

the Bulletin Board

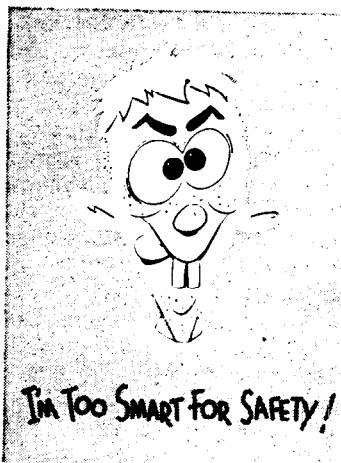
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AUGUST 29, 1961

LET'S HAVE A SAFE HOLIDAY

The 79th Labor Day holiday is almost here. The number of cars on the road will be, no doubt, the largest in history. In past years, the traffic deaths of the Labor Day weekend are especially heavy during the first few hours of the period, starting at 6:00 p.m. on Friday. Start alert - and stay alert.



Although you may be planning a home vacation, you or someone in your family will probably use the car for a short trip. Remember that most fatal accidents involving automobiles occur within 25 miles of home. So warn your wife or anyone else in the family who drives.

Take care of yourself and your family whether at the beach, in your car, mowing the lawn, painting the house, or having a cookout. Have a good time AND a safe one.

How many people HAVE to be hurt? Zero!

NOTE FROM FISCAL

Labor Day, Monday, September 4, 1961 will be observed as a regular Laboratory holiday. Since weekly pay checks will not be completed in time to be available to weekly shift employees who are not scheduled to work Thursday and Friday, they may have their checks mailed to them if they will leave their name, life number and address with the Cashier on or before Tuesday, September 5, 1961.

Due to the short work week every effort should be made to deliver time cards to Payroll before 10 a.m. on Tuesday.

LAWRENCE RADIATION LABORATORY

The University of California's Radiation Laboratory was recently renamed in honor of the late Ernest O. Lawrence. It has two major branches: one, at Berkeley, engaged largely in basic research; the other at Livermore (about 25 miles S.E. of Berkeley), engaged largely in applied research. Approximately 7,000 employees are involved in the activities of the Laboratory.

In the beginning the two major sites were closely connected, the Livermore site being a direct offshoot of the Berkeley site. This connection, while less today, is still considerable, particularly in the administrative and service groups. The degree of interrelation between the scientific groups varies among the different fields of interest.

Lawrence Radiation Laboratory - Berkeley

The origin of the Lawrence Radiation Laboratory lies in the invention of the cyclotron in 1930 by Professor Ernest O. Lawrence, the founder, first director, and a Nobel laureate. The Laboratory developed with the support first of the State of California and private sources, and later of the Government through the Manhattan Engineering District and the Atomic Energy Commission. Much of the present character of the Laboratory comes from this historical background. It still maintains close connections with the academic departments of the University, and is oriented toward basic research, with a strong interest in graduate and postdoctoral training.

The Berkeley Laboratory is particularly noted for its high-energy nuclear physics and for work in the transuranic elements, many of which were discovered there. The physics research program represents a large percent of the effort at the Laboratory, and concentrates almost entirely on high energy physics.

For more than a quarter of a century the Radiation Laboratory has been quite active in the development and use of accelerators. It was here that the theory of phase stability was proposed. (Also, the theory was proposed independently in Russia). This theory made possible the synchrocyclotrons and the electron and heavy-particle synchrotrons.

The extensive use of nuclear machines in physical and chemical research is suggested by some examples of achievement by Radiation Laboratory scientists over the years: the first production and identification of many radioisotopes; discovery of about a dozen synthetic transuranium elements (in the case of a few of these elements some of the evidence for the first identification was also found at Los Alamos Scientific Laboratory and Argonne National Laboratory); discovery of the synthetic element astatine. The discovery of Element 103, named lawrencium, was announced April 12, 1961.

In the mid-thirties, the Berkeley cyclotron was the initial source of significant quantities of radioisotopes. Therefore, much of the pioneering research with radioisotopes as tracers in biological, medical, and agricultural research

(Continued on next page)

LABOR DAY HOLIDAY

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MONDAY, SEPTEMBER 4, 1961

LAWRENCE RADIATION LAB—Cont'd

and for the experimental diagnosis and treatment of disease was undertaken by scientists in the Radiation Laboratory, in other departments of the University, and in other institutions to which materials were shipped. These studies have continued, together with a broad program of research in radiation and biophysics, in the Crocker Laboratory, completed in 1939, and in more expanded form in the Donner Laboratory, established in 1941.

Just before and during World War II the Radiation Laboratory played an important part in the development of the atomic bomb. Early in the Manhattan Project the Laboratory devised and developed the calutron for separation of isotopes, and assisted in the design and construction of the electromagnetic separation plant at Oak Ridge which used the calutron technique for the first separation of uranium-235 from normal uranium. The Laboratory also discovered the element plutonium, and undertook work on its chemistry prior to transfer of plutonium chemistry responsibilities to the metallurgical laboratory at Chicago. The University established the Los Alamos Scientific Laboratory, for which much of the original scientific staff came from Berkeley.

Lawrence Radiation Laboratory - Livermore

Livermore was established in 1950 as a site for the materials testing accelerator (MTA) project being carried on jointly by the Radiation Laboratory and the California Research and Development Corp. In 1952 a branch of the Radiation Laboratory, with the principal function of augmenting nuclear weapons development, was established and the MTA program was concluded in the next few years.

The main function of the Laboratory continues to be the development of new and improved types of nuclear weapons. In the nonweapons area, Livermore is engaged in studies of controlled thermonuclear reactions, high temperature reactors, and peaceful uses of nuclear explosives.

The Radiation Laboratory in Livermore (and in Berkeley), has been among the first in this country to attack the problem of controlled fusion reaction research, called Project Sherwood. Control of the release of energy from the reactions in which the nuclei of atoms are fused rather than split constitutes one of the most difficult projects ever presented to scientists and engineers. Fusion power, when achieved, will provide man with an almost limitless source of energy. Primary interests of the research groups in this field are the investigation of the behavior of high-temperature ionized gases (plasmas) in various magnetic field configurations, or "magnetic bottles," means for generating and rapidly switching huge quantities of pulsed electrical energy, the production of ultra-high, extremely "clean" vacua in relatively large systems, and the analysis and measurement of complicated plasma phenomena.

Recently, increasing attention has been paid to the peaceful uses of nuclear explosives. The program, called Plowshare, offers great potential for development. The applications of nuclear explosives can affect water transportation by the digging of harbors and canals. They can greatly increase the usefulness of water resources by the establishment of dams, by breaking up impermeable underground formations and by other means. The possible reward to the exploitation of tar sands and shales as future fuel sources could have consequences beyond any present estimates. The role of the Laboratory in this program consists basically in the development of new tools including the invention of nuclear explosives which can be used for earthmoving purposes without dissemination of dangerous radioactivity.

The solution of complicated and difficult mathematical problems through the aid of high-speed computing machines is a very important activity within the Laboratory program. Certain problems relative to weapons design have been the most complex hitherto solved. There are very large numbers of such problems in newly developing scientific fields, both applied and fundamental.

BERA FILM SERIES

Thursday Aug. 31 - 8:30 p.m. - Lecture Hall

THE LEAGUE OF GENTLEMEN. Directed by Basil Dearden, starring Jack Hawkins. Released, 1961.

The story involves the "having a wonderful crime" theme played to its utmost - a sort of "Rififi" with a British accent. An embittered army colonel forced into retirement after 25 years of unblemished service, recruits seven other ex-officers for a sensational bank robbery. It is planned and executed with the precision of the most brilliant military maneuver.

BERA '61 - '62 FILM SERIES

Sept. 7 **THE THREE PENNY OPERA**
 Sept. 21 **BALLAD OF A SOLDIER**
 AND **WEEGEE'S NEW YORK**
 Oct. 5 **THE QUIET ONE AND LAUGHING**
GRAVY (Laurel and Hardy)
 Oct. 19 **THE MOUSE THAT ROARED AND**
A SERIES OF ROBERT BENCHLEY
SHORTS
 Nov. 2 **THE GOLDEN AGE OF COMEDY**
 AND **UIRAPURU**
 Nov. 16 **HAMLET**
 Nov. 30 **LOVE AND THE FRENCHWOMAN**
 Dec. 14 **A NIGHT WITH CHARLIE CHAPLIN**
 Jan. 4 **IKIRU**
 Jan. 18 **BACKSTREETS OF PARIS**
 Feb. 1 **ROMEO AND JULIET**

The remainder of the series will be scheduled and announced in the near future. Series tickets may be purchased from the following ticket sellers: George Sabine, Recreation; Terry Rush, Chemistry; Maria Weynand, Medical; M. Clasen, Personnel; Bob Nathans, Reactor; Edna Hodges, Biology; Bill Tuttle, Physics; F.X. Rizzo, Nuclear Engineering; Pat Towey, Research Staff.

Full-Series ticket (20 shows)..... \$12
 Half-Series ticket (any 10 shows).... \$7
 Single Admission..... \$1

ICE CAPE DISCOUNT TICKETS

Exchange discount tickets to the ICE CAPEDES OF 1962 are available at Personnel Services, 58 Brookhaven Avenue. The discount tickets may be purchased for all evening performances between August 30 and September 14, excluding Saturdays and Labor Day weekend. Exchange tickets are available for matinees on September 2 and 3.

A SUCCESSFUL PARTY

Thursday, August 24, a party for summer visitors was held at the Brookhaven Center. About 350 staff members and visitors attended. An enjoyable time was had by all.

FIRST FULL MASTER POINT GAME

One full master point will be awarded to each of the winners of the duplicate bridge game to be held Thursday, August 31, in the Recreation Hall. (8 p.m. sharp) Our club is now sanctioned by the American Contract Bridge League. A partner is assured for everyone at all games.

Last week Ed Ashare and John Sears (E-W) won for the fourth straight time. Harold Schwarz and G. Czapski turned in a brilliant 75% game to win N-S. Sy Rottenberg and Abe Arnold were second and Strauch and Tuerk were third. Second E-W were Roger Newman and Les Lawrence; third, Paul Reilly and Max Schmaeler.

ALL-STAR GAME

Manager Tony Ingraham and Manager Ed Buchholz will have their hands full when they take the field Wednesday evening, August 30, at 5 p.m. to compete in the All-Star Game. Each pilot will have 30 selections representing his league in the nine-inning classic.

All league participants are urged to join in the fun and cheer their favorites. FREE BEER will be on hand for participants and league spectators.

SERIES CHAMPS

A 2-out-of-3 game play-off between the Brookhaven League winners and the National League winners was held to determine the 1961 BNL Softball Champions. Metallurgy defeated Biology twice in a row to retain their title. This makes the second consecutive year the National League entrants have copped the crown.

BRENNER BEATS BRANDON

The 1961 Men's Singles Tennis Tourney climaxed last Friday as Brenner pushed by Brandon in two sets (6-4, 6-3) to win the championship. Brandon, 1959-1960 champ, led 4-2 in the first set and seemed to be on his way to another victory. However, Brenner, featuring a strong serve and excellent ground shots rallied to take the next four games and set.

Brandon recovered to take a slight lead in the second set (3-2) but Brenner's deep accurate shots to his opponent's backhand, followed by his advance to the net and a powerful smash proved too much for Brandon. Brenner again took four straight games, set and match.

Men's Doubles

W. Merkle and A. Kevey take on A. Prodel and C. Coffin this Tuesday, August 29, in the Men's Doubles Finals.

HOW TO FORM A BOWLING TEAM

Last year BNL had five bowling leagues composed of 38 teams with over 250 bowlers. In many cases they were teams from the previous year. Mainly, however, they were new teams formed by individuals who were sufficiently interested to round up four or more people. Some were formed on departmental lines, some from car pools, and others just a collection of friends at the Laboratory. A surprisingly small number were experienced bowlers - in one league fewer than half had ever bowled in a league before. Competition is on a handicap basis, so experience or skill is relatively unimportant.

If you would like to get a team together you'll find it's quite easy. The first step is to pick up an entry form. George Sabine (Ext. 391) or Len Baker (Ext. 591) will be glad to help you get started. Grace Siemen (Ext. 2164) will assist prospective entries for the Ladies League.

Ladies' North Shore Bowling

Recognizing the fact that a good portion of our employees live on the North Shore and are unable or unwilling to travel to bowl, an attempt was made to establish a men's league at the Port Jefferson alleys last year. The effort proved successful as eight teams competed during the season and have indicated their return this year.

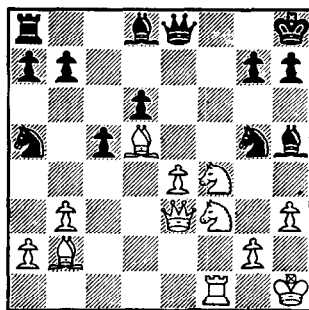
Now the ladies are stirring. A few teams have called asking if we are going to have a Port Jeff Ladies' League. The answer is **YES WE ARE** - the alleys are open if enough ladies' teams sign up. So if you're interested, round up your team and enter. We hope we get enough interest to have a North and South Shore Ladies' League.

New Individual Bowlers

If your department does not have a team, perhaps YOU can stir up some interest and start one. If you would like to join our leagues as an individual, give your name to the Recreation Office, Ext. 391. They will refer your name to established teams who are looking for more bowlers.

CHESS PROBLEM

In this week's problem, it is White's job to win. With pieces strewn around like this there is more than one solution, of course. We'll give you one - elsewhere in this week's BULLETIN BOARD.

**UPTON RIFLE AND PISTOL CLUB**

The September meeting will be held Thursday, September 14. All members interested in trap shooting please contact Dick Chapman, Ext. 624.

A great many open minds should be closed for repairs.

The nicest thing about the future is that it comes one day at a time.

PHOTO CONTEST**Miss BNL at Camera Meet**

The Lab-wide Photo Contest was concluded last week. Both color slides and black and white prints were eligible. Entries have been judged and the results of the contest are as follows:

COLOR SLIDES: 1st Prize, R.A. Abbott (AGS); 2nd Prize, W. Geisbusch (Biology); and 3rd Prize, H.R. Zulliger (Instrumentation).

BLACK AND WHITE PRINTS: 1st Prize, R.A. Abbott (AGS); 2nd Prize, Cy Fink (Nuclear Engineering); and 3rd Prize, a Tie between V. Cohen (Physics) and E. Gaetjens (Biology).

Winning photos were to be published in THE BULLETIN BOARD, but due to circumstances we are unable to do so. Instead, a display of the winning entries will be at the Cafeteria beginning Wednesday, August 30.

The awards for the contest will be given Tuesday, September 12, at 8:00 p.m.

Miss BNL (Gerry Mataragus) has kindly consented to assist with the presentations and act as the model for a session in lighting. Everyone interested in photography is invited.

CLASSIFIED ADS

FOR SALE

1955 PONTIAC - Starchief convertible, auto. trans., w.w. General premium tires, top one year old, auto. antenna, and other extras. Mechanically sound. Asking \$525. A. Caretto, Ext. 625.

1953 FORD - 2 door sedan, V-8, good cond., auto. trans., good tires. \$275. Bell, Ext. 617 or 525.

1954 FORD - 4 door sedan, V-8, st. shift, new tires. \$150. Ext. 2432.

1948 PLYMOUTH - 2 door coupe, r&h, two new 670x15 tires. Runs well. \$40. Ext. 2188.

1955 CHEVROLET - Green, 2 door, 8 cyl., power glide, excell. cond. \$525. George, Ext. 481, or HR 2-1151, eve.

1955 CHEVROLET - St. shift, r&h, \$400. Willis, Ext. 739.

SPLIT LEVEL HOUSE - on wooded half-acre; 7 rooms incl. large living room and 26 ft. rec. room. Private beach rights, landscaped, fireplace. SH 4-9877, eve.

CAPE COD HOUSE - Shoreham, 4 bedrms, 2 full baths, finished attic, full rear dormer, 95x125 ft. fenced lot, 1 1/2 car garage, finished basement with outside entrance to 16x30 ft. concrete patio. Many extras. 4 1/2% G.I. mort. Sacrifice, \$15,900. Ralph, Ext. 481, or SHoreham 4-9921.

HOUSE - Mastic, 8 mi. from Lab. Hot water heat, 6 rms. Anchor fenced in plot 80x100 ft. Full cellar, partly finished. \$11,000. AT 1-8532.

BOAT - 14 ft. Chris Craft runabout, good condition, \$135. AT 6-0945.

15 FT. SAILBOAT - SS rigging, Dacron sails, fiberglassed hull, \$250. Willis, Ext. 739.

24 FT. SAILBOAT - with double set of sails, spinnaker stormsail and 7 1/2 h.p. outboard. Very clean cond. Can be seen at Carman's River in Brookhaven. Best offer. Ext. 2430, or GR 5-0732.

18 FT. KAYAK - with paddles, and car-top carrier racks. Used 3 times. \$65. P. Buhl, Ext. 354.

20 FT. CROSBY CAT BOAT - Sleeps two, 25 h.p. inboard engine, sails in excell. cond. Hull needs some work. Real bargain for do-it-yourselfer. Asking \$950. MO 9-2883.

KITCHEN TABLE - and 4 chairs. \$10. Frank Rumph, Ext. 2221.

23 FT. CHRIS CRAFT CRUISER - 1949, sleeps two, galley, head, 95 h.p. New navy top, rear curtains. AT 6-1352.

21 FT. CRUISE-A-LONG - Gray Marine Phantom, sleeps 2, head, running water, navy top. Excell. cond. \$1200. Forge River Marina. Frank Flynn, Ext. 693, or AT 1-8427.

18 FT. THOMPSON - Navy top, 35 h.p. Evinrude, 1958 model. Completely equipped. \$1200 takes all. Central Islip 4-6015.

CABIN CRUISER - Sportfisherman, 34x11x3 1/2 ft., galley, dinette, stand up head, sleeps four on foam rubber. Bottle gas, outriggers, fighting chairs, 145 h.p. Chris Craft, 1 1/2x1 reduction. Good family boat. \$2800. Harold Vanderoef, Ext. 392, or WADING RIVER 9-4151.

26 FT. WHEELER CABIN - 130 h.p. Chris Craft. \$2,000. JU8-3828, eve.

SAILFISH DACRON SAIL - Complete with new boom and gaff. Outfit used only once. \$45. Paige, Ext. 2100.

CAMERA - Kodak Retina Reflex, F2. lens. 2 close-up lenses with adapter rings, leather carrying case. All for \$90. C. Porter, Ext. 2373.

VARMENT RIFLE - Savage model 340-B, .222 cal., with Weaver quick-detach scope mounts and some once fired brass. Excellent cond. Mossberg .22 cal. rifle, model 346-B, target sights and sling. Very good cond. P. Buhl, Ext. 354.

COLLIE PUP - female, 8 weeks old, AKC registered, \$50. Ext. 2430, or JU 8-7133.

FREEZER - 1954 Westinghouse, 18 cu. ft. upright. Excell. cond. \$175. G. Cross, Ext. 2260.

REFRIGERATOR - Good cond. Reasonable. Jungreis, Ext. 301-45, or EM 3-7032.

DINETTE SET - 5 piece Daystrom chrome, \$50; floor lamp, \$5; bedroom lamps, \$5; baby lamp, \$2.50; bumpers for crib and bouncing chair, \$6; snack and snoozer, \$4; 2 Syracuse wall plaques, \$15. Marv Weitz, Ext. 391, or AT 6-9259.

BEDROOM SET - Mahog., in excell. cond., \$1200 new, will sell for \$400; convert. couch, \$40; wooden closet, \$10; torch lamp, \$8; two snow tires on rims w.w. 7.50x14 used one season, \$40; 24 in. girl's bike, \$15. G. Munoz, Ext. 393, or JU 7-0711.

LAVATORY - and two-piece water closet. Old but serviceable. A bargain at \$5. Jim Hallock, Ext. 2480.

REFRIGERATOR - G.E., with separate door 60 lb. freezer, \$85; combination oil and gas range, will heat 2 or 3 rooms, incl. constant level valve, \$40. AT 6-1207

FOLDING BABY CARRIAGE - and delux padded-high chair. Very good cond. HR 2-0658.

EXTENSION TABLE - Mahog., seats 10, with pads, \$35; walnut gate-leg table, 12 in. wide when closed, \$15; 3 piece, 8 ft. sectional (straight units), \$50; club chair, \$25. Excell. cond. G.K. Ahlers, Ext. 440, JA 2-3227.

WANTED

UNFURNISHED HOUSE - to rent, 2-3 bedrms, lg. din. rm., Bellport-Patchogue or Shoreham-Wading River pref. areas. AT 6-9355.

TRAILER - utility, 2-wheel, approx. 4x6 ft., reasonably priced. Betty, Ext. 396.

UNFURNISHED HOUSE - to rent, 2 bedrms, facility for gas stove, not more than 1/2 hour drive to lab. Garage pref. \$75-90 a month. Dave Miller, Ext. 686, or YA 4-3382.

LAWN MOWER - Large (24 inch or so) reel type, self-propelled. Fairly good cond. and not too expensive. Ext. 2316.

Woman to help with light housework and children, half days for 2 weeks during early September. Roger Caldwell, Ext. 501, or 2374.

LOST AND FOUND

LOST - Lady's sunglasses, black frames. Lost in vicinity of Rec. Bldgs. Ext. 458.

FOUND - Lady's black leather gloves; Man's black wallet with name "Mark Douglas Eicher." Personnel Services, Ext. 2107.

CAR POOLS

Steady, dependable ride wanted from South Country Road, Brookhaven, Ext. 583.

Want to form or join car pool from Levittown-Massapequa area. Roberts, Ext. 687.

Driver wanted for existing 4-man car pool from Sayville-West Sayville area. J. Daane, Ext. 779.

ANSWER TO CHESS PROBLEM

WHITE	BLACK
1. N x N	B x N
2. N x B	Q x N
3. Q - B3	B - R3
4. Q x N, etc.	