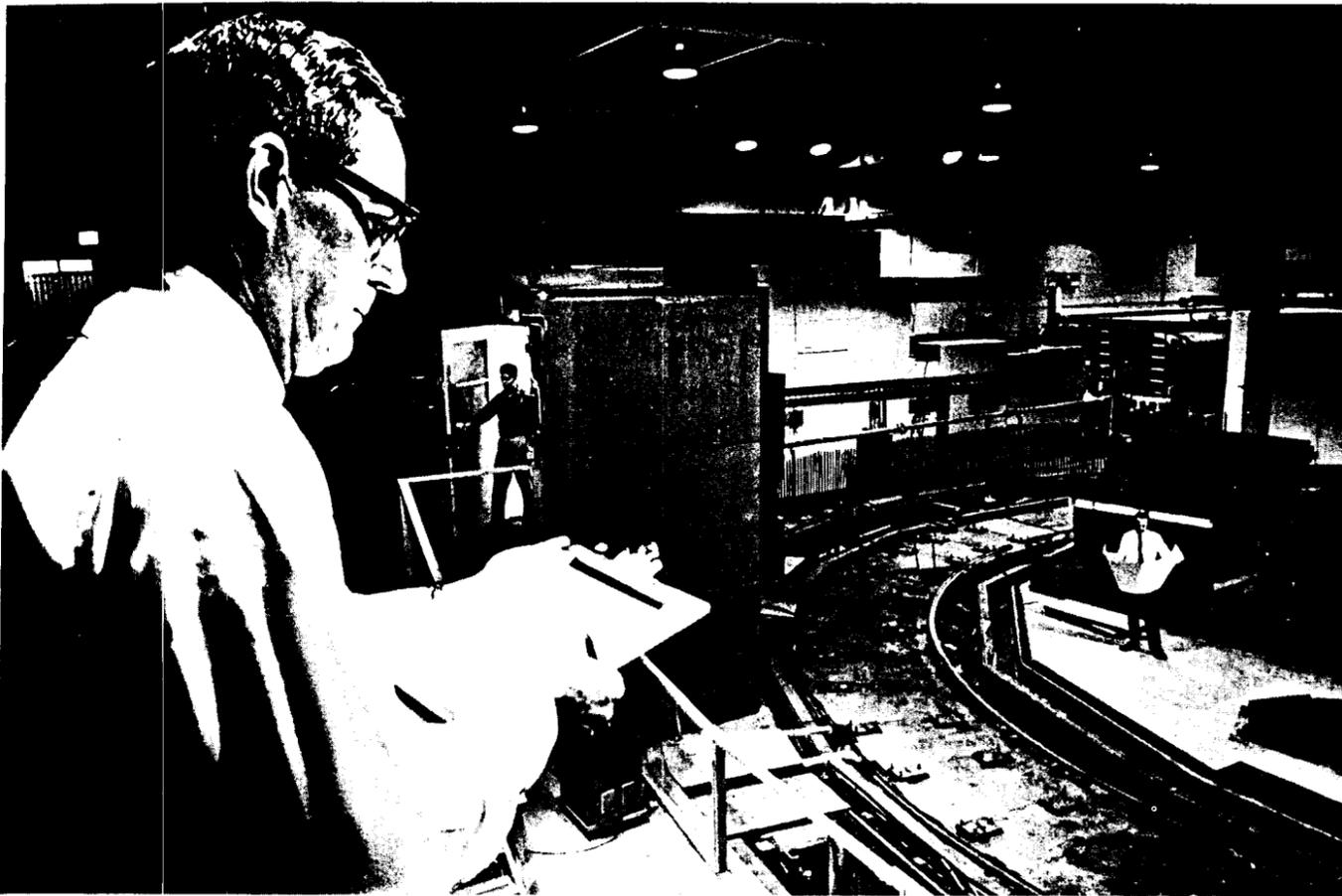




Cosmotron Injector Used For Bio-Medical Research



Dr. Clarence Turner (left) surveys area in Cosmotron building that is presently being used by the Medical Department for Bio-Medical research with the Van de Graaff. A technician is shown leaving an experimental

target area (center). Leon Goodman (right) is standing near the area where a new experimental facility will be constructed. —Humphrey

Bio-Med Accelerator Replaces Cosmotron

The gong that used to ring when the Cosmotron was being operated is silent. The huge magnets that formed the ring for the Cosmotron have been cut up and moved to a storage area where lingering radiation can dissipate. Some of the specialized magnet assemblies have been moved to the AGS for new uses. There is only a circular trench in the floor of the Cosmotron Building to indicate where this pioneering machine once was.

Yet in one corner of the experimental floor there remains one part of the Cosmotron that refuses to retire, and in fact, is now being used for new research that may be recorded in history as being as important as that performed with the Cosmotron. The Cosmotron injector, a 4 MV Van de Graaff accelerator, has been converted to dc operation and is being used as a bio-medical research accelerator. Dr. Clarence Turner, who worked with the Van de Graaff since its installation in 1950, is still in charge of the operation of this large accelerator.

The Radiological Research Accelerator Facility (RARAF) represents a joint enter-



Leon Goodman, (left) Research Associate in charge of Bio-Med project, checks use schedule with William Jordan of BNL.

prise between scientists from the Medical Research Center at Brookhaven and members of the Radiological Research Laboratory of the Department of Radiology of Columbia University. This laboratory, under the administration of the Medical Department, has a program concentrated on research in radiobiology and radiological physics and is available for use by other departments, such as Biology and Health Physics.

RARAF utilizes the Van de Graaff generator that served previously as the injector of the Cosmotron. The accelerator has been completely overhauled and should reach 5 to 6 MV with a maximum beam current of at least 100µA. It is used to generate steady beams of charged particles for direct use and for the production of mono-energetic neutrons having energies ranging from a fraction of one MeV to about 20 MeV.

A shielded area for the irradiation of living systems and for general studies in dosimetry has been developed inside the Cosmotron building. The area consists of a room 13 feet wide, 18 feet long, and 18 feet high, with 4-foot-thick ilmenite concrete walls and a 2-foot-thick roof. An open-grill steel floor 7 feet above the concrete floor divides the cave into two target areas. The lower level is used for the direct horizontal machine beam and also contains a magnet for bending the beam 90°. The resulting vertical beam is used in the upper level.

A second area to be built will be 30 feet wide and 44 feet long. The unroofed structure will have 4-foot-thick concrete walls 18 feet high. Additional magnets will be used to bend the beam into this room and into one of three separated beam tubes and target positions. An additional target area to be provided outside the shielded room will utilize low beam currents for charged particle studies. Construction of this second area could not be initiated until the Cos-

(Cont'd on page 2)

Synthetic RNA Used In Cancer Research

The initial results of a joint Brookhaven National Laboratory and Sloan-Kettering Institute for Cancer Research program to test the use of synthetic double stranded RNA on a DNA virus known as Herpes Simplex are published in the November issue of the *Proceedings of the National Academy of Sciences*. The researchers are Dr. Leonard D. Hamilton of BNL and Dr. Chester M. Southam and Virginia I. Babcock of Sloan-Kettering Institute for Cancer Research in New York City.

The report states that two types of synthetic two stranded nucleic acid, poly (A·U) and poly (I·C), protected mice and rabbits against Herpes Simplex virus infection and inhibited growth of the virus in human cells in tissue culture.

Herpes Simplex is a DNA virus which commonly causes cold sores in man, but occasionally causes eye infections leading to blindness and sometimes causes systemic infections which may result in death. Certain other viruses of similar type cause cancer in animals.

In rabbits keratoconjunctivitis, a local eye infection similar to pink eye, which occurs in man, responded to treatment with either poly (I·C) or poly (A·U). Other investigators have also reported the effectiveness of poly (I·C), but poly (A·U) has not previously been studied in this condition. This eye infection also responds to treatment with IUDR, a drug which inhibits DNA metabolism.

In the systemic Herpes virus infection of mice, all untreated mice died while half of those mice which were pretreated with poly (A·U) or poly (I·C) remained in good health. Even when treatment was started as late as 48 hours after infection, it had a significant therapeutic effect. This is the first report that poly (A·U) is an effective anti-viral agent or that any agent is effective against systemic infections.

The cells of all self sufficient living organisms contain both types of nucleic acid, DNA, and RNA; DNA primarily in the nucleus, is the substance that carries genetic characteristics and RNA helps transfer and translate the information. Viruses differ from living organisms in that their particles contain only one type of nucleic acid - either DNA or RNA.

In a previous study, poly (I·C) was found to be effective against systemic infections of mice by foot-and-mouth disease virus, an RNA virus. This research was a joint effort of Brookhaven National Laboratory and the USDA's Plum Island Animal Disease Laboratory.

Second Sculpture On View At Berkner

A massive bronze sculpture titled "Nuclear Energy" has been placed on display in the lobby of Berkner Hall and will remain there for an extended period. This work by Henry Moore is on loan from Governor Nelson Rockefeller.

Both "Nuclear Energy," and a piece by Herbert Ferber titled "The Sun, The Moon, and The Stars II" are part of the new approach to displaying art at Brookhaven. In addition to the traditional forms of temporary exhibitions, the Committee will bring to the Laboratory major works of twentieth century art on loan for extended periods. This program was stimulated by aesthetically congenial spaces of the Conference Center - Berkner Hall - Cafeteria complex.

"The Sun, The Moon, and The Stars II" On loan from the Whitney Museum is Herbert Ferber's "The Sun, The Moon, and The Stars II." Ferber, a prominent member of the older generation of American sculptors, has been one of the most successful artists in translating the concepts of cubism, particularly its organized freedom, into the language of sculpture. The work now at Brookhaven was originally commissioned for a temple in Cleveland and, in the words of Ferber, "the idea of Creation was to be explicit. The abstracted forms of Sun, Moon and Stars were to supply the iconography." But the iconog-

raphy does not overwhelm the sculpture, but rather acts as highlights in a tightly organized but open composition in which the "idea of creation" is pervasive. Its innate strength is manifest in the ease with which this remarkable sculpture illumines a scientific environment as it would a (Cont'd on page 2)



Art Committee members Dennis Puleston (left) and Phil Palmedo (right) are shown in front of the sculpture "The Sun, The Moon and The Stars II" at Berkner Hall.



BNL Riggers move the 500-pound bronze sculpture onto a display stand at Berkner Hall. Art Committee Chairman Phil Palmedo (left) watches anxiously as the bronze is placed on a revolving base. Dennis Puleston (right) and Patrick Glynn (left center) watch that the sculpture is properly positioned. —Humphrey

Bio-Med Accelerator

(Cont'd from page 1)

motron ring had been removed to clear the required floor area.

The RARAF also includes laboratory space and a machine shop. The latter is used for both the development and maintenance of the accelerator and the requirements of experimenters. Three laboratory rooms are now in use, and additional rooms will be developed.

A large variety of radiation biophysics studies is being done at the RARAF. In radiological physics these include the measurement of proton and neutron γ spectra with wall-less counters, the measurement of the absorbed dose from monoenergetic neutrons in depth in human phantoms, the development of tissue-equivalent multiplication ionization chambers, studies of stopping power and the average energy expended in the production of an ion pair for heavy ions, and studies of δ -ray energy deposition.

Radiobiological experiments utilize monoenergetic neutrons to study lens opacification in the mouse, hemopoietic effects in the mouse tail, genetic effects in *Drosophila melanogaster*, and cytogenic effects in maize embryos and the inflorescences of *Tradescantia*.

The Principal Investigators for the joint project are Associate Director Dr. Victor Bond of BNL and Dr. Harald H. Rossi of Columbia. Research Associate Leon Goodman of Columbia is in charge of the research program of the RARAF, assisted from Columbia by Steve Marino, Robert Mills and Robert Colvett. Susan Munsterman is the group's secretary.

In addition to Dr. Turner, the operating staff from BNL includes: William Jordan, Mechanical Engineering; Richard Skelton and Ernest Lange, Medical Research Technicians; and Albert Manger, Central Shops.

According to Goodman, "The set up and operation of this facility was helped by the cooperation and assistance of Dr. Green and the Accelerator Department in providing space and equipment." Since working full time on this project, Goodman has been living in Shoreham with his wife and two children. Before the start of the Bio-Medical project he had done research work at the Research Van de Graaff with Dr. J.L. Bateman of the BNL Medical Department.

Sculpture

(Continued)

religious one, the way in which it represents technical as well as cosmic creativity. "Sun, Moon and Stars" is hung on the wall under the skylight at the west end of the lobby.

Nuclear Energy

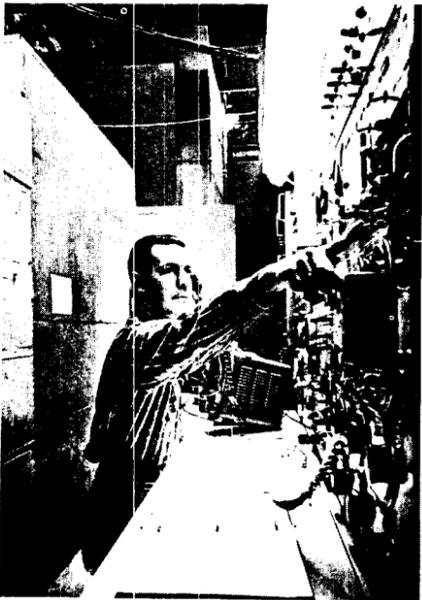
Henry Moore is often considered the greatest sculptor of the era. The work on loan from the Rockefeller collection is the bronze cast from the working model of "Nuclear Energy," commissioned by the University of Chicago to commemorate the first achievement of controlled nuclear fission at that institution. This version of the work was completed in 1964 and was originally called "Atom Piece."

This is surely one of the tightest, most concentrated symbolic statements of 20th century sculpture. One is immediately reminded, of course, of the atomic bomb's mushroom cloud, itself a symbol of the age. But it is also a representation of energy or force in a dynamic biomorphic sense. In a general context Moore once wrote, "Force, Power, is made by forms straining or pressing from inside. Knees, elbows, forehead, knuckles, all seek to press outward. Hardness, projection outwards, gives tension, force and vitality. Clenched fist, symbol of Power - of Force." Nuclear Energy, the clenched fist of the modern world. Herbert Read wrote, with regard to this work, "The whole concept suggests the containment of a powerful force, in the way that a compact skull holds a brain capable of the wildest fantasies." It is significant that the dome rises from a complex, open, but rugged and firm base.

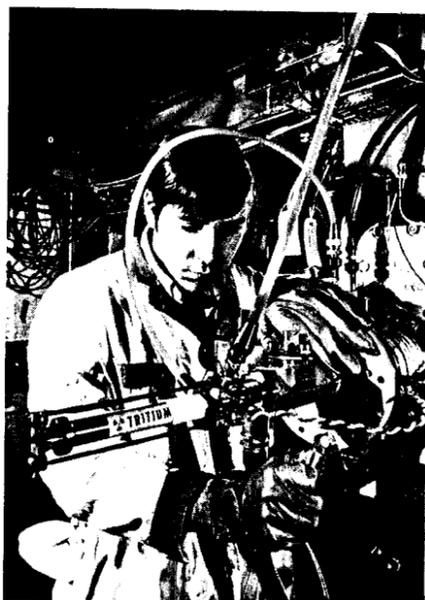
The two sculptures will be on view in the Conference Center for at least three months. In this way it is hoped that members of the Laboratory community will, at their leisure, be able to become familiar with their qualities.



Richard Skelton, Research Technician, checks alignment of beam tubes at the Radiological Research Accelerator Facility. In the background is the Van de Graaff formerly used as injector for the Cosmotron.



Ernest Lange, Research Technician, works controls of the Van de Graaff.



Stephen Marino, Columbia, places target at end of accelerator beam.



William Jordan, Mechanical Engineering, checks for leaks in the "water window" to be installed between the control panel and a new Bio-Med experimental area.

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NORBERT J. DERNBACH
Public Relations Officer

Here and There

Claire Lamberti

Edwin J. Tuthill and James J. Reilly, Jr. (both of DAS) were the named inventors of "Apparatus for Continuous Chromatographic Separations," for which U.S. Patent No. 3,482,376 was granted to the AEC on December 9, 1969.

Charles Hendricks and Robert Shuman, of Furman University in South Carolina, are spending January and February in the Chemistry Department for off-campus research in conjunction with their studies at Furman. Mr. Hendricks is working in association with Norman Sutin, and Mr. Shuman with Richard Dodson.

Enrico Bellini joined the Biology Department as Guest Research Associate on December 31, and will be working in association with William S. Hillman. Dr. Bellini is at present affiliated with the Botanical Institute of Freiburg University in West Germany and is the recipient of a NATO Fellowship.

Lewis J. Greene (Biology) recently presented a seminar on "Pharmacologically Active Peptides as Enzyme Inhibitors" at the Division of Biological Sciences, State University of New York at Stony Brook.

Arrivals & Departures

Arrivals

Simone E. Duby.....Medical
Geoffrey P. Tauro.....Medical

Departures

Diane Adamson.....Physics
Caterina A. Corchia.....Staff Services
S. Thomas Emerson.....Physics
Joseph L. Friedes.....Physics
Karen H. Jarzombek.....Fiscal
Kathleen T. McLinsky.....Chemistry
Lance R. Persson.....Physics
Vincent Rutkowski.....P.E.P.

In Memoriam

William Fetter, Security, who retired 14 years ago, died on Tuesday, January 27. He has lived in Ridge since his retirement. He is survived by one daughter.

French Club of BNL

The next meeting of the French Club will be held on Monday, February 16, at 8:30 p.m., in one of the small rooms of the Cafeteria-Conference Center.

Mrs. Florence Witkowski, noted art historian, will present an illustrated lecture in French entitled "Trésors et Vitraux des Eglises de France" (Art Treasures and Stained Glass Windows in French Churches).

Everyone welcome; admission \$1.50.



Woodwell Appointed To Senate Advisory Panel

Senator Jennings Randolph (D.-W.Va.), Chairman of the Committee on Public Works, announced the appointment of George Woodwell of the Biology Department to a panel of expert consultants to advise the Committee on a continuing basis on matters of ecological and environmental policy.

"I have been cognizant, as have other Members of the Committee," stated Senator Randolph, "of the need for expert and independent scientific and technical guidance on the complex problems over which we have jurisdiction. For several months we have been discussing with eminent and nationally-recognized scientists the feasibility of establishing an advisory panel to bring to the deliberations of the Public Works Committee the best of contemporary scientific thought in the field of ecological and environmental policy. The response from the scientific community has been universally favorable.

"The growing concern among scientists concerning the degradation of our environment is being transformed into the desire for action. Our panel of consultants will provide a new, more effective and more direct channel of communication between the scientific community and the legislative processes.

"The panel will advise the Committee and the staff on the specific programs and policies under the jurisdiction of the Committee, such as highway and related transportation problems, water resources development, and the general problems of water and air pollution and solid waste disposal. We will also seek assistance from the panel on long term environmental problems that are not now being closely addressed by any of the Committees of the Congress - the climactic effects of jet aircraft, the impact on the environment of other existing and anticipated technologies, and the need for new water resources development policies in relation to population trends."

Also appointed to the same panel was Professor Ian McHarg, University of Pennsylvania, who lectured at BNL in February, 1968.

Period of Adjustment

The BERA Theatre Group will be presenting Tennessee Williams' *Period of Adjustment* on March 13, 14, 20 and 21 at the Laboratory Theatre. This rare play (a comedy by Williams) concerns the marital adjustments of two couples, one, newlyweds with problems, the other married for many years, with old problems. The production features Carol Celentano, Joe Nardi, Julie Peierls and Norm Silbergli in the lead roles. The director is Lu Zavesky.

There is one small part, a policeman, still uncast, and anyone who wishes to join in on the production of the show is most welcome. For more information call Dan Hooper, Ext. 7464.

Be sure to reserve one of the dates, and come and see what promises to be a hilarious and enjoyable evening of theatre.

Cafeteria Menu

Week Ending February 12, 1970

Friday, February 6	
Old Fashioned Clam Chowder	
Fish 'n' Chips/Tartar Sauce	.65
Round Roast of Beef/Brown Gravy	.65
Shrimp Chow Mein on Crisp Noodles	.75
Monday, February 9	
Chicken Chowder	
¼ Roast Chicken/Stuffing/ Cranberry Sauce	.65
Breaded Pork Chop/Applesauce	.65
Chopped Beefsteak/Macaroni	.65
Tuesday, February 10	
Beef Barley Broth	
Baked Meat Loaf/Brown Gravy	.65
Beef Chop Suey on Rice	.65
Broiled Chicken Livers/Bacon Strip	.65
Wednesday, February 11	
Cream Mushroom Soup	
Vcal Patti Parmigiana	.75
Knockwurst/Mashed Potatoes/ Sauerkraut	.65
Fried Scallops/Tartar Sauce	.80
Thursday, February 12	
Puree Potato Soup	
Old Fashioned Chicken Pie	.80
Round Roast of Beef/Brown Gravy	.65
Spaghetti/Italian Sausage	.80



Novelist Kurt Vonnegut, Jr. (left) being interviewed by NET producer Jac Venza at the Brookhaven Graphite Reactor.

NET Playhouse Shows Scenes From Brookhaven

A new series, starting tomorrow night on Channel 13 TV at 8:30 p.m. will air five foreign film dramas each focusing on man's anxiety about his immediate future. The series, titled "Five Tomorrows" will be introduced by Kurt Vonnegut, Jr., noted author whose familiar works include "Slaughterhouse Five," "Cat's Cradle," "Player Piano," and an article in the current issue of Esquire on "The High School Revolution."

Vonnegut was interviewed at BNL by the producer of the series, Jac Venza. Color movies were made at the BGRR and the HFBR while Vonnegut and Venza were discussing the implications of the films.

Each of the films deals with a different aspect of the same theme: the shape of our daily lives should the present trend toward conformity, violence and mindless action continue unabated; should the manufacture of atomic arms remain unchecked; and should the vigilante concept of "law and order" be carried to its illogical extreme.

SUNY Offers Course On LI's Fresh Water

Dr. Lehn Franke, a scientist with the U.S. Geological Survey in Mineola, will teach a course on Long Island's fresh water resources at the State University of New York at Stony Brook beginning this month.

Prior to joining the U.S. Geological Survey in 1964, Dr. Franke worked with the Canadian Geological Survey in Newfoundland and Labrador and was employed by the Mobil Oil Company in Midland, Texas and Ankara, Turkey. From 1960-64 he was on the staff of the Federal Institute of Hydraulics in Karlsruhe, Germany.

In addition to extensive research and field work, Dr. Franke has published several scholarly papers on Long Island's water supply, including a study on the effect of sewerage, an atlas of Long Island resources, and an analysis of the effects of the 1962-66 drought. Two additional studies of hydrology on Long Island are nearing publication.

Science Youth Day Focuses On Biology

The 14th Edison Science Youth Day at Brookhaven National Laboratory will be celebrated next Wednesday, February 11, and will have as its theme, "Biology Today."

Invitations have been sent out to more than 50 High Schools to send their top science students to participate in this annual day-long program. It is expected that well over a hundred students and teachers will come next Wednesday to spend the day at the Lab.

After being welcomed by Lab Director Maurice Goldhaber, the movie "Brookhaven Spectrum" will be shown. Harold Siegelman, acting Chairman of the Biology Department will address the participants on the subject of biology, in preparation for afternoon tours and lectures by members of the Biology Department.

At the conclusion of the lectures and tours the participants will have a Question and Answer period before leaving the Lab at 4 p.m.

Dance Committee Defies the Cold Outside

The Gym will be transformed into a Winter Wonderland on Friday evening, February 20. Even though we might have the same scene on the outside that evening, the atmosphere will be somewhat different inside. Warmth and gaiety will be the added attractions.

If you've never gone to one of the BERA Lab-wide dances you're missing a marvelous opportunity to really have a good-time evening.

Since the Wayne Foster Orchestras have always been favorites at past dances, the Committee again arranged to have one of these bands come back for a repeat performance.

An interesting note on the Wayne Foster Orchestras was cited by Robert Sylvester in his syndicated column last week. He said - "Success story: A little more than a year ago, a young bandleader named Wayne Foster and his wife, Marin, were doing the best they could playing club dates with their small band. Then they played some fill-in music while Republicans waited for the national election returns at the Waldorf. Next thing Foster knew, he was tapped to play President Nixon's Inaugural Ball in Washington. It was a pretty good springboard. Today, Foster and his wife have put together six bands with permanent personnel and keep 60 musicians busy all the time. The groups did over 1,000 private parties in a year. What makes this success story a little more upbeat is that Foster has been totally blind since age 10."

If you enjoy gliding across the floor to the accompaniment of good music, you won't be disappointed if you come to the dance on the 20th.

BERA will provide free potato chips, pretzels and ice. Beer and mixers will be sold at a nominal cost. If you prefer more potent liquid refreshments, bring them along with you.

The cost of admission will be a mere \$2.00 each for employees and family and \$2.50 each for visitors. That's a modest price to pay for four hours of delightful entertainment.

Mail Call . . .

The company clerk in an army unit had a cinch compared to the mail clerks at BNL. Where the Army worries about the troops not getting enough mail, here at home in BNL, the flood of mail never ceases to be almost too much to handle.

70,000 pieces of inter-office mail picked up, sorted and re-delivered each month is chore enough. Add to that the 115,000 incoming letters and the 1,000 packages, and you get a real good idea of the mail picture at Brookhaven.

All of this mail has been and will be handled, but sometimes it gets to be too much when the boxes are filled with such non-technical matters as Sears Roebuck catalogs, Playboy magazines, and offers of special sales from Rainbow Ranch.

All employees may help to reduce this overload of unofficial mail by filling out Change of Address forms that are available from either the BNL Post Office, any US Post office, or send a note to the BNL Mail Room and they will mail any employee a request form. For those who receive a large quantity of such mail, there are Post Office Boxes available for rent.



Nick Pisco of the BNL Mail Room, sorts thru a pile of Monday morning mail.

Candidates Picked for BERA Election

Ballots for the annual election to three positions on the BERA Executive Board will be mailed to all Laboratory employees on February 12.

The following is the slate of candidates selected by the 1970 BERA Nominating Committee.

James Hooper (Reactor Engineer) Atomic Energy Commission

George Latham (Biology Associate) Biology Department

Charles Meinhold (Associate Health Physicist) Instrumentation & Health Physics Department

Thomas Nelson (Assistant Materiel Manager) Supply & Materiel

George Oldham (Rigger) Plant Engineering & Planning

Jerome Weiss (Chemist) Division of Applied Sciences

The winners of this election will replace John Binnington (present Board President), Woodrow Hobson and George Oldham whose terms will expire on March 1. Incumbent members of the Board are Paul Kelly, Lynn Kalbach and Leslie Lawrence.

Soccer

M.T. Hutchings

Christmas may be over but those pounds are still there. Why not work them off playing soccer in the Gym? We play every Monday evening at 7:30 p.m. sharp. Come along, or call Ext. 7608 or 2582 if you wish to play.

We hope to arrange an evening of short games with local teams in February.

We recently said good-bye to founder-members John Connant and Pete Webster. Although new players are joining in, we always need more participants, so don't put it off - come next Monday.

Bowling News

Irma Carl

Purple League

Designers and Electrons are tied for first place with Fiscal still hanging in there only one point behind the leaders. Mike Guacci was the leader this week with a 188-535 series, Marshall Bull 214-528, Bernie Jefferson 186-516, Stan MacCormack 192-514, Joe Cuccia 189-507, Hank Ach 180-504, and Joe Mayeski 214-502.

Pink League

The never-say-die All Toes are only one point out of first place. With the exception of Charlotte Martens (176) and Ann Kirkpatrick (183) everyone else is trying to forget the fair to middlin' night of January 27.

Mixed Volleyball

The Nets are in their prime, winning all three games on January 26. The Jets haven't forgotten last half and struggled for two wins 22-20 and 21-19. Meanwhile, the Bouncers have been deflated for some time and can't seem to spring back. Recovering from last half's last place, the Mets won a game from the Bouncers.

Second Half Standings:

	Wins	Losses
Nets	3	0
Jets	2	1
Mets	1	2
Bouncers	0	3

—Lorraine Osterer

Expecting Home Movies?

Postmaster Steve Garrett has reported receiving two rolls of film at the Upton Post Office that were mailed out for processing with no return address.

The films, each in a pre-paid mailer from Korvettes, will be held at the Post Office until they are claimed. The numbers on the stubs are: 228161 and 437721.

Safety Equipment Schedule

Safety items will be issued in the lower level of Building 535 as follows:

Safety Shoes	
Mondays	1:30 p.m. to 4:30 p.m.
Thursdays	9 a.m. to 12 noon
Safety Spectacles	
Mondays	9 a.m. to 12 noon
Wednesdays	1:30 p.m. to 4:30 p.m.

Dollars and Sense

Robert Von Hollon
Medical Deductions

Almost all of us have medical and dental expenses. The expenses we have incurred, for ourselves and our dependents, may be deducted on our income tax return to a limited extent. The term "dependent" has the same meaning as it does in determining the dependency exemption to which the taxpayer is entitled, except that the \$600 test does not apply. Therefore, medical costs you have incurred for someone who does not technically qualify as your dependent can be deducted, if you provide over half of his or her support for the year, and the reasons you can't claim that person as a dependent are due to his or her gross income (in excess of \$600) and the fact that he or she filed a joint income tax return.

Expenses are deductible to the extent they exceed 3% of adjusted gross income. However, there is a special rule regarding expenses incurred for *medicines* and *drugs*. Before applying the 3% limitation, we must first apply a 1% limitation. These limitations apply to all taxpayers regardless of age.

You can deduct one-half of the premiums paid for medical care insurance without regard to the 3% rule - up to a maximum deduction of \$150. The other half, plus any excess over the \$150 limit, is included with your other medical expenses subject to the 3% rule. If a husband and wife each paid premiums for medical care insurance, each can take up to \$150 of deductions if they file *separate returns*.

The term "medical expenses" includes payments to medical doctors, chiropractors, optometrists, osteopaths, Christian Science practitioners, psychiatrists, dentists, etc. The amounts paid are deductible even though the practitioners may be unlicensed.

The determination of medical care depends on the nature of the service rendered, not on the experience, qualifications, or title of the person rendering them. However, the service rendered must be for the diagnosis, cure, mitigation, treatment or prevention of disease or for the purpose of affecting any structure or function of the body.

Other medical expenses can consist of: artificial limbs, crutches, dentures, eyeglasses, hearing devices (including special instructions in speech and lip reading for a deaf person), laboratory fees, "seeing-eye" dogs and their maintenance, transportation costs, wheel chair or X-rays.

Transportation expenses for rendition of medical service are deductible. The transportation can be by means of ambulance, bus, train, taxi or private car. Instead of keeping detailed records of automobile operating expenses, you can take an automatic 5¢ a mile deduction for medical transportation. All you have to do is prove medical purpose and mileage.

1. Vitamins, iron supplements, and similar drugs prescribed or recommended by a medical practitioner are deductible items. But such personal items as toothpaste and other toiletries, maternity clothing, and diaper service are non-deductible personal expenses.

2. Accident and health premiums (i.e., Automobile liability insurance) are considered medical expenses only to the extent paid for true medical insurance coverage. The amount *must* be stated in the policy or in a *separate* breakdown by the insurance company and must be reasonable as compared to charges for other coverage.

3. Medical expenses claimed on your tax returns must be net of reimbursements.

4. If you deducted a medical expense item on your '68 return for which you were reimbursed in '69, and the '68 deduction gave you a tax benefit, the reimbursement must be included in your '69 income in Part III of Schedule E (Miscellaneous Income). Such '69 reimbursement can not be used to reduce '69 medical expenses.

Classified Advertisements

Position Available

GENERAL COMMUNICATIONS CLERK (1) - Staff Svcs. Application Deadline: February 12, 1970.

Employees interested in applying for above positions should inform their Supervisor and file a written request with the Employment Office.

Autos & Auto Supplies

63 WAGONEER - 4 w/d, r/h, 4 new snow tires, new batt, excel cond. \$1150. 286-3440 after 6.

60 CHRYSLER NEW YORKER - Full pwr. \$175. Jerry, Ext. 2934, HR3-3706.

59 FORD ANGLIA - 2 dr, std trans, 4 cyl, new tires & batt, very clean, good 2nd car. \$170. Bill, Ext. 2580.

59 INTERNATIONAL - A-130 rack body, many extras. 727-027 after 5.

68 PONTIAC LEMANS - Vinyl top, bckts, Hurst 4 spd trans, 389 eng, low mileage, new snow tires & studs. E. Divis, Ext. 2718.

67 PLYMOUTH FURY WAGON - 6 cyl, std trans, r/h, low mileage, excel cond. 286-8119.

66 MUSTANG CONV - Red/white top, V8, 4 spd, console, bckts, extras, very good cond. \$1295. C. Nielson, Ext. 7677, 325-0968.

VW OWNER'S SERVICE MANUAL - For 1600 fast-back & squareback, 319 pp, covering repair & maintenance. Cost \$8, sell \$3. Howard, Ext. 7775.

66 VW - Factory equipped camper, incl side tent, excel cond, 2 extra tires. \$1500. Mazzeo, Ext. 2407, 878-1923.

66 FORD ¾ TCN PICKUP - 4 w/d, snow plow, s/t tires, beach tires, r/h, set for camper. AT9-0664.

64 MALIBU SS CONV - Yellow/blk top/blk int, 4 spd trans, posi rear, excel cond. HR3-9180.

63 RAMBLER STATION WAGON - 6 cyl, std trans, excel cond, new brakes, muffler & batt. HR3-9180.

64 LINCOLN - 4 dr, full pwr, good cond. \$500. W. Lundgren, Ext. 7525, 388-1566.

48 CHEVROLET ¾ TON TRUCK - 15" split rims, 8 hole, good cond, best reasonable offer. W. Lundgren, Ext. 7525.

69 JAVELIN SST - Dk green/tan int, V8, auto trans, ps, 10,000 mi. \$2,800. 286-0785 after 5.

67 COUGAR - 2 dr, turquoise/blk top, auto 3 spds, bckts, ps. AT6-0957 eves, Ext. 2245 after 4.

2-13" F85 WHEELS - Mounted w/1 baldy & 1 new tire. \$5/pr. Dick, Ext. 612.

TIRES - 2-5.00/5.20x14 Firestone Town & Country snows, excel cond. \$15 ea. Carol, Ext. 2727.

64 CADILLAC - Perf cond, new tires, all possible acces. \$1600. Kahane, Ext. 2810.

62 FAIRLANE - 4 dr, V8, auto trans, good tires, snows, good running cond, Mobil station. Herman, AT6-0139.

VW ROOF CARRIER - For the bug, 2 yrs old. \$5 or best offer. J. Olson, Ext. 441, 289-1463.

68 PLYMOUTH FURY III - V8, auto trans, ps/pb, deluxe trim, r/h, must sell. As is, \$1650. Bernie, Ext. 322, 286-8946 after 5.

66 CHEVROLET IMPALA - 2 dr hdt, new brakes, clutch, batt & valve job. \$900. Ken, 281-8622.

64 OLDS DYNAMIC 88 CONV - White/blk top, ps/pb, auto trans, excel cond. Asking \$775. Ext. 2928, 475-8962 after 6.

59 CHEVY WAGON - New eng & exhaust system, very good cond. \$175. Bill, 878-2879 after 5.

TIRES - 7.75x14 & 8.25x14, good cond, 4 ply. \$5 ea. 473-2473.

59 JEEP WAGON - 4 w/d, snow plow, 6 cyl. \$850. 281-8695.

62 FALCON STATION WAGON - 6 cyl, auto trans, 2 snows mounted on extra wheels. \$75. AT6-9197.

57 CHEVY CONV - Ps/pb, Hurst shifter, V8, running cond. Asking \$75. AT6-9197.

65 VOLVO 122S - 4 dr, new batt, snows, very good cond. Asking \$690. 266-6309.

68 VOLVO 122-S - Michelin radials, carb air pre-heater. \$2195 firm. Frank, Ext. 7220.

60 PLYMOUTH VALIANT WAGON - Needs work, best offer. Fern, Ext. 574.

Boats & Marine Supplies

9'6" BLUE MAGNUM SURFBOARD - Used 2 times, \$70; Alcott sailfish, wooden hull, nylon sail, \$150. R. Sautkulis, Ext. 388.

JOHNSON SEA HORSE - 17 hp, runs but needs cleanup. \$20. Jerry, Ext. 588.

9'2" BOSTON WHALER SQUALL - Tender/sailing dinghy, plus spare unused sail, oars, used 3 mos only. \$550. (New price \$680 + \$46 spare sail) Ext. 2435/538 after 6.

14' SAILBOAT - '67 O'Day Javelin, fiberglass, c.b., Hild sails, 5 hp Seagull, '69 trailer, excel cond. Pat, Ext. 574, 744-8623.

Miscellaneous

STARLINE WALL OVEN - Coppertone, oven light, broiler, auto timer, size of opening 22" wide x 33" high. \$30. Ext. 586, 475-7372.

UTILITY TRAILER - 4'x8', steel body, wired for lights. \$125. 744-6406.

SNOW BLOWER - 3½ hp Craftsman, used once. Orig cost \$197, selling for \$150. 744-6406.

OAK FIREWOOD - Logs or split, pickup or delivered, 20"-30", reasonable. Bob, 732-9517.

COLDSPOT REFRIG - 31" deep, 32" wide, white, hardly used, 3 yrs old. \$90. Ext. 2203, 286-0866 after 6.

GE TOASTER & IRON - Excel cond. \$5 ea. Ext. 2203.

HOT WATER HEATING CONVECTORS - 48"x24"x 8½", \$12; 32"x24"x6½", \$10. Ext. 2515.

HARMONY JUMBO GUITAR - Model 1260, steel string. \$60. D. Mauro, Ext. 7525.

AUTO STEREO TAPE PLAYER - W/speakers, \$35; am-fm portable radio, 11 transistor. \$20. D. Mauro, Ext. 7525.

GARDEN HOSE - 2-50' lengths plus fittings. \$8. Ext. 2435/538 after 6.

ICE SKATES - Hockey, size 5. B. Johnson, Ext. 573. FREE - You take it off the property, a 90' steel tapered flag pole. 727-0271 after 5.

36" GAS RANGE - White, excel cond, best offer; all wood kitchen set, best offer. Jerry, Ext. 588.

IRON - \$4; men's white sneakers, 5½ (deck soles), used once, \$3; tinker toy "Big Boy." as new, \$2.50. Ext. 2435/538 after 6.

DINETTE SET - Beige formica, 42"x58", 2 matching chairs, good cond. \$15. L. Kukacka, 473-1157.

AKC GERMAN SHORTHAIRED POINTER - Female, 14 mos old, best reasonable offer. Irwin, Ext. 2168.

ELEC DRYER - Lg, Hotpoint. \$20. 289-1754.

CREATIVE PLAYTHINGS CRAWLIGATOR - Like new, \$5; child's auto harness, like new. \$2; Morsan baby carrier, used twice, \$2. 744-3744.

STEREO ADC 220 CART - Like new, \$5; tinted deluxe dust cover, "high" for dual changers, \$7.50. M. Tainiter, Ext. 2728.

CLOTHES DRYER - Needs work, probably a new timer. \$10. Ric, Ext. 2100, 286-0405.

HOTPOINT ELEC RANGE - 30" wide, good operating cond. John, Ext. 7685.

REESE HITCH - W/equalizer bars, will install. \$150. S. Galante, 475-6484.

LABRADOR RETRIEVERS - Male puppies, gold color, 10 wks, AKC, shots, best family dog. LT9-5432.

LADIES' FIGURE SKATES - Size 6. \$6. F. Pallas, Ext. 7183, 475-3365.

BED FRAME - Harvard, metal, w/casters, adjusts from twin to queen size, very good cond. \$10. D. Britton, Ext. 7201, 941-3609.

BABY ITEMS - Feeding table; folding carriage; mesh playpen; baby clothes & other items. GR5-2998.

8 MM MOVIE CAMERA - 8 mm editor, flood lights, \$6 ea; baby scale, \$3; elec sterilizer, \$5; steel Hollywood bed frame, \$2. Dick, Ext. 612.

SHOTGUN - 12 ga, side by side 28" full & modified, beautifully hand engraved, excel cond. \$105. Ric, Ext. 2100, 286-0405.

68 APACHE TENT TRAILER - Ramada, sleeps 8, ice box, 3 burner stove, sink, spare tire, Privney curtains & awnings, excel cond. \$1000. M. Iarocci, AT6-8468.

BLACK LIGHT - 40", almost new; Armstrong flute, silver plate, \$50. Andy, AT6-0428.

MEN'S SKI BOOTS - Size 8 med. \$10. Ext. 2924, 286-0428.

LADIES' ICE SKATES - Hyde, white, size 8N. \$10. 286-0428.

SKI BOOTS - Size 7½, good cond. \$10. Ext. 7689, 589-7052.

ENCYCLOPEDIA BRITANNICA SET - Brand new. Ext. 2891, AN5-0501.

PORTABLE DISHWASHER - Sears automatic, good cond. \$45. 744-8917.

HAMMOND ORGAN - Self-contained E-111 series, must be seen to be appreciated. Ext. 351.

ACCORDION - Italian make, 120 base, good cond. \$60 or will trade for 48 base accordion. Ext. 2902.

2 ANTIQUE BRASS TELESCOPES - About 30x, orig spyglass type. \$25 ea. Ext. 597, AT6-0436.

BATTERY TAPE RECORDER - \$6; remote servoflash for flash bulb, \$8; camera tripod/pan head, \$6. Ext. 597, AT6-0436.

FREIDEN MANUAL CALCULATOR - Full size, Mod H. \$30. Ext. 353, AT6-0436.

GARRARD SL95B - W/Stanton 681EE cart; Lafayette 1500T w/cab; 2 Criterion 5xA speakers. All for \$500. Ed, HR3-7324 after 7.

GARRARD SL95B - Stanton 681EE cartridge, dust cover & base. List \$202.95 + tax, sell for \$115. Ed, HR3-7324 after 7.

MANUAL RIVAL MEAT SLICER - \$8. LT9-3269.

STAMP COLLECTION - Foreign & US stamps, best offer. LT9-3269.

IRRIGATION SPECIAL - 240 gph Duro piston pump w/tank & motor. \$15. F. Pallas, Ext. 7183.

SPRING BARGAIN - Planet jr hand plow. \$10. F. Pallas, Ext. 7183.

FREE - Back issues of Scientific American. F. Pallas, Ext. 7183.

MEN'S CLOTHES - 3 suits (size 40), top coat (38), sport coat, car coat, shirts & pants, all good to excel cond, some brand new, reasonable. B. Kiriazis, Ext. 7220/2766.

C FLUTE - Bundy-Selmer, good cond, asking \$45; umbrella tent, sleeps 4, good cond, asking \$25. B. Kiriazis, Ext. 7220/2766.

TRAVEL TRAILER - 16' Shasta, sleeps 5, self contained, equalizer hitch, spare, must be seen. Ext. 7415.

WESTINGHOUSE WASHER & DRYER - In semi-working order. \$25 takes both. D. Hirst, Ext. 2938/7351, 286-3912.

STAINED GLASS CHANDELIER - Antique, Tiffany style, best offer; blue wool coat w/silver mink collar, size 14, like new, \$25. Fern, Ext. 574.

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

OLD MASTIC - 3 bedrm house, den, garage, basement, comb windows, corner property, near Forge River marina yacht club. 281-7226 after 6.

For Rent

FURN HOUSE - 2 bedrms, dining/den w/fireplace, stereo, TV, hamlet of Brookhaven, avail Feb-June 15, 1970. AT6-1068 eves.

FURN HOUSE - E. Patchogue near bay, 4 bedrms, avail 5-6 mos starting Feb, terms negotiable. Ext. 2729, GR5-1372.

Wanted

HOUSE - 3 bedrms, 1½ bath, 1½ car attached garage, wooded ½ acre, east of Pipe Stave Hollow Road, Miller Place. Ext. 2994, 751-5867 after 6:30.

ADDING MACHINE - In perf working order; steel office file cabinet. Ben, Ext. 2588.

STUDENTS - Who wish to study piano, accordion or organ, beginners or advanced, my home or yours. Don, 281-8044.

TAXPAYERS - Federal & State income tax forms prepared in the privacy of your home or mine. GR5-8330.

TREE REMOVAL - & chain saw service, reasonable. Bob, 732-9517.

MATTRESS & BOX SPRING - Twin size, 36"x39". Ron, Ext. 2969.

UNFURN APT - Vicinity of Stony Brook U, for responsible married couple. 567-3582.

CAMPING EQUIPMENT - Must be in good cond. D. Lambrecht, Ext. 7266.

VACUUM CLEANER - W/attachments, reasonable. Thornber, 878-2342.

PETS - Going on vacation, skiing, pet sitting, reasonable, reliable. Tony, 924-8225.

JUNE BRIDES - Have your wedding gown custom made, reasonable. Millie, 878-1540.

WINDSHIELD FOR OUTBOARD BOAT - 58" wing to wing. Gordon, Ext. 424.

CHILD'S CAR SEAT - To fit bckt seat. Ric, Ext. 2100, 286-0405.

TO RENT - 1-2 bedrm furn apt/house. Kendrick, Ext. 2962, Ext. 7730 eves.

ACCORDION - 48 base, in good cond, about \$50. Ext. 2902.

BUTTONHOLE ATTACHMENT - Singer or Greist, for straight stitch machine. 286-9602.

ROTO-TILLER - 588-5833.

TO RENT - Sm apt or house. B. Kiriazis, Ext. 7220/2766.

GIRL'S ICE SKATES - Size 1. Gene, Ext. 2428.

Carpools

WANTED - Riders from Bellport area - reliable, prompt, on-time driver w/new car. Howard, Ext. 7775.

SUFFOLK COMMUNITY COLL STUDENT - Wishes to join or form carpool from Lab to school. Betty, Ext. 2759.

FORM CARPOOL - Greenlawn, Centerport or Northport area. Frank, Ext. 488.

DRIVER WANTED - To compl existing carpool from Exit 52 (or further west) on LI Expwy. Elliot, Ext. 2103.

DESIRE DRIVER - From Massapequa or Wantagh or vicinity. Ext. 2942.

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.

5. Ads not carried because of space restrictions will be held for publication in the next issue.

6. Ads are run only once and must be resubmitted if they are to be repeated.

7. 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: _____ Name: _____ Phone No.: _____

Send to: Brookhaven Bulletin, 40 Brookhaven Avenue