



Birds Eye View Of BNL



Workmen from the American Chimney Corporation dismantle sections of a stack from one of the laboratory's former steam plants. After the brick and mortar are loosened, the rubble is dumped down the center of the 90-foot chimney, where it is removed through a large hole broken through the base.

Summer Homes Needed For Foreign Students

Approximately 40 teen-age students and 2 chaperones will arrive in Suffolk County from Italy on August 3. Their visit, known as the Homestay Program, is being sponsored by the Foreign Study League, an educational service of Readers Digest, and is being coordinated by Arline Fassman of Bellport. Local families are being invited to host students or chaperones in their homes during the stay.

There are two very important and subtle by-products of the learning experience with the Homestay Program. First, the student's intellectual appetite is whet so that he wishes to continue studying the culture of the American people. Second, the student returns to his country with a deeper appreciation for his own cultural heritage. After living in another country and culture, he is equipped to better evaluate the habits of other people.

While here the students and chaperones will attend lectures and participate in several outings before leaving on August 26. Arrangements for these will be taken care of by the Foreign Study League. Most of the time, however, will be spent with the host families, participating in their regular daily lives.

The Foreign Study League hopes that all interested in participating in the Homestay Program will take advantage of the many opportunities offered by this educational experience. By so doing, they can help intensify the knowledge and enjoyment to be gained through this unique program.

Any family that may be interested in hosting either a student or a chaperone is asked to contact Arline Fassman, 41 Bieselin Road, Bellport, N.Y. 11713 (286-8696).

Official & Special Events

- Monday, June 17**
APS Summer Study on Radiation Damage (June 17-28)
- Tuesday, June 18**
Low Level Radiation Effects Meeting - Rooms A & C, Berkner Hall
- Wednesday, June 19**
Navy Meeting - 7:30 p.m. Berkner Hall
- Thursday, June 20**
BERA Art Show - Rooms B & C, Berkner Hall (June 20- July 2)
- Japanese Doctors & Technologists Tour

- Sunday, June 23**
Heavy Ion Transfer Reactor Study Group Meeting (June 23-29)
- Wednesday, June 26**
Blood Bank (June 26-27)

IBEW Meets June 27

Local 2230 IBEW will hold its regular monthly meeting on June 27, 1974 at 8 p.m. in the Knights of Columbus Hall, Railroad Avenue, Patchogue. There will also be an afternoon meeting at 2 p.m. for shift workers in the Union office at 31 Oak Street, Patchogue. On the agenda will be regular business, committee reports and the President's report.

Lab-IBEW Negotiations

The labor contract between the Laboratory and the IBEW expires July 21, 1974. The first negotiation session took place Wednesday, May 29 at the Brookhaven Center, and the second meeting was held on Thursday, June 13.

Members of the Laboratory Negotiations Committee are: A. Mahlmann, I. Polk, P. Thieberger, A. Villacara, W. Walker, W. Webster, J. White, and J. Washburne.

Members of the Union Negotiations Committee are: C. Geonie; P. Kelly; J. Carroll; J. O'Reilly; P. Fennelly; L. Morris; C. Hobson; R. Farmer; F. Kedenberg; C. Schmidt; S. Gracia; and Ms. Dorothy Husted, IBEW International Representative.

BNL's Island Doctor

For the past two years, Dr. Knud Knudsen has been Brookhaven's resident physician in the Marshall Islands. Each year a medical team, headed by Dr. Robert Conard, goes to the Marshall Islands to monitor the Marshallese who were accidentally exposed to radioactive fallout during a Pacific bomb test in 1954. In view of the many cases of thyroid abnormalities that have developed in the exposed people, it was decided to establish a resident physician in the islands to maintain continued medical surveillance and treatment.

Dr. Knudsen and his wife Liv, who is a registered nurse, reside in Kwajalein, a town of 5000 people located on the atoll of Kwajalein. They have two children, a married daughter and a son. Their son accompanied them out to the islands where he attended high school before entering college in the U.S. last year.

Although their home is in Kwajalein, Dr. and Mrs. Knudsen spend much of their time travelling to the outer islands, primarily Rongelap and Utrik, where inhabitants received radioactive fallout. Because of Mrs. Knudsen's nursing background, she is of considerable help to her husband.

They usually spend several weeks at a time on the outer islands and are provided with housing but must bring groceries and other supplies with them from Kwajalein.

Their greatest problem has been transportation. Until recently they traveled from island to island aboard trust territory cargo ships, which left much to be desired. They were dirty, chickens and pigs were given the run of the ship, and because the vessels were poorly maintained, they were unsafe. Unfortunately, Dr. Knudsen found this out the hard way when his wife, Bill Scott of the Medical Department, and he were grounded on a reef while travelling on a cargo ship. They were forced to wade ashore in waste-deep water and wait to be rescued by a helicopter. A similar incident occurred once, when Dr. Conard and other members of the medical team were lost at sea for two days due to poor navigational equipment on board a cargo ship.

The condition of the ships was not the only source of Dr. Knudsen's frustrations.

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Correction

The article about the BNL Annual Blood Drive in the June 7, 1974 issue of the *Bulletin* contained the following erroneous statement:

The Laboratory's health insurance through Connecticut General covers only the processing fee for blood - it does not cover the cost of blood . . .

The fact is that the cost of the blood and processing is a covered expense under the Laboratory group medical insurance plan.

1. The cost of blood and processing is covered when administered during a period of hospital confinement.

2. The same cost is covered as outpatient hospital cost resulting from an accident.

3. When not administered under one of the two preceding conditions, the cost of the blood and the processing is covered as a Major Medical benefit.

When a Laboratory employee or a dependent of an employee receives blood from a blood bank and there is no charge for the blood, the processing fee is covered under the conditions described above.

Public Sale Of Motor Vehicles

Twelve (12) vehicles, located at Warehouse T-87, will be available for Public Sale.

Inspection will be permitted from June 17 through June 21, during the hours of 9 a.m. to 4 p.m., except Saturday and Sunday.

Bids will be opened on June 26, 1974, at General Services Administration, Business Service Center Bid Room, 26 Federal Plaza, New York, N.Y.

This will be an Informal competitive bidding. Bid forms may be obtained at building 87 and 211. For further details, please call Extensions 2303 or 2977.

Blood Drive Extended To June 18

Because only 525 pledges to donate blood had been received as of Wednesday afternoon, the BNL Blood Drive is being extended to June 18. If you have not already done so, please fill out the pledge card below and return it to Public Relations, 40 Brookhaven Avenue, by that date.

Dept.
Address..... Phone ext.

BLOOD DONOR PLEDGE

I hereby pledge to donate blood on (check one) Wednesday, June 26, Thursday, June 27, at the Laboratory gymnasium.
I would prefer either a.m. or p.m.

Name.....
(please print)
Signature.....
Life No.

Bike Race & Marathon Run Into Hot Weather

Despite the staggering temperatures last Sunday, more contestants turned out for the 1974 marathon and bike race than last year. The effects of the 83-degree heat were apparent in the slower finish times and the numbers of people who did not complete the races.

This was the first year for the 5-mile race which attracted 18 contestants. Luke Powell, son of Bob Powell of the Reactor Division, ran to victory with a winning time of 32:1 minutes, beating the second-place winner by seven minutes.

The heat took its toll during the 10-mile race with four runners not finishing. Andrew McNerney walked away with the first place trophy for his winning time of 70:35 minutes.

Richard Kellogg, a student from Yale University working in the Physics Department, was the winner of the 17.5-mile bike race.

By 11 a.m., the temperature had dropped two degrees from the initial 83 degrees, but not enough to soothe the runners.

The first place winners received trophies provided by BERA for their achievements, while ribbons were awarded to the second and third place winners. The marathon and bike race were organized by the Race Committee, headed by Bob Powell and including Georgia Irving, Paul Tichler, Herman Geist, George Mooney, and Gerry Kinne. Georgia Irving handled the registration prior to the races. Powell officially started the races while Paul Tichler and Gerry Kinne timed the 10-mile and 5-mile
(Continued on page 3)



Dr. Knud Knudsen (left) with Dr. Robert Conard.

Island Doctor

(Continued)

Their erratic schedules were even more frustrating because they prevented him from visiting the outer islands with the regularity he wanted.

The transportation situation became increasingly difficult for both Dr. Knudsen and the whole medical survey program. Fortunately, this problem was solved when the U.S. Army furnished the AEC with an overhauled landing craft utility (LCU) for use by the medical teams. Although the LCU is much slower than the cargo ships, doing only four to five knots heading into the wind, it is clean and has the added advantage that it can be beached for easy access.

Dr. Knudsen first became interested in working with the Marshallese when he accompanied the BNL medical team on an annual survey of the islands in 1971. "His constant presence in the Marshall Islands has done a lot to help the relations between the people and the medical survey team,"

says Dr. Conard. "We have been extremely fortunate in having Dr. and Mrs Knudsen stationed on the islands. They have been highly dedicated to their work and I am extremely grateful to them."

In addition to his work with the thyroid program, Dr. Knudsen has been devoting much of his time to regular medical health care because of the shortage of medical personnel on the islands. The Marshallese are most grateful for what he is doing, comments Dr. Conard.

Dr. Knudsen will be returning to the United States in October when he will be replaced in the Marshall Islands by another physician. When he returns to the Lab, he will work with Dr. Conard and accompany the medical team to the Marshall Islands on subsequent surveys. He will probably go back to the islands in a year and a half to relieve his replacement as BNL's resident physician there.

Service Awards — June

- 25 Year**
 Frederick L. Horn Applied Science
 Arthur F. Humm, Jr. Health Phys. & Safety
 Edward G. Reilly Physics
 Andrew W. Sunyar Physics
 William A. Tuthill Applied Science
 Stephen T. Waski Staff Services
 Lois N. Zeidler Fiscal

- 20 Year**
 Edward Caruso Biology
 Charles W. Flood, Jr. Health Phys. & Safety
 Julius Spiro Accelerator
 Edward J. Walsh Health Phys. & Safety
 Joseph H. Whelan Plant Engineering

- 10 Year**
 Mulki R. Bhat Applied Science
 Stephen C. Biemer Plant Engineering
 Lorraine G. Elmore Physics
 Raymond H. Mayo Plant Engineering
 Elizabeth A. Pergan Personnel
 Louis E. Repeta Mechanical Engineering
 Benjamin W. Rosen Physics
 Maureen H. Sacker Medical
 Susan S. Schwemmer Biology
 Nelson E. Tyler Supply & Materiel
 Joseph L. Wiensko Plant Engineering

Selected Reading

- Amer. Sci. 62, May-June 1974
 New directions in physics. D.A. Bromley. 293-303
 Women scientists in America before 1920. M.W. Rossiter. 312-23
 New Sci. 62, May 2, 1974
 Conversations with a two-month-old. C. Trevarthen. 230-2+
 Science 184, May 31, 1974
 Academy says energy self-sufficiency unlikely. A.L. Hammond. 964
 Two new accelerators proposed: Competition for 1976 funds. W.D. Metz. 975

Arrivals & Departures

- Arrivals**
 Dale W. Gassaway Ph. & Graphic Arts
 Edward Harmer Central Shops
 Raymond Lopez Instrumentation
 Margaret J. Matkovich Medical
 Morgan May Physics
 Peggy L. Micca Medical
 Anthony Tatakis Plant Engrg.

- Departures**
 Carmine DiLullo Mech. Engrg.

Correction
 In last week's *Bulletin*, Norman D. Rohrig was listed as an Arrival in Applied Science - it should have read Medical.

New Talent Festival
 Opening Night - Thursday, June 20
 8-10 p.m., Berkner Hall

The Brookhaven Art Committee invites all BNL staff, family and friends to attend a gala preview of drawings, paintings, and sculptures. These works were selected by members of the Art Dealers' Association of America in order to introduce artists who never have had one-man shows in New York City. The works are currently on exhibit in 19 uptown galleries.

Brookhaven has the honor to present some of these artworks for the enjoyment of this community. The exhibit will be on view weekdays through July 2 from 11:30 a.m. to 2:30 p.m., and on the day of the Picnic, June 22, from 1:30 to 5 p.m.

The New York Galleries who will be in the show are: Terry Dintenfass, Martha Jackson, Willard, Forum and Kraushaar.



Head of a Woman by James Lechay.

TIAA/CREF

Following is the text of a letter written by a BNL employee to Thomas C. Edwards, President of TIAA and CREF, and the reply.

Mr. Thomas C. Edwards, President
 TIAA and CREF
 730 Third Avenue
 New York, New York 10017

Dear Sir:

As a participant, I had requested and received copies of the TIAA and CREF Investment Reports for 1973 in order to obtain a more detailed picture of how TIAA and CREF applied to our retirement savings. Examination of these reports has brought out, what appears to me, a disturbing fact about the way that TIAA handled some of this money and poses several questions that I hope you will answer.

First of all, I would like to quote some phrases from the above mentioned documents in order to put my comments into perspective. From the CREF investment philosophy, the pertinent sentence is: "CREF participants can moderate their exposure to the risks of equity investing by allocating a portion of their retirement savings to TIAA, which provides a fixed dollar annuity income." I believe that this philosophy is understood by many of your participants who may think that there is some reasonable doubt that common stocks are the best inflation hedge and prefer to have their retirement savings sheltered from this form of speculation. However, this does not seem to be the case. The TIAA investment report states that TIAA purchased 1,132,000 shares of common stock in 1973 at a total cost of \$55,271,207 or a 8.6% of the total new investment purchases. Moreover, these holdings appear to be identical to those in the CREF portfolio. Furthermore, the dividends from these stocks represent a return of only 2.7% on the original investment and the equity value as of May 17, 1974 represents a loss of over \$11,000,000. I would therefore appreciate your reply to the following questions:

1. Why did TIAA invest in common stocks when this type of speculation is available from CREF?
2. How can you justify low return, non-guaranteed, speculative investments as being consistent with TIAA's investment objective and philosophy?
3. The following points are stated as being evident:
 - a. TIAA did not diversify its common stocks but instead acquired the same ones as CREF.
 - b. TIAA bought common stocks when attractively priced preferred issues were available having a high rate of return and some sort of dividend protection.
 - c. TIAA did not purchase, in lieu of common stocks, such things as intermediate term money market instruments, government and agency notes and bonds when such safe investments yielded historically high rates of return and it was evident that many people in the investment community expected long term interest rates to rise sharply.

Considering the above facts and the loss of \$11,000,000 thus far, in your common stock purchases, how can you justify that the TIAA investment advisors are not imprudent and irresponsible?

Sincerely yours,
 Carl L. Goodzeit
 Accelerator Department

Mr. Carl L. Goodzeit
 Accelerator Department
 Building 911-C
 Brookhaven National Laboratory
 Associated Universities, Inc.
 Upton, Long Island, New York 11973

Dear Mr. Goodzeit:

Mr. Edwards has asked me to reply to your letter of May 23rd regarding TIAA's investments.

I can appreciate your concern, as from the information shown in our 1973 Investment, it appears that TIAA had made additional investments of \$55 million in common stocks during the year. This is not the case. While the Association has had a small investment (about 2 to 3% of assets) in common stocks for many years, no additional funds have been allocated to our common stock program during the last three years. We were in the process of restructuring the common stock portfolio during the year and the \$55 million investment reflects the reinvestment of proceeds realized from the sale of common stocks.

TIAA's investments are subject to the laws of the State of New York covering life insurance companies. With a cash flow of more than \$600 million a year every available investment outlet must be given consideration in order to maximize investment returns. If it is believed that over a long period of time, investments in common stocks will provide a hedge against inflation and show higher rates of return than fixed income investments, then they should be considered, but only in amounts that are small enough to permit long-term investments without concern about intermediate market fluctuations.

Not all of TIAA's annuity policyholders participate in CREF. About 9% have only a TIAA annuity contract. Invested assets also support reserves for life insurance and major medical contracts and future expenses. The reserve for future expense is accumulated prior to retirement and provides funds for expenses during the payout period. If possible, it would be desirable to shelter this reserve from rising costs due to inflation. Also, TIAA's operating expenses tend to rise during an inflationary period and some of this increase might be offset by common stock investments. These are the considerations that some years ago led to the establishment of a small investment in common stocks. Are they still valid? They are being re-examined and it is quite possible that recent developments will lead to a decision to eliminate common stocks from our investment portfolio.

Most of the common stocks now held by TIAA are also in the CREF portfolio. CREF has investments in the common stocks of about 200 companies that are followed closely. It seems logical for TIAA to select its stocks from this carefully supervised list. However, TIAA holds only 30 stocks and in much smaller amounts than CREF, therefore, its investment performance may be better or poorer than CREF's, but it certainly will be different. TIAA's investments in 30 companies, many of them industry leaders, should provide ample diversification for a fund its size.

Preferred stocks have certain tax advantages that result in their selling at yields slightly less than alternative investments of similar quality. As TIAA cannot benefit from this tax advantage, being a tax-exempt organization, we seldom have more than a small investment in preferred stocks and usually find it to our advantage to replace them with other investments.

TIAA invests for the long term and generally we do not acquire short-term investments in anticipation of a possible change in long-term rates. However, at times during 1973, we held more than \$100 million of short-term money market instruments. Some of these may have been rolled over two or three times during the year and, therefore, were not reported in our Investment Supplement as purchases, as the inflated total would be misleading.

TIAA has the reputation of having one of the best records of investment performance in the life insurance industry. Our net rate of interest earned last year of 7.16% was 116 basis points above the average rate of 6.00% for the industry. These additional earnings meant 34 million additional dollars for our policyholders in 1973. This amount will increase year after year as long as we can maintain this differential.

In the 24 years, 1950 through 1973, TIAA invested \$1,958 million in conventional mortgages. Less than 1% of these loans have ever gone into foreclosure, and recovery on the sale of foreclosed properties resulted in a net loss of only \$91 thousand for the 24-year period. This is less than .005% of the funds invested. At the end of 1973, TIAA's investments in direct loans to industry represented about 30% of total assets. Here again, since about 1950, we have followed a policy of gradually increasing the percentage of TIAA assets invested in these loans. They provide a rate of interest substantially higher than is available on the large bond issues that are underwritten by investment bankers and offered publicly. Although these direct loans do have some additional risk, our experience to date has been very good.

I do not believe that TIAA's investment management has been either imprudent or irresponsible. I hope you agree.

Please let me know if you have further questions or would like additional information about TIAA's investments.

Sincerely yours,
 Walter Mahlstedt
 Executive Vice President and
 Chairman, TIAA Finance Committee

