Development, continues his lecture series, "Human Development: The Pre-School Years," at 5 p.m. in Lecture Center Room 103.

Professor of Art Leopoldo Castedo continues his discussion of contemporary Latin American life styles, focusing on the intellectual and artistic forms, in his lecture series on "Latin American Cultural Development" at 5 p.m. in Room 150 of the Light Engineering Building.

Professor of English David Erdman continues his discussion of poet William Blake at 5 p.m. in Room 146 of Social Sciences Building "A."

Wednesday, February 23

Professor of English Martin Stevens continues his lecture series on Chaucer's Canterbury Tales with a discussion, "The Teller and the Tale: The Wife of Bath" at 5 p.m. in Room 135 of Social Sciences Building "A."

Thursday, February 24

The Center for Contemporary Arts and Letters sponsors a talk on "The Outlook for Modern Poetry" by M.L. Rosenthal, author of a widely-used text on modern American and British poetry, at 8 p.m. in Room 102 of the Lecture Center.

Two Japanese samurai films, Kurosawa's "Throne of Blood" and Mizoguchi's "Ugetsu," will be shown at 8:30 p.m. in Room 100 of the Lecture Center.

Friday, February 25

The Department of Music's Professional Artists Series presents a recital by Paul Zukofsky, violin, accompanied by Gilbert Kalish, piano; and Timothy Eddy, cello. All three musicians are Performing Artists-in-Residence at Stony Brook. The recital, featuring music by Berger, Ives, Schumann and Lessard, begins at 8:30 p.m. in Room 105 of the Lecture Center. Donation, \$1.50.

Bowling News

Grace Faies

Black and Blue League

Apologies to handsome? Bud Pollock who rolled a 192 last week and didn't make the paper. This week the only gal bowling was Kit D'Ambrosio with a 167/455. The men, of course, always lead the field and those out in front were Bob Brown with a 210, Dick Murgatroyd 202/543, Fred Van Dervoort 180/513, (nice bowling, Fred), Arnie Kreisberg 187, and Rick Murgatroyd 180.

Pink League

The combination of Kay Hunt (155) and Ruby Burwell (174) of the Alley Oops was enough to take 7 points from the Hopefuls. The Spares' secret weapon, Mary German (163), led her teammates in sweeping 5 points from the Fiscal Assets. The Bio-boozers (Lynn Kalbach was their secret weapon) surprised the Pinsplitters by stealing 4½ points from them despite the valiant effort of Grace Faies (179/472). Needless to say, the standings are tightening up. Honorable mention this week to Fran DeMarco.

Note: The men's Annual Nassau-Suffolk Championships are scheduled to be held April 22nd thru May 21st, 1972 at the Century Lanes in Huntington. Anyone who is interested, please contact Lou Jacobson, extension 477.

Country and Western Dance



Last year's affair sponsored by the Family Camping Club was attended by a sell-out crowd. Scenes like the one above will be repeated this year on Friday, March 10 in the Gym.

Hank Poeling Brings Nashville to BNL Again

The big rage these days is country-western music from Nashville. Since we think that BNL employees like to keep pace with the "in thing," the Family Campers Dance Committee has come up with plans for a night of Nashville with all the trimmings.

The music will be under the direction of nationally known Hank Poeling. Hank has performed at the Ernie Tubbs Mid-Western Jamboree in Nashville, the Golden Nugget in Las Vegas and on radio and television in Oklahoma City. These are just a few highlights of his career.

Along with Hank Poeling will be the Country Boys and Rudy Franklin, a protege of Don Durlaker, who will do the calling for the square dancing.

The dance will be held at the Gymnasium on Friday, March 10, starting at 9:00 p.m. and continuing until 1:00 a.m. Tickets will be sold at the door, at \$3.00 each for employees and escorts, and \$3.50 each for visitors.

For refreshments, bring your own bottle if you like. We'll have beer and mixers on sale at a small cost. For nibbling, BERA will provide potato chips and pretzels free of charge.

If you get hungry during the evening, the Camping wives have promised to whip up a concoction (they'll call it "chuckwagon special") to tantalize the taste buds of any chow hound.

Since this will be a very informal party you'll want to wear your most casual, comfortable clothes.

See you on the 10th!

Cafeteria Menu

Week Ending February 24, 1972

Friday, February 18	
Manhattan Clam Chowder	
Roast Beef w/Brown Gravy & 1 Veg.	.85
Fish 'n' Chips w/Tartar Sauce	.85
Broiled Turbot & 1 Veg.	.95
Monday, February 21	
Cafeteria Closed - Snack Bar Open 9 a.m. - 2 p.m.	
Tuesday, February 22	
Puree of Split Pea Soup	
Beefsteak Pie w/Vegetables & Biscuit Crust	.99
Southern Fried Chicken & 1 Veg.	.85
Stuffed Cabbage & 1 Veg.	.85
Wednesday, February 23	
Vegetable Soup	
Beef Hash w/Chili Sauce	.80
Broiled Link Sausage w/Scrambled Eggs & French Fries	.90
Florida Shrimp Louisiana	.95
Thursday, February 24	
Navy Bean Soup	
Beef Chop Suey	.90
Grilled Rumanian Steak w/Fried Onions & French Fries	.95
Cheese Omelet w/Bacon Strips & French Fries	.80

Selected Reading

Science 175, February 4, 1972
National Science Foundation: The house that McElroy built. J. Walsh. 502-4
Search 2, November-December 1971
Is research really necessary? W. Boas. 403-5

Soccer

Ken Batchelor

On Saturday 5th February, BNL and Staten Island were scheduled to play two games against teams from the British Naval Aircraft Carrier H.M.S. Ark Royal. However, high winds prevented the navy teams from landing and the Staten Island and BNL teams decided to play each other instead. In this game the BNL team proved far too good for the Staten Island team and were victorious by 6 goals to 1.

In the first half BNL started off as if they were against the strong navy team and were unfortunate not to score early in the game when a Staten Island defender handled the ball in the area but was not penalized. Immediately after this Farrell appeared to score a good goal which was disallowed. However, another fine move by the BNL defense set up the ball for Batchelor to volley home from close range. A few minutes later the BNL center half lobbed the ball over the Staten Island goalkeeper for the second goal to give BNL a half time lead.

In the second half BNL had the strong wind in their favor and spent most of the time in the Staten Island half. Soon after the kickoff Farrell scored a good goal from a passing movement on the left and almost directly from the kick-off the forwards combined again for Batchelor to score another goal from the edge of the area. With the BNL defense playing well up the field the Staten Island forward scored a break-away goal through Robbie. That was the end of their glory however as BNL added two more goals before the final whistle.

BNL 6 vs Staten Island 1
(Batchelor 2, Farrell, Pfister) (Robbie)

In the Inter-Departmental Competition on Friday, January 28th, DAS, Chemistry and Medical further increased their lead by collecting 3 points to AGS 2 and Physics 1.

In the first game DAS and AGS played a very close contest with the score tied until the last few minutes when DAS scored three quick goals. Throughout the game both teams had many narrow misses and DAS was somewhat fortunate to win by such a margin. In the second game AGS found the Physics team (which included two newcomers to the game) very tough opposition and were glad to run out victors by 2 goals to 1. In the final game the Physics team surprised the strong DAS team by twice taking the lead only to see DAS score in the last few minutes of the game to tie the score at 2 goals each.

DAS, Chemistry & Medical 4 vs AGS 1
(Farrell 2, Meyers, VanZelst) (Batchelor)

AGS 2 vs Physics 1
(Batchelor 2) (Strayer)

DAS, Chemistry & Medical 2 vs Physics 2
(Meyers 2) (Strayer, Lumpkin)

All players are invited to join the teams in competition each Friday evening at 5:30 p.m. in the gymnasium.

Volleyball News

Odelli Ozer

The inevitable finally happened in the Mixed League. The mighty Gotcha's, ambushed by the high flying Boomerangs dropped their first game since the beginning of the season. The victory earned by the efforts of Charlie Cowan, Bill Kropp and the Kinseys, with the help of Pat Oster and Dick Lingg (of the Spikers), proved to be so much of a shock to the Boomerangs that they went on to lose their next game to the last place Active Sites. Ruby Burwell's Jets had a perfect night winning all four of their games and moving into a tie for second place.

The interesting incident in the Men's League was provided by Jerry Levine's transfer from the Atom Spikers to the Set Ups. The Set Ups who already have been improving since the beginning of the second half put up a fierce fight against Chemistry before bowing 2-1. In other games the Spikers defeated the Atom Spikers 3-0 while the Cool Tools took three games from the Particle Detectors when the latters failed to field a full team because of a mixup about starting times.

Note that the starting time is 5:30 p.m. for the early games and 7:00 p.m. for the late ones although games may start earlier by agreement of the two captains and the referee.

The standings on February 10th are as follows:

Men's League	W	L
Spikers	6	0
Cool Tools	8	1
AEC	3	3
Chemistry	3	3
Set Ups	4	5
Atom Spikers	3	6
Particle Detectors	0	9
Mixed League	W	L
Gotcha's	12	1
Boomerangs	8	5
Jets	8	5
Trolls	3	7
Spikers	3	9
Active Sites	3	10

Spring Season Starts at Pool

Spring is fast approaching and with that comes the start of a new season at the Swimming Pool. So prepare now to have your season pass ready to use on the very first day.

Season passes may now be purchased at the Recreation Office (9:00 a.m. - 1:00 p.m.) or at the Pool Office during its open hours beginning February 10, 1972.

The following schedule of rates and times will be in effect for the Spring Season which begins February 12th and continues through June 16th.

Schedule

Open Weekdays Monday through Friday
12:00 noon - 1:30 p.m. Employees Only
(Must have Season Pass).

5:00 p.m. - 9:30 p.m.
Employees/Family/Visitors.

Rates

Season Pass
Employee or Family Member \$ 5.00
Family (Same Household) \$10.00
Daily Single Admission
Employee or Family Member 50¢
Visitor 75¢
(No Single Admissions 12 noon - 1:30 p.m.)

POOL SPECIAL

On Monday, February 21, the swimming pool will be open from 1:30 to 9:30 p.m. This one-day Holiday Special is for the benefit of those people who wish to take advantage of the pool facilities during the mid-winter doldrums. Bring the kids!

Film Service Office

The Film Service Office, formerly situated at the east end of the Gymnasium complex has been moved to the west office where Recreation was. The hours and telephone extension will remain the same. Weekdays from 9 a.m. to 3 p.m., Ext. 7221.

Classified Advertisements

Positions Available

The Brookhaven Bulletin each week will list job openings which have come to our attention and may be of interest to Lab employees. Each listing will be repeated (if still available) only once.

ELECTRICIAN A (1) - Plant Engrg. & Planning. Application deadline: February 28, 1972.

ELECTRICIAN A (2) - Plant Engrg. & Planning. Application deadline: February 29, 1972.

REGISTERED NURSES (2) - One position requires permanent evening shift schedule.

For further information, please contact Employment Supervisor, Ext. 2109 or 2513.

Autos & Auto Supplies

2 SNOW TIRES - H-78x14, good cond, hardly used at all. \$90 new, \$25 for both. Shore, 475-5176.

65 CHEVELLE MALIBU - 2 dr hdtip, auto trans, ps, 2 new tires. 981-1981.

71 MG MIDGET - Perf cond, 8000 mi. \$2000. M. Sautter, Ext. 712, 924-3338.

65 FORD STATION WAGON - Fair cond, ps, auto trans, 10 psgr. \$500. M. Carroll, Ext. 316.

60 RAMBLER - 4 dr, running cond. \$50. Ext. 2129, 941-9442.

71 PLYMOUTH ROADRUNNER - White/blk vinyl top, cloth & vinyl int, bckts, console, ps, 4 spd, posi. \$2975. George L., Ext. 7581.

67 SUNBEAM MINX - 4 dr, r/h, auto trans, 4 cyl, 30 mpg. \$625. Jake, Ext. 2719.

65 CHEVROLET WAGON - V8, std trans, new tires, batt. 289-3114.

71 CHEVY VEGA - White/blk int, auto trans, r/h, brand new snows. 281-8684 after 6.

69 FORD LTD COUNTRY SQUIRE - 9 psgr, r/h, auto trans, w/w. \$2200. Walter, Ext. 567.

69 CHEVY IMPALA - V8, ps/pb, 20,000 mi. \$1300. Ext. 2810.

69 CHEVY IMPALA CONV - Yellow, factory air cond, 4 new polyglas tires, low mileage, like new. Carsten, Ext. 2893.

64 OLDS VISTA CRUISER WAGON - 30,000 mi on eng & trans, very good cond. \$500. 289-8236 after 6.

65 VW - Runs well, new tires, brakes. \$450. Steve, Ext. 7646/7684.

12V GEN - GM type, \$7 ea; 2 bbl carb & manifold for 64 Rambler 6, \$10; all good cond. Bob, Ext. 2450, 289-0357.

62 FORD FALCON FUTURA - Rebuilt eng, int & ext good, auto trans, 2 new tires, 2 snows, 8 track tape deck, reasonable. 924-3170.

67 GREEN MGB - New radial tires, good top, tonneau, fm radio, very good cond. 286-9286 after 6.

72 MUSTANG - 14 hands, lovable, brown, not yet saddle broken (2500 mi), fully equipped, sacrifice, must sell. \$3600. Ext. 7637.

VW RIMS - Good cond. Both for \$7.50. Jeanne, Ext. 7637.

64 DART WAGON - 270 series, dependable 2nd car, 4 dr, new auto trans, ps, \$250. E.W. Anderson, Ext. 2835, 289-0742.

70 OPEL GT - 4 spd, 102 hp, make offer. 281-2605.

BATTERY - New Sears h.d.; many spare parts for '64 6 cyl Mercury Comet; good tires, incl snows. Vasquez, Ext. 7133.

Boats & Marine Supplies

SAILBOAT - Fiberglass Aqua Cat. \$300. RA8-2553.

17' FIBERGLASS SAILBOAT - C/B Explorer class, ideal 1st sailboat, compl w/main, jib, trailer, cushions, etc. B. Museler, Ext. 7676.

30' GAILBRATH - Fly Bridge 1968, 265 hp Palmer FWC, monel tanks, outriggers, cedar hull, oak frame. \$3950. 273-4575 eves.

26' BOAT TRAILER - Tandem wheels. \$200. 273-4575 eves.

40 HP EVINRUDE LONG SHAFT - 1969, elec start w/ controls, cables & 2-6 gal tanks, used 1 season. \$425. 924-5203 after 6.

33 HP EVINRUDE - 1966, manual start, 1 tank, w/ controls, A-1 shape. \$195. Hank, Ext. 2221.

Miscellaneous

SERIES - Parallel R-C combination box model 1140, \$10; Seco grid circuit tube tester, model GCT-5, \$10; Seco crystalin meter, model 500, \$5. Henry, 727-3830 after 6.

WATERMAN POCKETSCOPE - Model S10A, \$15; signal generator, model 315 (Eico), \$15; service bench vacuum tube volt meter, model IM-13, \$30. Henry, 727-3830 after 6.

VOX 50 WATT AMP - & Kent elec guitar, both excel cond. \$100. B. Sick, Ext. 439, HR3-3693.

CHAIR - Stuffed red naugahyde, excel cond, like new. \$20. JU4-7050 after 6.

USED LADIES SKI SET - Wood skis w/Cubco binding in good cond & blk leather La Dolmite buckle boot, size 8. \$25/both. Mariene, Ext. 7711 after 6.

SIAMESE KITTENS - 9 wks, 1 blue point, 1 choc/seal(?); beautiful, intelligent & playful. Georgia, Ext. 2186, 286-8869.

SKI BOOTS - Men's size 11, lace, very good cond, \$15; men's shoe roller skates, size 10½, \$5. Ext. 2129.

6 ALUM AWNING WINDOWS - 48" w x 51" h w/ screens; 2 alum storm doors 30"x80". 475-2075.

ANDERSON FLEXIVENT WINDOW UNIT - 38" w x 33" h, s/s. 475-2075.

POOL TABLE - Brunswick regulation, 1" slate, subways, \$400; radios-am, fm, missing batt compartment covers, \$10. Ken, Ext. 7668.

CHIFFEROBE - Child, painted white. 289-3114.

CAMERA - 2¼x3¼ Speed Graphic w/case, flash gun & cut film holders. \$40/all. L. Galanter, Ext. 2205.

BABY BATHINETTE - Plastic tub, well cushioned top, shelves, wheels into bathroom. \$8. Joan, 744-3919; Jack, Ext. 7839.

HICKOK - Color bar, dot generator. \$25. John, 744-5867 after 6.

COFFEE TABLE - Thomasville "Monterey," pecan, 60"x22"x17". 286-8512.

MOD 98 MAUSER 243 CAL - 26" star premium barrel, Weaver scope bases. \$60. F. Rumph, Ext. 7581.

WRIGHT POWER SAW - W/extra blades, needs carb adjustment. \$40. Ext. 2428.

UPRIGHT PIANO - Solid mahog, bench incl, old resonant sound Steinway, need the room-must sell! \$500. A. Roy, Ext. 7333.

SAVAGE FOX MODEL B - Dbl barrel shotgun, 2 ga, used once. \$95. F. Rumph, Ext. 7581.

MEN'S PERSIAN LAMB HAT - & coat collar, custom made, never worn, labor costs \$55 to make, sell both \$25. 475-2842 before 3.

OAK FIREPLACE LOGS - Custom cut, split, delivered, & stacked, well seasoned. Ken, 289-8212 eves.

APT SIZE REFRIG - \$15; 24" gas range, \$20; single bed, \$6; 1 ton chain hoist, \$15. R. Smith, 475-3632.

SHOTGUN - Dbl barrel Stevens, good cond. 475-4199.

BACKHOE & FRONTEND LOADER - Model 160 Dynahoe, new paint job & new bushings in backhoe, perf cond, best offer. 744-0548 after 6.

ICE SKATES - Men's hockey size 12. \$7. M. Halbert, Ext. 7581.

GERMAN SHORTHAIR POINTER PUPS - 11 wks old, shots, AKC. 653-4618 after 6.

12 GA & 20 GA LEE LOADERS - \$3.50 ea; 12 ga & 20 ga Lee wad guides, 25¢ ea; 12 ga & 20 ga Lee crimp starters, 50¢ ea. L. Blum, Ext. 7782.

PLASTIC TARGET CASES - Once-fired empty 20 gauge Remington. 100/\$1. L. Blum, Ext. 7782.

20 GA REM POWER-PISTON WADS - No. W29942, 200/\$1; No. W23678, 900/\$4.50; Lee powder measure kit, \$2. L. Blum, Ext. 7782.

MINI BIKE - Nearly new 4 hp B&S eng, scrub brakes, knobby tires. \$75. R. Lundgren, Ext. 7782.

BABY GRAND PIANO - Old, wood good cond, best offer. P. Grand, Ext. 2481, 363-6206.

SIAMESE KITTENS - Free, sealpoints, 3 mo, males or females, 1 temp shot. Pat, Ext. 7229, 929-4942.

EXPERT TYPING - Papers, Theses, manuscripts. E. Connolly, Ext. 2196, 286-8731.

6' SKIS/CABLE BINDINGS - Lace ski boots, size 7½, \$50; ski rack to fit MGB or similar sports car, \$10; all excel cond. Bill, Ext. 2876.

ONLY TWO LEFT! - Beagapoo pups (new breed?), Freel R. Slavinski, Ext. 2896, 473-4043.

52" FLEXIBLE FLYER SLED - New this season, used once. Orig. \$20, sell \$12. Chuck, Ext. 7734.

FOREIGN COINS - National Geographic magazines, old phonograph records. O. Booker, Ext. 2411.

DRAWING TABLE - Dietzen wood base, 6'x4' w/file & tool drawer, parallel straight edge & adjustable draftsman's stool. \$60. Al, Ext. 7211.

B&W TV - 23" walnut console, reasonable. Ext. 7637, 286-1290 eves.

STROLLER - 5 mos old, \$15; car bed, \$5; Panasonic clock radio, \$7; Slazenger tennis racket, as new, \$5; must sell, leaving US end Feb. Kortt, Ext. 312/7713.

BUNK BED OUTFIT - Steel link springs, serofoam matt, \$40; 5-drawer maple finish chest, \$20. Olson, 289-8629.

BOY'S ICE SKATES - Blk, size 2, \$2; men's blk size 9 skates, \$6. Ext. 439, 286-0037.

GUITAR - Fender Jazzmaster. \$90. 581-0932 after 6.

BILTRITE BABY CARRIAGE - W/matt, used 4 times, folding frame, upholstered body, use as car bed, excel cond. \$45. 924-5192.

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

WADING RIVER - 7 rm ranch, brand new cond, landscaped, 3 bedrms, 2 baths, paneled fam rm 2/fireplace, w/w, s/s, 2-car garage, full bsmt, oil hw heat, central air cond, 2 mi from Sound on 1 acre of woods. \$45,000 firm. Ext. 2930, 929-6549.

E. PATCHOGUE - 2 story colonial, 3 yrs old, 4 bedrms, 2½ baths, 2 car garage, fireplace, major appliances, 0.4 acre landscaped garden. 286-8455.

Wanted

WILL SHARPEN ICE SKATES - T. Lehecka, LT9-2470.

TAXPAYERS - Federal & State income tax forms prepared in the privacy of your home or mine. 475-8330.

SUMMER BUNGALOW OR PROPERTY - On Peconic or Shinnecock Bay. Frank, Ext. 7530.

FURN HOUSE OR APT - Reasonable, not too far from Lab, for couple w/8 mo baby. Ext. 2770.

THE PERSON - Who ordered a plastic house model from Faller, Gutenbach, Germany. Ext. 2273.

1 MILK CAN - 30 gal, for Boy Scouts of Troop 224 Selden. Ext. 2170.

ICE SKATES - Woman's size 6, white, also size 8 white. Ext. 429, 286-0037.

SAWS TO SHARPEN - Also ice skates, knives & carbides. Ken, Ext. 7668.

ICE SKATES - Men's size 11. M. Halbert, Ext. 7581.

TROPICAL FISH SUPPLIES - Cond unimportant, price reasonable or free, tanks a lot. M. Strongson, Ext. 2727.

GOOD HOME FOR PUPPIES - Miniature Pinscher-? mix, 10 wks, all shots. T. McKinley, Ext. 481.

TREE REMOVAL - & chainsaw work, also light hauling. Ken, 289-8212 eves.

BACK PACK BABY CARRIER - Becky, 289-8212.

Carpools

DRIVER WANTED - To compl existing carpool from Bayport-Blue Point area. Lee, Ext. 2349.

DRIVER WANTED - From Smithtown-Commack area. Ext. 563.

DRIVER WANTED - To compl existing 4-man carpool from Huntington. Irv, Ext. 2207; Frank, Ext. 2960.

Classified Ad Policy

Deadline is 12 noon Friday for publication the following week.

- The Brookhaven Bulletin's classified section may be used only by active and retired Laboratory employees.
- All items for sale or rent must be the advertiser's property.
- Ads for material acquired for resale in association with a full or part-time business cannot be accepted.
- Firearms offered for sale or trade may not be brought on site.

- Ads not carried because of space restrictions will be held for publication in the next issue.
- Ads are run only once and must be resubmitted if they are to be repeated.
- Ads should be restricted to 20 words or less and typed or printed on the form provided, and must bear the employees signature.

- For Sale: Auto & Auto Supplies
 For Sale: Boats & Marine Supplies
 For Sale: Miscellaneous

- Wanted
 Carpools
 Lost & Found

Check the heading applying to your ad.
 Print or type your ad in 20 words or less.

Ads concerning property for sale or rent cannot be accepted on this form. Special Real Estate Ad forms are available at the Office of the Brookhaven Bulletin, Room 112, 40 Brookhaven Avenue.

(Name & Phone No. To Call)

Employee's Signature..... Life No..... Ext.....

Send to: Brookhaven Bulletin, 40 Brookhaven Avenue