# the Bulletin Board

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## AEC COMMISSIONERS MEET AT BNL

Atomic Energy Commission Chairman John A. McCone and Commissioners John F. Floberg, Robert E. Wilson, and John H. Williams met at BNL on Tuesday, June 14, to review the Commission's medical program. Also present was Mr. Loren K. Olsen, who will replace Commissioner Williams when the latter resigns from the AEC on June 30. After their meeting the Commissioners visited the Alternating Gradient Synchrotron.

#### JAPANESE STUDY TEAM

A Japanese Radiation Utilization Study Team will visit BNL on Friday. June 24. This group of ten high level scientists, engineers, and technicians represents industrial firms and government agencies interested especially in the area of radiation utilization. While in the United States the group has visited leading research laboratories and related organizations to have discussions with experts in this field. The primary purpose of this visit is to study the present status of radiation utilization and its future prospects in industry and to explore the effect of increased productivity through the application of radiation to production practices.

### BNL PLANNING

### L.I. FAIR EXHIBIT

BNL has been invited to present an exhibit at the Science and Industry Exposition and Long Island Fair, to be held at Roosevelt Raceway, October 8 through 16. Many other research and industrial installations on Long Island will also participate. The Laboratory plans to include a seven-panel display, models of the Research Reactor and Cosmotron, and Biology exhibits featuring research in plant mutations and photosynthesis.

## EMPLOYEES MAY BUY SAFETY SHOES

You can't keep on your toes if you don't keep your toes on! Safety shoes stocked in Safety Stores, Building 100, may be purchased at cost by BNL personnel for use at home when operating power mowers or doing other jobs involving the possibility of injury to the feet.

## THE TRAVELS OF RAGWEED POLLEN



Taking a pollen sample from a ragweed plant injected with a radioisotope.

About 5% of the population of the United States, or almost 9 million people, are afflicted with hayfever. Airborne pollen is the chief cause of hayfever; ragweed pollen is responsible for about 95% of the hayfever (pollinosis) in this country.

A study is now under way to learn more about the travels of airborne pollen. This study is a project of the New York State Museum and Science Service, with the cooperation of BNL. It is financed by a grant from the Public Health Service (National Institute of Allergy and Infectious Diseases). Dr. Eugene C. Ogden, State Botanist of New York, is directing the work.

The study involves the facilities and many members of the staffs of the Biology Department, The Meteorology Group, and the Health Physics Division at BNL. Gilbert S. Raynor of Meteorology has worked closely with Dr. Ogden in designing and testing sampling devices.

Pollen of most plants is carried by insects. This pollen does not cause hay-fever since it is heavy and sticky and seldom reaches the nostrils. Pollen which is airborne, from plants such as pines, oakes, birches, poplars and grasses, is produced in huge quantities.

Among the airborne pollen producers, tree pollens appear in the spring, grass pollens are most prevalent in the early summer, and weeds (including ragweed) produce pollen from mid-August until the end of September. There are several species of ragweed; two are native to Long Island and shed vast quantities on this area. (Continued on Page 2)

#### RAGWEED POLLEN-Cont'd

Although most pollen comes to rest near its place of origin, it can travel extremely long distances. Ragweed pollen has been found in the middle of the Atlantic Ocean and several thousand feet above the land. A small percentage, but a large amount, of ragweed pollen travels hundreds of miles through the air.

The overall purpose of the study now in progress is to devise and perfect techniques for studying the travels of ragweed pollen. There are two major aspects of the study. The first is sampling airborne pollen. It has been found that the counter now widely used by allergists to determine the pollen count is affected not only by the amount of pollen in the air but by other factors, such as wind speed and orientation of the sampler. These factors may introduce differences in the count of over 500%, even though the same concentration of pollen is being sampled. There is an obvious need for a pollen sampler that will operate with improved accuracy under commonly encountered weather conditions.

Another recognizer need is for more information on the effect a given number of ragweed plants has on the pollen concentration in the atmosphere at different distances and directions, over various types of topography and vegetation, and with regard to meteorological situations. For these studies, it is desirable to plot the travels of pollen from a known source.

There are two methods used to obtain ragweed pollen for study which is easily distinguishable from other pollen of the same species. One method is to induce early blooming and shedding by covering the plants in the late afternoon and uncovering them in the late morning, thus lengthening the daily period of darkness. The early-blooming pollen will be the only ragweed pollen in the air, except for a few stray spores from the South or other areas.

The other method is to tag pollen which sheds during the regular ragweed season with a label which allows it to be easily recognized. Two radioisotopes, radiosulphur and radiophosphorus, have been found satisfactory for this purpose. With both radioisotopes, the pollen is released from the plants in normal fashion and its buoyancy is unchanged.

In this method, the individual ragweed plant is injected with a radioisotope, which spreads throughout the entire plant. When the pollen is shed and is carried through the air, some of it is picked up on the samplers, in which there are microscope slides coated with a sticky substance. The slides are collected periodically. They are then coated with liquid photographic emulsion. The grains of pollen are thus between the slide and the emulsion and the atomic "explosions" form a latent image. When the slide is developed, the radioactive pollen is easily distinguished from normal untagged pollen. This device is called an autoradiograph, since the tagged particles "take their own pictures."

This is the project's third summer. Samplers of several designs based on different principles are now under test. An isokinetic sampler, which is complicated and expensive, is being built for use as a check and a wind tunnel has been constructed for studying aerodynamic qualities of all samplers.

An acre of ragweed is under cultivation in one of the Biology Department's fields. Samplers are placed in and around the field, on the two meteorology towers, and in the woods to determine the effect of pollen from one acre of ragweed on the surrounding area. This summer the group will sample at various distances and directions from a plot of ragweed that will shed in July. There are two small isolated plots for radiophosphorus and radiosulphur to determine the relative advantages of the use of these tags.

There is much to be learned about the travels of ragweed pollen and the effect of a given amount of ragweed on hayfever sufferers. The tagging and sampling techniques being worked out by the present study will help to provide reliable and accurate means for getting some of the answers to these questions.

#### USE OF SOFTBALL FIELDS

In order to maintain and keep the softball fields in good condition, only organized teams may use the softball fields on a schedule prearranged through the Recreation Office.

#### SWIMMING POOL SCHEDULE

Beginning Monday, June 27, the Summer Schedule of rates and hours will be in effect, as follows:

Pool Open Monday through Friday 2:30 p.m. to 9:30 p.m.

Daily Admission Rates									
Employee	.35								
Family Member	.35								
Guest	.60								
Season Tickets (June 27 to August 28)									

Tickets will be on sale at the Swimming Pool Office ONLY.

#### DON'T BRING CHILDREN BEFORE 2:15 p.m.

The pool does not open for general admission until 2:30 p.m. daily. Parents bringing children to the Laboratory to swim are requested not to do so before 2:15 p.m. Children will be required to remain in the pool area until picked up by parents.

#### **UPTON RIFLE - PISTOL CLUB**

On Thursday, June 30, the small-bore rifle shooters will have their first competitive match against the Grumman "Gophers". This event will take place at the on-site range at 6 p.m. All small-bore rifle shooters are invited to participate.

Monthly meetings of the U.R.P.C. will be cancelled for the months of July and August. The next monthly meeting will be on Thursday evening, September 1.

The last shoot of the small-bore intrateam tournament will take place this Thursday evening. R. Domish holds high average with a one point lead on E. Hart. Also crowding first place are P. Colsmann and P. Colombo. Winners will be announced next week.

## BNL SAFETY RECORD A SMALL CUT CAN CAUSE TROUBLE!

9 DISABLING INJURIES at BNL thus far in 1960 (for a rate of 4.28 injuries per 1,000,000 manhours compared to the All AEC Research Contractor rate of 1.77).

## SUMMER RECREATION

BERA is now swinging into its summer program. We would like to extend a warm welcome to summer students and guests at BNL and to inform them and the regular Laboratory employees of the recreational activities in which they can participate during the summer months.

For the benefit of newcomers who may not be familiar with BERA, these initials stand for Brookhaven Employees Recreation Association. All employees become members of BERA automatically as soon as they come to the Laboratory. The organization promotes athletic competition and cultural and social activities at BNL. There are no dues to BERA itself, but some of the member clubs may elect to have dues.

BERA is administered by a board of six voting trustees chosen in an election open to all employees. At the present time the trustees are: Edward Sayre (President), John Binnington (Vice President), Grace Siemen (Secretary), Mary Semerjian, Lawrence Fuller, and Alf Christoffersen.

Here are some of our summer activities, schedules, and facilities:

SWIMMING POOL - Monday through Friday, 2:30 p.m. - 9:30 p.m. GYMNASIUM - Monday through Thursday evenings to 9:00 p.m. (Volleyball, badminton, table tennis, basketball, exercise, etc.)

RECREATION BUILDING - Monday through Friday 5:00 p.m. - 11:30 p.m. Open as a lounge and meeting place. Has kitchen facilities, dance floor, club rooms, picnic area.

TENNIS COURTS - Six non-scheduled courts. BERA features a summer tournament.

OPERATION GET-TOGETHER - Our annual Laboratory-wide picnic held on site for all employees and immediate families.

RESIDENT CHILDREN'S PLAY SESSION - A daily morning athletic play program for on-site children held in the Recreation Building.

CHILDREN'S SWIM LESSONS - Registered instruction courses given each summer for all employees' children.

DANCING - Record dances held weekly at the Recreation Building. Square Dances and Arthur Murray Instruction will be scheduled periodically.

MOVIES - Our Film Study Group has scheduled a series of excellent films to be shown at the Lecture Hall each Monday in July and August.

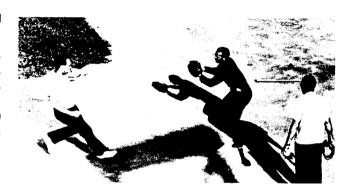
FISHING CONTEST - Entry blanks are available for this contest, which began in May and will continue until October. 15 species of fish are eligible.

SOFTBALL - 2 fields, 2 leagues, and 12 department teams are now in action. Always room for additions to the rosters.

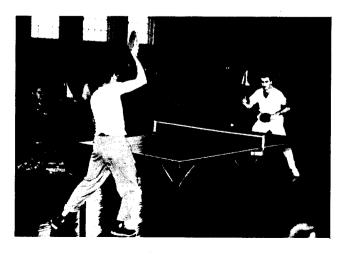
CLUBS - Rifle & Pistol, Camera, Skin Diving, Motor Sports, Chess, Model Railroad, and Ceramics. Most of these activities are at an ebb during the summer. Events and meetings will be announced in The BULLETIN BOARD.

RECREATION OFFICE - Open Monday through Friday 11:30 a.m. - 12:30 p.m. and 4:00 p.m. - 5:00 p.m. Information on all activities, schedules, and recreation facilities is here. For your convenience items used in athletics such as tennis rackets, softballs, tennis balls, badminton birds, etc., may be purchased at a savings. Information on beaches, golf courses and State Parks is on hand.

Watch THE BULLETIN BOARD for specific information and announcements of recreation activities.







APPLICATION: Swimming Classes

#### SWIM CLASS

Date...

Name	Son/Daughter	Age*	${\sf Classification}$									
1												
2												
3												
4,												
5												

\*If under eight years old, state height

I wish to register the above children in the Swimming Classes. I understand that he or she is not permitted to leave the Swimming POOL AREA. I agree that he or she may be denied participation in the program for failure to observe the rules.

					(Employee's Signature)					

(Life No.) (Extension)

Forward this application with registration fee to the Recreation Office, 3 Center Street, on or before July 1.

#### **REGISTRATION DEADLINE - JUNE 30**

**Important:** If there are days your child can NOT attend classes, indicate this on application. No registration fees will be refunded.

SWIMMING CLASSES: 1:00 - 2:30 p.m. 1. These classes are for all Laboratory employees' children, and will start the week of July 11.

2. Children must be eight years of age or four feet in height.

3. Each child will be scheduled for a specific period, probably once a week depending on response.

4. A fee of \$2.00 per child must accompany application. (Make checks payable to BERA).

5. Children will report at the Swimming Pool not earlier than 12:50 p.m.

6. Classes will end at 2:30 p.m. Offsite children must remain in the pool area until picked up by parents. On-site children must remain in the pool or proceed directly to apartment area.

7. Children will pay daily admission fee (.35) or present season ticket to enter swimming pool.

8. To the best of your knowledge, select and write in on application the group your child qualifies for: **Beginner**, Non-swimmer or NOT able to swim 40 feet. **Intermediate**, Can swim at least 40 feet. **Swimmer**, Can swim 100 yards.

#### CLASSIFIED ADS

Deadline each week for BULLETIN BOARD Classified Ads is Friday afternoon at 3. Send ads to BULLETIN BOARD, 58 Brookhaven Avenue, or bring them to the Personnel Office, same address.

If your ad was omitted due to lack of space, it will appear in next week's BULLETIN BOARD.

#### **FOR SALE**

1951 DODGE - as is. Best offer. Also 1958 Volkswagen in perfect condition, 23,000 miles (not 2 yrs. old). Leaving July. Ext. 301-70 or 514 (evenings).

1957 MERCURY - 4 door, fully equipped. Best offer over \$900. ATlantic 9-1079, day or evening.

1952 WILLYS JEEP STATION WAGON - 2 wheel drive, 5-8.20x15 tires for beach. New shocks, battery, exhaust system, voltage regulator. \$200 firm. J. Gibson, Ext. 407.

1959 CHEVROLET - Black Impala convertible. Red upholstery, std. shift. Will sell to pay off note. Small cash or trade required. C. Porcaro, SElden 2-5393, after 6 p.m.

1954 FORD - 4 dr. 6 cyl. Std. trans. Good tires. \$300. Ext. 629 or GRover 5-3308.

1941 CHEVY - must part with this sturdy, quick starting car. Very good tires and battery. Economical on gas. ATlantic 9-1865 after 6 p.m.

1949 FORD V8 STATION WAGON - in good mechanical condition. Needs carpentry. F. Shively, Ext. 746 or 2116.

1955 BUICK - Riviera Century. R&h, power steering, dynaflow trans. Excellent condition. \$800. GRover 5-2808 after 5 p.m

1956 CHEVROLET BEL AIR - 2 dr. sedan. Auto. trans., power steering and brakes. R&h. Clean condition. \$950. SHoreham 4-2930.

1951 CHEVROLET - grey 2 dr. sedan. Power glide. Good tires and finish. 63,000 mi. \$200. Ext. 789.

1959 RENAULT DAUPHINE - heater, windshield washers, low mileage, excellent cond. Blue. \$1,300. J. Backes, Ext. 2341. After 5:30 GRover 5-3918.

FAMILY VACATION TOO EXPENSIVE? - Try kamping kum komfort, from Mexico to Canada. With birch paneled 15 ft. travel trailer complete with 2 beds, stove, icebox, heater and many extras. Automatic brakes. Almost new. \$1095. S. Cohn, Ext. 301 or ANdrew 5-0501.

BOATS - 18 ft. ¼ in. mahogany hull, speed-boat, needs deck work, \$125. 18 ft. Barnegat Bay Sneak Box sailboat, sloop rigged, needs new canvas on decks, \$350. Duck Hunting Sharpie, good condition, 100 decoys, will sell separately, \$200. Universal motor, 25 h.p., needs manifold. \$40. ATlantic 4-6209.

BOAT - marine plywood Yellowiacket. 15 ft. runabout. Remote controls, steering, windshield, cushions, 35 h.p. Johnson, plus Pacemaker trailer and winch. Excellent shape, ready to go. \$650. M. Walters, Ext. 778 or POrt Jefferson 8- 1791.

JERSEY SEABRIGHT DORY SKIFF - 24x7x2 ft. 45 h.p. Palmer F.W. cooled, new battery, new 2½ ft. dry chemical extinguisher, 4 life cush-

ions, anchor and 100 ft. ½ line. Painted and in water ready to go. A reliable, sound and able launch for the fishing enthusiast, easy to haul. Call Paul, Ext. 596 or MA 9-4985, evenings and weekends.

BOAT - 1959 15 ft. Barbour Vacationer with walk-through, 30 h.p. Evinrude motor, excellent condition ready to go, steering wheel and controls, running lights, canvas cover, automatic bilge bailer, \$525. STony Brook 7-1136.

PRAM - 8 footer in excellent condition with 1½ h.p. Neptune outboard motor. Skipper and his sister moved into larger craft. No bunks, no head, no galley, but lots of fun in calm water. \$65. GRover 5-8202.

MARINE ENGINE - Model "A" converted. Water jacket, bronze shaft, 2 propellers, 2 marine clutches, good for spare parts, etc. ATlantic 1-8127.

1958 FIBREGLASS RUNABOUT - with 35 h.p. Johnson outboard, both bought new, total use under 40 hours, electric starting, remote control steering, extras include fuel tank, full canvas cover, battery, front & rear lights. Orig. cost \$2300. Price \$1150. ATlantic 6-8744 evenings.

23 FT. OWENS CABIN CRUISER - 1956, 96 h.p. Sleeps 3, head, galley. \$200 of parts and labor since hauled. Completely painted and varnished, motor job, new cutlass strut bearing, new battery. \$200 of access.: elec. w/wipers, bilge pump & spotlight, lighted compass, 8 life pres., water skis, etc. \$2250 takes it. J. Mapes, Ext. 427 or YAphank 4-3118.

1957 35 H.P. JOHNSON - Javelin modelcan only be used with remote controls which are included in price. Starts and runs perfectly, covers have orig. paint, entire motor in finest possible cond. Will guarantee for season. Lists at \$360, will sell with electric starter for \$325, without starter \$295. Ext. 482. Evenings and weekends. BEllport 7-1092.

SNIPE SAILBOAT - sails are in good condition. Needs mast. \$100. ATlantic 6-8314, after 6.

SAILBOAT HULL - 15 ft. Plywood bottom with seams fiberglassed. G. Terres. Ext. 301-41. 14 FT. RUNABOUT - with 30 h.p. 1957 Evinrude outboard, steering wheel, remote controls, 4 cushions, anchor, Tee-nee trailer and hitch, and water skis. \$550. T. Pappa. Call ATlantic 1-7595 after 6.

PAINT SPRAYER - Craftsman ½ piston type. With 20 ft. air line. Combination internal or external mix, bleeder or non-bleeder type gun. \$40. T. Papa. Call ATlantic 1-7595 after six.

BABY FURNITURE - crib, excellent condition, originally cost \$125, asking \$45. Baby car crib and baby swing, both for \$3. ATlantic 1-9638.

CHILDREN'S FURNITURE - youth's solid maple single dresser, bed & mirror. \$40. AM 4-4627. COMPLETE PLASTICVILLE TOWN AND COUNTRY - houses, stores, stations, figures, etc. for 027, S gauge. One Marks water tower & 1 pr. of Lionel 027 switches. Also some track, will sell for \$12. GRover 5-1285.