

the Bulletin Board

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TAKE YOUR CHOICE

Which of the contests are you entering? You are welcome to enter one or all of the contests to be held on July 29 during Operation Get-Together No. 4.

BATHING BEAUTY CONTEST - entrant must be a BNL employee - married or single. File application with G. Sabine, Recreation.

CRAZY ART CONTEST - Paintings may be submitted starting Wednesday, July 26 up until 3 p.m. the day of the picnic. Deliver to the gym.

BEATNIK CONTEST - GROUP SINGING CONTEST - Enter the day of the picnic.

MISS RHEINGOLD in cooperation with experts in various fields, will be on hand to help judge the foregoing contests.

BNL EXHIBITS AT COUNTY FAIR

An accelerator panel designed by George Cox, a reactor model, and a Health Physics exhibit will be on display at the Suffolk County Fair June 30 - July 9. The fair is located at the Sayville Airport, Sunrise Highway and Broadway.

MRS. ALICE W. KRAUSS RECEIVES AEC AWARD

Mr. E.L. Van Horn, Manager of the Brookhaven Area Office of the U.S. Atomic Energy Commission, has announced an award for sustained superior performance to Mrs. Alice W. Krauss. Presentation of the award certificate and a check in the amount of \$125 was made to Mrs. Krauss on Tuesday, June 27, 1961.

The award certificate stated "in recognition of sustained superior performance of official duties which resulted in a significant contribution to the work of the Atomic Energy Commission."

Mrs. Krauss joined the Brookhaven Area Office of the Atomic Energy Commission in August 1946 through a transfer from the staff of the former Camp Upton, Department of the Army. She resides at Crescent Street, Yaphank, New York. Mr. Henry Krauss is a staff member of the Supply and Materiel Division of the Laboratory.

THEATRE GROUP READING

Thursday, July 13

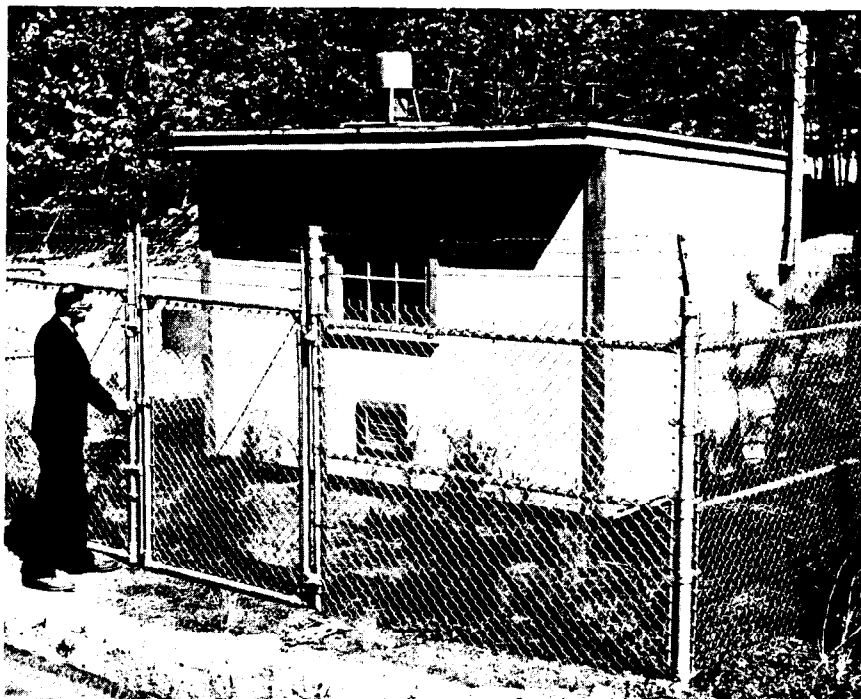
Ginny and Ed Sayre's House

Details in next week's BULLETIN BOARD

AREA SURVEY

The Area Survey Section of the Health Physics Division monitors radiation levels in the air and water on and off the Laboratory site. Its primary function is to keep continuous track of conditions so that radiation exposures due to our gaseous and liquid effluents may be kept well below those established as safe by the AEC, in accordance with the recommendations of the National Committee on Radiation Protection (NCRP).

Much of the radioactivity produced at Brookhaven National Laboratory is incidental to research activities. These inconvenient by-products constitute the bulk of our radioactive wastes. Contaminated solids, such as glassware and experimental apparatus, may be either cleaned or confined by packaging for eventual off-site burial. However, clean-up or confinement becomes impracticable for large volumes of low-level liquid or gaseous wastes. Instead, dilution is relied upon to reduce the concentration of radioactivity in these effluents to conservatively safe levels at the point where anyone might be exposed to them, on or off the BNL 3600-acre site. The magnitude of this problem is indicated by our 1960 liquid effluent average flow rate, 500,000 gal./day, and by the graphite reactor cooling air flow, 40,000,000 cu.ft./day. The Area Survey Section conducts an extensive sampling program to verify that the anticipated dilution of liquid and gaseous wastes has been achieved.



The most conspicuous aspect of this area survey program is the nine Area Survey Stations, one of which is pictured above. Three of the stations are located on-site, four are at or near the perimeter, and two are off-site. Sensitive Dynamic Condenser Electrometer Ion Chamber units within these stations

(Continued on next page)

AREA SURVEY—Cont'd

continuously monitor and record the natural background gamma radiation (2-3 milliroentgens/week) and the occasional additional amounts which may be attributed to radioactive Argon-41 from the reactor air coolant stream. Four of the stations still retain the complete equipment installed at the inception of the area survey program in 1949, including the Dynamic Condenser Electrometer Ion Chamber unit, shielded and unshielded roof-mounted GM tubes, a lead-shielded cosmic ray GM tube, and a moving filter particulate air sampler which has both alpha and beta detectors. Data from all these units is automatically photographed every six minutes. From these photographs, seven-hour readings are tabulated for long-term averages, while intermediate readings are used for special analyses.

The equipment used in the monitoring stations is extremely sensitive. For instance, changes in natural background radiation levels caused by rainfall, a layer of snow over the ground or night-time temperature conditions are easily detectable. Very large effects were caused by fallout from nuclear weapons tests but nowadays only small variations due to fallout are observed. Here at Brookhaven we are fortunate to have a very well ventilated site, having vigorous winds with frequent direction changes from all parts of the compass. Thus, although Argon-41 levels may be momentarily high enough to interfere with counting apparatus in laboratories downwind from the Reactor stack, the average levels are quite low. For instance, at the edge of the site to the N.E. where the highest long term boundary levels are found, the 1960 average was 0.72 milliroentgen (mr) per week. This is far less than the value of 10 mr per week allowed by the NCRP recommendations.

Sufficient dilutions of low-level contaminated liquid waste flows, by other cold liquid wastes and by hold-up of radioactive materials in the filter beds, is achieved so that the liquid waste effluent is well below the NCRP's recommended drinking water limit of 0.5 micro-microcuries (1 micro-microcurie = 2.2 dis/min) per cc averaged over one year. Daily proportional samples are taken of the inflow to the filter beds and of the discharge to the small stream which eventually flows into the Peconic River. Weekly accumulated rain water and monthly stream samples are also taken routinely, as well as occasional special samples of plants and other biota.

These samples are prepared in the Area Survey Lab and counted in the Area Survey Counting Room, both of which are located on the second floor of the Health Physics Administration Building (T-144) at 31 Herschel Place.

WEDNESDAY DANCES

Starting on Wednesday, July 12, and continuing on Wednesday evenings through July and August, there will be live music for dancing at the Recreation Building from 9:00 p.m. to 12 midnight. Frank Campbell's 3-piece combo will provide the musical entertainment. Everybody's invited to join in the fun. Beer and soda are available for purchase.

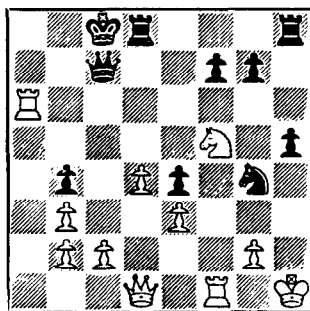
Come on out on the 12th to show us this is what you want, and if the response is adequate we will continue the dances throughout the summer months. Dress as casually as you please.

If you have talent, or your own instrument, bring it along and the band-leader will be happy to have you join in.

Admission 50 cents

CHESS PROBLEM

The weekly chess problem is presented to THE BULLETIN BOARD by BNL Chess Club which meets every Tuesday night at the Recreation Hall. All are welcome.



In this week's problem black is one move away from checkmate, but it is white's move. What can white do to prevent mate?

POPULATION IMPLOSION

Nearly everyone who has been at the Laboratory for a few months or more is aware of the recent significant increase in on-site population. This influx consists, almost entirely, of individuals who will work at Brookhaven during a part of the summer, and who will return to their respective affiliations in the Fall.

Arrangements have been made for 284 scientists and students from approximately 100 different institutions to be here this summer. Half of this number are staff members from colleges, universities, and research institutions; and half are students.

Seventy-seven students from 42 colleges and universities are participants in this year's Summer Student Program. In addition to their laboratory duties, the students attend nine lectures which serve to acquaint them with a wide range of research activities. The first lecture in this series was presented by Dr. G.F. Tape, Acting Director, on June 27.

BRIDGE TOURNAMENT

The first duplicate bridge game of the newly formed Bridge Club will be held Thursday, July 6, at 8 p.m. in the Recreation Building.

Everyone is invited to play.

SUMMER FILM SERIES

Films will be shown at the Lecture Hall every Thursday evening at 8:30 p.m. starting July 6. Admission \$.90, for adults, \$.50 for high school students.

- July 6 LITTLE FUGITIVE
and BETWEEN TWO WORLDS
13 UNDER THE BLACK MASK
and THE MISCHIEF MAKERS
20 DIABOLIQUE
and WAITING (subj. to change)
27 WOMAN OF THE NIGHT
and DAY OF THE PAINTER
Aug. 3 END OF INNOCENCE
and UKIYO-E
10 CRAZY FOR LOVE
and DISORDER (subj. to change)
17 8 x 8 and PASSIONATE PASSTIME
24 HENRY V
31 LUCKY JIM and AUTUMN FIRE
Sept. 7 THE THREE PENNY OPERA

The program on July 6th will consist of two creative experimental films, one of American and one of British origin. LITTLE FUGITIVE is an exciting, humorous adult story of a small boy's adventures at Coney Island.

BETWEEN TWO WORLDS is a synthesis of bold color, choreography, decor, and music into a fantastic film ballet creating a dance-form expressly for the screen.

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: Alf Christoffersen (President), Lawrence Fuller (Vice President), Mary Semerjian (Secretary), John Binnington, Blanche Laskee and Pat Towey.

Here are some of the 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. - 11:00 p.m. Open as a lounge and meeting place. Has kitchen facilities, dance floor, club rooms, picnic area, TV.

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 & immediate families. July 29.

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 employee's children.

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

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

FISHING CONTEST - Entry blanks are available for this contest which began in March and will continue until November.

SOFTBALL - 2 fields, 2 leagues, and 14 departmental teams are now in action. Always room for additions to the rosters.

CLUBS - Rifle & Pistol, Camera, Skin Diving, Archery, 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, badminton birds, etc., may be purchased at a saving. Information on beaches, golf courses and State Parks is on hand.

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



STEP RIGHT THIS WAY, LADIES AND GENTLEMEN



For a fabulous, fantastic, fun-filled frolic - OPERATION GET-TOGETHER No. 4, July 29 from 1 p.m. until 9 p.m. Games, rides, contests, sports, famous personalities, music, dancing, refreshments and many more wonderful attractions.

The Greatest Show On Earth for the smallest price! Get your tickets Now.

WANTED - some of your time on the day of the picnic. Call Blanche Laskee, Ext. 798, and volunteer for duty. Fun guaranteed.

TICKET SELLERS

For Operation Get-Together

PAT COSIER, Physics	Ext. 688
VIRGINIA HARTMAN, Physics	407
INGER NIELSEN, Physics	2242
ERNIE WINDSCHAUER, Physics	424
CARMEN SPIRO, Physics	791
ISAAC COLE, Physics	424
PAT FERRIGNO, Tech. Info.	2273
EDNA HODGES, Biology	319
PAT BENGENSTEIN, Cosmotron	752
MILDRED O'NEILL, A.G.S.	603, 604
TRUDI NEUHOFF, Photography	2178
TED JASSON, Plant Maint.	586
PETE DELMONTE, Mach. Shops	577
RINA HILGEMEIER, Reactor	394, 2189
GRACE SIEMEN, T-100	2190
JOE MAMMINA, Hvy. Mach. Sp.	566
SOPHIE KOSTUK, Chemistry	608
ELEANOR TINGEN, Admin.	2131
HELEN COOKE, Electronics	542
GEORGE SABINE, Gym.	391
BOB STILL, Fiscal	557
WALTER BECKER, Plant Maint.	2136
MARIANNE CLASEN, Personnel	2106
RUTH NEUSS, AEC	2194
LOIS NORMAN, Metallurgy	555
GRACE JONES, Nuclear Eng.	2550
VIOLET SIGNORELLI, Nuc. Eng.(197) ..	463
GRACE SEARLES, Hot Lab.	2268
SUE SOLOVEY, Physics	541

FISH FLASH

If you've noticed Gus Barwald black and blue and Bandid-ed, it's the result of his fishing trip last Saturday off Fire Island's experimental buoy. Fishing 16 miles out, he hit into a blue shark which put up an hour and a half battle before Gus boated him. Vital statistics: 168 lbs., 9½ ft. long.

BALCOMB GREENE HAS NYC EXHIBIT

A retrospective exhibit of the work of Balcomb Greene, whose paintings were exhibited at BNL in November, 1959, is being held at the Whitney Museum of American Art at 22 West 54th St. in New York City. The BNL showing was the first BERA-sponsored art exhibit to be held at the Laboratory. Some of the paintings exhibited at BNL are included in the present exhibit.

Mr. Greene's exhibit at the Whitney Museum has received very favorable notices from New York art critics. The show will run through July 23.

ANSWER TO CHESS PROBLEM

White wins by:

1. R - B6 ... Q X R
2. N - K7 check.

DISCOUNT TICKETS

Discount tickets to the following shows and events are currently available at the Personnel Office, 58 Brookhaven Avenue.

MY FAIR LADY

(Mark Hellinger Theatre, N.Y.C.)

THE BEST MAN

(Morosco Theatre, N.Y.C.)

PARADISE ISLAND

(Jones Beach Marine Theatre)

WESTBURY MUSIC FAIR

Current attraction, The Vagabond King
Coming, The Pajama Game

FOLK SONG CLUB

For all those interested in forming a Brookhaven Folk Song Club, there will be a meeting at the Recreation Building in the Apartment Area on Tuesday, July 11, at 8 p.m.

ON-SITE PLAY SESSION

Registration is still being accepted for the morning play sessions for on-site residents' children. Information and applications at the Recreation Office, 3 Center Street.

SWIM CLASS SCHEDULE

The schedule of classes for beginners, intermediates, and swimmers will be posted in the swimming pool and the gym on Thursday, July 6.

LOCKER REGISTRATION

All locker registrations at the Gymnasium and Swimming Pool expire as of June 30. If you wish to keep yours - please re-register for it at the Recreation Office.

CLASSIFIED ADS

FOR SALE

1951 OLDS S-88 - Summer student special. It runs. \$25 firm. Moose, Ext. 2205 or HR 3-2608.

1952 CHEVROLET - Deluxe 2 dr. sedan. Excel. cond. \$225. C. Kiesling, Ext. 451 or AT 4-0717.

1950 PONTIAC - '52 engine, std. shift, 6 cyl. New battery, generator, tires, and seat covers. \$125. T. Schreiner, Ext. 2406.

1951 PLYMOUTH - 4 dr., excel. cond., new tires. \$150. Ext. 541.

BUNGALOW - 6 rm., Ridge, approx. 5 min. from Lab. New Castro furniture in living rm., wall-to-wall carpet in liv. rm. and bedrm, tiled bath and shower, hot water heat. 250x500 ft. lot, spacious lawn, landscaped. Extremely low taxes. Make reasonable offer. Ext. 553 or 2176.

HOUSE - Brookhaven, 3-bedrm, ranch type, 2-car garage, full basement, nice loc. For sale or rent, Sept. 1. Rent reasonable. AT 6-1119.

FINE FAMILY BOAT - in water, ready to go. 50 h.p. engine, 23 feet O.A., 6 ft. 6 in. beam, draft 30 in., yard inspection just completed. Cabin with two bunks, covered cockpit. \$500. Ext. 301-30, Heine, or AT 6-0478 after 6 p.m.

BOAT - 14 foot Old Towne lapstrake rowboat. 2 yrs. old and in excellent condition. \$150. Ext. 2351.

1957 JOHNSON OUTBOARD - 5½ h.p. Excell. cond. Full gear shift and 5 gal. remote gas tank.. Ext. 2255 after 4 p.m. ask for Bill Tuthill or JA 2-3468.

18 FT. THOMPSON BOAT - Inboard: sacrifice, fully equipped. 95 h.p. Chris-Craft Engine. Only 100 hrs, on engine. GR 5-2396.

ALL WIN TWIN CARRIAGE - converts to stroller. Like new condition. GR 5-8623 after 5:30 p.m.

WOOD GARAGE DOORS - 2 pr., size 4 ft. by 7 ft. \$10 per pair. 10 screens, size 27½ by 55½ in. 5 screens, size 27½ by 38 in. \$1. each. William Fedrich, SH 4-2920 or Ext. 672.

DACHSHUND PUPPIES - 1 male, 1 female, 8 weeks old. AKC registered. Red colored. GR 5-0732 after 6 o'clock.

WANTED

COMMUNICATIONS RECEIVER - Broadcast to about 30 mcs. Need one reasonably priced. A. Friedman, Ext. 2133.

SMALL HOUSE OR COTTAGE - to rent. Furnished, South Shore, for 2 adults, 2 children, and 2 cats from July 28 to approx. Aug. 11. L. Foldy, Ext. 522.

FOUND

PIPE - Personnel Services, Ext. 2107.

CAR POOLS

Would like to join or form carpool from Plainview or vicinity. F. Hohmann, Ext. 2117.

Need one person to fill vacancy in existing car pool. Bellport, East Patchogue area. Bob Walton, Ext. 2181.

Join or form car pool from Bay Shore. John Post, Ext. 2116 or 772.