

the Bulletin Board

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BANK WILL BE CLOSED ON FEBRUARY 12

In observance of Lincoln's Birthday, the Peoples National Bank facility on site will be closed Friday, February 12. Laboratory employees who would normally receive their pay checks on that day will be paid on Thursday, February 11. The Bank will be open 9:45-12:00 and 12:30-4:00 on Thursday, February 11. For the information of shift employees, the Cashier's Office will be open on Friday.

HIGH SCHOOL STUDENTS TO VISIT LAB ON EDISON'S BIRTHDAY

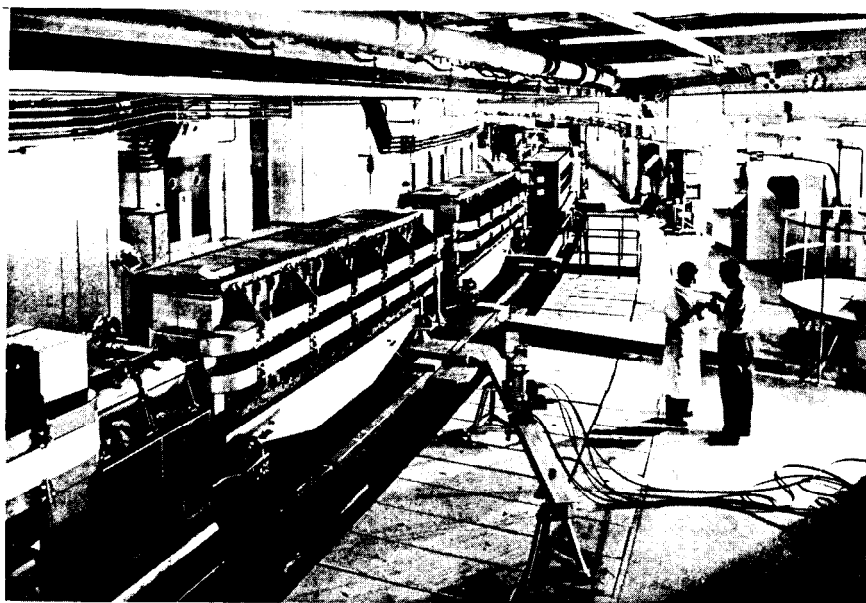
On Thursday, February 11, the Laboratory will be host to a group of selected high school students and editors of high school papers, in observance of the anniversary of Thomas Alva Edison's birthday. The visit is part of the International Edison Birthday Celebration, in which all major AEC laboratories are participating in a program aimed at stimulating the interest of high school students in careers in science and engineering.

The invitations were issued to 50 high schools in Suffolk County, with the possibility of a total of approximately 300 boys and girls visiting the Laboratory, making a tour of the major facilities, and meeting with staff scientists to discuss selected research topics. The program begins at 10:00 a.m.

Each student, who is selected by his school on the basis of his scholastic standing and interest in science, will be furnished a kit of information on nuclear science and technology.

The program starts with an introductory talk on Brookhaven's role in the national atomic energy project; then depending upon the specific fields in which the students have expressed an interest, groups will meet with scientists at the Research Reactor, Hot Laboratory, Biology Department, Cosmotron, AGS, and Medical Department.

CERN INAUGURATES ITS 25 BeV PROTON SYNCHROTRON



View of the interior of the ring building of CERN's 25 billion electron volt (25 BeV) alternating gradient proton synchrotron.

Two Brookhaven scientists, Drs. G.K. Green and E.D. Courant, attended the CERN proton synchrotron inaugural ceremony on February 5, in Geneva, Switzerland. The following article was prepared for THE BULLETIN BOARD by Roger Anthoine, CERN's Public Information Officer and editor of the employee newspaper, THE CERN COURIER.

CERN is an international laboratory for advanced research in high energy physics, established as a permanent organization in July 1953. The abbreviation "CERN" is derived from the initials of the French title of the original governing Council.

At present CERN comprises 13 member States: Austria, Belgium, Denmark, France, the German Federal Republic, Greece, Italy, the Netherlands, Norway, Sweden, Switzerland, United Kingdom and Yugoslavia.

About 1,000 persons are now employed at CERN on its 110-acre site, at Meyrin near Geneva. Among the facilities available for fundamental research, are a 600 MeV synchro-cyclotron and a 25 BeV proton synchrotron. This is for the time being the largest particle accelerator of any kind in the world.

The proton synchrotron - the PS for short - is similar in design and size to the AGS now under construction at Brookhaven. As many readers of THE BULLETIN BOARD know, a proton synchrotron is a circular accelerator designed to give protons, i.e., the nuclei of hydrogen atoms - a very high kinetic energy, with a view to using these submicroscopic particles as "missiles" to strike other atomic nuclei, penetrate them and give rise to disintegration events, which provide the physicists with valuable information about the nature of matter.

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CERN Proton Synchrotron—Cont'd

In the CERN PS, the protons are obtained from atoms of hydrogen gas by means of an ion source and then a "Cockcroft-Walton" pre-accelerator accelerates them up to 500,000 electron volts (500 keV). After this, they are again accelerated by a linear accelerator which brings them up to a kinetic energy of 50 million electron volts (50 MeV).

The particles thus reach the end of the injection system, travelling at about one third of the speed of light. During six microseconds they are injected through the inflector into the vacuum chamber of the synchrotron itself. This chamber is their "race-course", a ring-shaped structure, 628 m. (2,000 ft.) in circumference and of 14x7 cm. (5.6x2.8 in.) cross-section.

In the synchrotron, the protons are accelerated by 16 cavities located around the ring. A magnetic field produced by 100 magnet units keeps the beam of particles focused on an orbit 200 m. in diameter within the confines of the vacuum chamber.

In one second the protons go almost 480,000 times round the vacuum chamber. When the process of acceleration is finished the velocity of the particles reaches 99.94% of that of light or about 300,000 kilometers (186,000 miles) per second. At this point their energy is about 25 billion electron volts: or more exactly 24.3 BeV with a 12,000 gauss magnetic field, and 28.3 BeV when the magnets are pushed up to their near-saturation limit of 14,000 gauss. The average intensity current of particles accelerated per second is 2.10^9 at 28 BeV or 3.10^9 at 24 BeV.

The number of antiprotons produced per pulse by a beam at 24 BeV was recently measured: the figures of 30 obtained is most gratifying and confirms the hopes placed upon this new tool of the nuclear physicists.

SKI CLUB MEETING

There will be a Ski Club meeting on Monday evening, February 15th at 7:30 p.m. in the Recreation Hall. This past weekend's water-skiing and ice-skating expedition by 30 hardy souls to Dutch Hill and Mount Snow will be re-hashed, and an award will be presented for the best forward half-gainer on the Dyke trail in Saturday morning's slush.

Plans will be discussed for the March 5-6 trip to the Mt. Snow-Hogback area in lower Vermont. Deposits of \$5 for reservations may be paid to Barbara Garnier at the meeting or within the next two weeks. Reservations will be closed at 5 p.m. Friday, February 19. After Monday night's meeting, a film will be shown. For any additional information, call J. Walsh, Ext. 457.

SEWING CIRCLE

The Wednesday sewing-chatting circle has decided to charge 25¢ per adult, per meeting to cover the necessary expenses. Coffee and cookies will still be served. All wives of Brookhaven employees and newcomers are welcome to come between 2:30 and 4:30.

CAFETERIA TIDBITS

Since not everyone can visit Hawaii, the Slater System is bringing Hawaii to you. Visit the Cafeteria during the week of February 15th, and make an imaginary visit to the Paradise of the Pacific! Hawaiian atmosphere, music, and food will be featured - the next best thing to an actual trip to Hawaii.

Buffet Luncheon - East Room

The popular Buffet Luncheon in the East Room of the Cafeteria will be served on Thursday, February 11th. Same price - \$1.00 - same hours 12 to 1:30 p.m. - and an enticing selection of entrees.

**FOLK DANCE WORKSHOP
THIS SATURDAY**

Don't forget the folk dance workshop at the Recreation Building this Saturday, February 13. The workshop will be led by Eugene Tso of New York City and will consist of two sessions: 2:00 to 5:00 in the afternoon and 7:30 to 10:30 in the evening. A buffet supper will be served at the Brookhaven Center during the intermission. Admission to the workshop will be \$1.00 per session and the price of the buffet is \$2.00 per person.

Fringe Patter

NON-TAXABLE SICK LEAVE

Many questions have arisen regarding non-taxable sick leave payments. The Internal Revenue Code of 1954 provides that payments made to employees for sick leave under the Laboratory sick leave policy may under certain circumstances be excluded from gross income for Federal income tax and Social Security purposes. Payments received under the following circumstances may be excluded:

1. If absence from work is caused by SICKNESS extending beyond seven consecutive calendar days, sick leave payments up to a weekly rate of \$100 attributable to the eighth and all consecutive days of absence thereafter may be excluded from gross income.

2. If absence from work is caused by SICKNESS, and the employee is HOSPITALIZED for one or more days during that absence, sick leave payments up to a weekly rate of \$100 attributable to the first day of absence and all consecutive days of absence thereafter may be excluded from gross income.

3. If absence from work is caused by PERSONAL INJURY (either occupational or non-occupational), sick leave payments up to a weekly rate of \$100 attributable to the first day of absence and all consecutive days of absence thereafter may be excluded from gross income.

Any employee who has sick leave payments during 1960 which fall in one or more of the above three categories should fill out Form No. 989-A, obtained through your Department, IMMEDIATELY AFTER THE ILLNESS and return the form to the Payroll Section. It is important to note that Form 989-A SHOULD BE COMPLETED UPON THE EMPLOYEE'S RETURN TO WORK so the information can be reported on the W-2 form next year. If you fail to report non-taxable sick leave at the time it occurs, it will be assumed that the sick leave payments are taxable.

BNL LICENSE STICKERS

The Laboratory is not issuing new stickers to replace those now in use. Only a new application form is necessary to revalidate your old sticker.



BERA BOWLING

LADY KEGLERS COLUMN

Wednesday night 1st place was upset with Odds and Ends taking over by 2 points as a result of their taking all 4 points from Chemistry and Medical losing all 4 to the Nightingales. Third place is again tied up between the Allthumbs and the Nightingales. Allthumbs and the Struggler's split 2-2. The Frisbees took 3 points from Sam's Gals. Four split conversions were made: Barbara Fitzgerald 6-10, Grace Searles 5-10, Ellie Norton and Grace Siemen 5-7. High games and series for the night: Tillie Penny 177/477, Grace Siemen 176/482, and Grace Schiro 169.

The first five places in the league are neck and neck. Anything can happen and usually does in the Ladies League. Why not come down and root for the team of your choice. You might surprise yourself and find that you've had an enjoyable evening.

Note to all members of the Ladies League: We now have two representatives acting on your behalf on the Executive Bowling Board - Grace Siemen and Chris Podlaski. If you have any problems or questions you wish to have brought before the Board pass it on to either of these representatives and they will act upon it at the next Board meeting.

GREEN LEAGUE

The Old Timers beat Chemistry 3-1. J. Gilmartin converted 9-7 split, a beautiful shot. J. Reilly had a 503 series and Tierney 510. Walsh and Webster had high games of 195 and 196 for Chemistry. The Teasers dropped 4 points to the Fire Department. Kinney, Peter and Rhodes had 505, 510, and 504 series. The Electrons shocked the Reefers 3-1. Dvorak had a 212, 561 series for the winners. P. Ratyca had 209-503 for the losers.

PURPLE LEAGUE

The Bowl Aids with some fine bowling took three points from the Designers. Walsh had 191-521, Schulz 183-517.

For the Designers Rocky had 202-552, Scatton 191 and Chirco 180.

The Phoubars in second place snowed under the Fiscals 4-0. Red had 194-539, Tommy 187-520, Dick Vogt 182-513, and Ole 182. The Fiscals had Bohn with a 195-555.

The Toppers came back to take 3 points away from the Ptuis. Reamy had 188 and Nocar 180, while for the losers Becky had 189-527. The Chain Gang took 3 from the Dirty Birds. Maile for the winners had 177 while for the losers Leavitt had 162.

COME OUT OF THE STANDS

There's a story about the perfect baseball player who could play every position, never made an error, and always hit a home run each time at bat. The only trouble was, he never put down his hot dog and came out of the stands.

How many BERA dances have you attended? Have you ever been on the committee which plans, organizes and runs the dances? Come out of the crowd and join the committee. Offer your ideas, talent, and enthusiasm. If you want a St. Patrick's dance call G. Sabine, Ext. 391.

HOCKEY DISCOUNTS

About 65 employees, family and friends spent an enjoyable Sunday afternoon at the Long Island Sports Arena this week watching the New York Rovers play the Johnstown Jets (both teams are in the Eastern Hockey League). The visit was made possible by a group discount purchase of tickets at half price.

If you missed out on the fun or you would like to go again here are the details: Sunday, February 28, 3:00 p.m. Rovers vs. Philadelphia. Regular price \$2.50 - our price \$1.25. Long Island Sports Arena in Commack. Deadline for tickets - Thursday, February 18.

Don't wait until the last minute - order your tickets now! Make sure of your reserved seats by calling or seeing G. Sabine, Ext. 391 at the Recreation Office. Please accompany order with cash or check.

Parking Between Dormitories 12 and 14 Upton Road

Staff members who do not reside in the Dormitories at 12-14 Upton Road but visit these buildings are requested to park in the parking lot on Bell Avenue. Parking between the Dormitories is reserved for Dormitory residents only. Please cooperate and give the Dorm Ladies a break.

CERAMICS CLUB

An 8 week course for beginners to be given for those interested in using Ceramics Club equipment. Course must be limited to ten people only. First to call will be accepted. Classes to start February 18th. If interested call P. Mirabelli, Ext. 2106.

CAMERA CLUB

The next meeting of the BNL Camera Club will be Wednesday, February 17 at 8 p.m. in the Recreation Hall. There will be a shooting session with a model. The emphasis will be on lighting arrangements.

UPTON RIFLE - PISTOL CLUB

The pistol group's first match of the season will be with the Southampton Rifle and Pistol Club. The match will take place Thursday, February 25. Starting time is 8 p.m. at the Southampton Pistol Club's indoor range. Any caliber may be used. All pistol shooters wanting to participate in this match send name and department to Paul Hichborn, Cosmotron, for directions.

DISCOUNT PASSES FOR ROLLER DERBY

Passes for the Roller Derby at the 9th Reg. Armory in Manhattan on Feb. 16 are available at Personnel Services. \$3.50 seats are available to Laboratory Personnel at \$2.00.

BNL SAFETY RECORD

34 Days Since Last Disabling Injury
(Jan. 5, 1960 - Feb. 7, 1960)

THE BLACK HORNET

You've probably noticed the new "Black Hornet" (1960 model) (formerly the Green Hornet) making its rounds in the morning with hot "coffee-er" coffee, tasty pastry from our own ovens, and satisfying sandwiches, all for your eating pleasure. Call the Cafeteria Manager (Ext. 2302) and ask him to stop at your building.

LABORATORY CLOSING BY STORM

In the event of storm, listen to any of the following radio stations for information as to closing of the Laboratory.

| | | |
|-------------|-------------|-------------|
| WBAB | WPAC | WRIV |
| WGSM | WHLI | WALK |

CHESS PLAYERS

Notice to both "wood-pushers" and experts: Are you interested in the formation of a Chess Club? Do you long to face an adversary and say "check-mate"? In order to know how many people are interested or for further information please phone Enid Degenhardt - Ext. 2110.

CLASSIFIED ADS**FOR SALE**

1958 RENAULT - red. WW tires. Radio and heater. \$900. S. Earle, Ext. 591.

1953 PONTIAC - Chieftain. 4 door sedan. Radio, heater, hydromatic, 2-tone. Good reliable car. Call Ext. 624.

1958 RENAULT - Dauphine. 4-door. Black, radio, heater, WW tires. Port Jefferson 8-0673 after 6 p.m.

1956 OLDSMOBILE - 4 door sedan. Radio, heater and automatic transmission. 2-tone. S. Zahra, Ext. 2170 or Port Jefferson 8-2075-J.

1960 KARMANN GHIA - convertible. Blue. Only 2100 miles. Purchased in Europe. Phillips, Ext. 604 or 432.

BOAT - 18 ft. shelter cabin. 60 h.p. ChrisCraft engine. \$400. G.Rover 5-9493.

BOAT - 14 foot Pen Yan. Wrap around windshield. 1955 Johnson 25 h.p. Steering and remote controls. Tee Nee trailer. \$475. Call SHoreham 4-9832, after 6.

RUNABOUT - heavy gauge riveted aluminum durateck runabout, 12 ft. with front deck and steering wheel. About 6 yrs. old. A 1958, 7½ h.p. Evinrude with 4 gal. tank and motor stand. A 1959 Mastercraft Trailer with winch and tail light. Also included: anchor, lines and cushions. Ready for use. \$450. Call Ext. 624 or G.Rover 5-2131.

BOAT - 19 foot Barbour Silver Clipper. 35 h.p. Johnson electric motor boat and motor. Used one season. Call after 5:30. Atlantic 6-8624.

TWIN-SIZE BED - innerspring mattress. Used 2 weeks. New condition. SElden 2-3431.

HOUSE - \$9800 Cape Cod. 3 bedrooms, living room and kitchen. Full cellar. Oil, hot water heat. 9x12 patio. 100x100 clean landscaped. Plus refrigerator, stove and washer - electric. Call G.Rover 5-2715 after 6 p.m.

SAILBOAT - 18 ft. Cape Cod knock-about. Hull fair to good, rigging good, sails poor. With 2½ h.p. Johnson outboard. \$200. Bob Isler, Ext. 649 or SEtauket 6-1276.

PUPPIES - 8 weeks old. Origin unknown (small mother). Males and females. FREE. Sayville 4-6209.

KEROSENE HEATERS - 2 portable kerosene heaters. Each with 2 gal. fuel tanks. 2 burner wickless type. Used only one season. Cost over \$50. Yours both for \$19.98. A. Timpe, Ext. 434.

CABINET & SPEAKER - Stephens cabinet and 12 inch speaker, with realistic electrostat. Owner moving. Bargain. J. Constant, Ext. 618.

VOLKSWAGEN - 1958 green sedan. Radio and heater. Excellent condition. \$1350. Will talk. Ext. 676.

1959 TRIUMPH - TR-3. Beautiful silver grey, radio and heater. \$2100. Call Atlantic 4-0400.

ICE SKATES - boy's hockey skates, size 5. Almost new condition. \$5. Bill Bornstein, Ext. 550.

1958 OPEL REKORD - last chance! Must be sold. No reasonable offer refused. 2-tone paint, R and H, all deluxe extras. Excellent condition. A great economy buy. Bob Young, Ext. 591.

1959 SPRITE - light blue. WW tires, good condition. Ext. 2185.

FOR RENT

HOUSE - 8 rooms. 4 blocks off Sound. Rocky Point. One year lease. \$75 per month. Call after 5:30 p.m. James Stafetas. ATlantic 6-8224.

APARTMENT - 3 rooms. Beautifully furnished. All improvements. Rent very reasonable. Beach rights. Edward Mignani, WAding River 9-4434.

WANTED

STAIRCASE - one circular metal staircase. At least 9 ft. high. Ext. 423.

PLAY PEN - light weight type with mesh sides. L. Davis, Ext. 2133.

UNIFORMS - retired Navy, Coast Guard and Merchant Marine uniforms to be reactivated for Sea Scout Troop No. 55, Sag Harbor. Will pick up. H. Worwetz, Ext. 2143 or Ext. 791.

FM TUNER - or AM-FM combined. Reasonable. Ron, Ext. 464.

BOAT TRAILER - for 14 ft. light weight outboard. D. Cantor, Ext. 2102.

SAILBOAT - small. R.C. Krueger, Ext. 301 or BELLport 7-0693-J.

CAR POOLS

Would like ride from Holiday Beach area. Elsie Tebbens, Ext. 2237.

Rider would like to join car pool from South Country Rd., Bellport-East Patchogue area. Call M. Darden, Ext. 2106 or ATlantic 6-8205 after 5:30.

Want a ride to Hofstra on Tuesday and Thursday evenings for 8:00-9:15 p.m. class from Port Jefferson-Setauket-Stony Brook area. Call J. Walsh, Ext. 457.