

## VOL. II, NO, 32

### MODEL RAILROAD CAR3 ON DISPLAY

At a meeting of the BNL Model Railroad Club, held Tuesday, March 6, about 20 members presented the model cars that they ha<del>d</del> constructed as a requirement for membership. Some of the cars are on display in the lobby of the Cafeteria.

The Main Line track is nearly completed. Club members wishing to work on the track evenings or on weekends may make arrangements by calling Jim Hallock on Ext. 423.

### E. G. HEINZE TO ASSIST MAXWELL SMALL

Everett G. Heinze, leader of the Office Services Group, has been detailed to assist Maxwell Small in the Project Engineers Office for an indefinite period.

James S. Scott, supervisor of the Duplicating Section, will serve as Acting Office Services Leader during the period Everett is working on this special assignment.

## BRIDGE CLUB WINNERS

Miss Frances V. Summers and Dr. Robert Van Reen were the North and South winners at the Bridge Club session held Tuesday night, March 7, in the Research Staff Lounge. Mirs. David H. Curinsky and Dr. Warren H. Winsche took East and West honors.

The next meeting of the Club will be on Tuesday, March 21.

# MUSIC - LISTENING TONIGHT

The Music-Listening Group will meet tonight at 8:00 p.m. in the Research Staff Lounge to hear a program arranged by Alfred C. Hunting.

All staff members are invited to attend.

#### EASTER EGGS AND CANDY AT REDUCED PRICES

Arrangements have been made by BERA with Huyler's of N.Y. for staff purchase members to candy and Easter eggs at attractive prices. Samples are on display at the Recreation Office in the Gymnasium. Orders, accompanied by payment in full, may be placed at the Recreation Office until March 24.

Items ordered will be ready for delivery on April 5.

#### COMING EVENTS

Music-Listening-Mar, 13 Research Staff Lounge 8:00 p.m.

Band Rehearsal - Mar. 15 Research Staff Lounge 8:00 p.m.

Bridge Club - Mar, 21 Research Staff Lounge 8:00 p.m.

"Great Expecations" March 27-Theatre - 8:00 p.m.

Square Dance - Mar, 28 Recreation Hall 8:00 p.m.

MONDAY, MARCH 13, 1950

#### RIFLE CLUB OFFICERS ELECTED by Bob Shaw

The annual meeting of the Upton Rifle & Pistol Club was held on March 6, 1950. At this time the officers for the ensuing year were elected as follows:

President: Bob Shaw Vice-Pres.: Karl MacVean Secretary: Harriet Hayes Treasurer: Guy Inman

Exec. Officer: Bob

Brouwer

Chief Instructor: Red Macaulay

It is planned to hold our regular meetings in the evening and our next monthly meeting is scheduled for April 3 at 8:00 p.m. in the Recreation Bldg., York Lane. Arnold Runge is putting together a fine program for this meeting, including refreshments and appropriate movies.

Bob Brouwer is working out the firing schedule for the coming season and when completed it will be published in The Bulletin Board. The contemplated program is well-rounded and includes novel events which should provide considerable enjoyment.

The Club House at the Range is nearly completed and we are looking forward to a very successful season which will have been made possible by the sustained efforts of the former Executive Board.

# WEST GATE CLOSED

The Security Office has announced that the West Gate will be closed until f her notice. PAGE 2

#### THE BULLETIN BOARD

## RESERVISTS RECEIVE RAPID RESPONSE by Jack Nehemias

An interested group of a dozen Laboratory men met last Tuesday for an informal discussion with Captain Klein about the possible formation of æ Research and Development Unit in the U.S. Army Organized Reserve at BNL.

Such a unit, if formed, would have no T.O., no enlisted men. A minimum of ten Reserve officers is required in order to form a separate unit. Forms are on hand for transfer from other Arm<del>y</del> Reserve Units to a Research and Development Unit. For Army veterans with one year's service and either a B.S. degree or four year's experience in research and development, direct commissions may be obtained. These applications are also available.

Persons interested in further information or in application forms should call O. H. Perry at Ext, 591 or J. Nehemias at Ext. 593.

### CAMERA CLUB by Joyce Harris

The second in the Camera Club series was presented last Wednesday night, March 8, when the Club held their demonstration on "Lighting for Still Life".

The next Camera Club meeting will be held in the Recreation Hall on York Lane at 6:30 p.m., March 22. At this time the lecture on "Dark Room Facilities and Film Development" will be presented.

#### WANTED

To join car pool or get a ride from East Main St., Patchogue (near Chev. dealer) - F.O'Neill, Ext 2172.

### BNL BAND CONCERT TO BE PRESENTED JOON

"Staff members who would like to join the BNL Band should do so at an early date," Abe Edelman, director, said today, "as we are only eight or ten rehearsals away from our Spring concert."

"Our particular need," Abe continued, "is saxaphone and French horn players, but staff members who play other instruments will be welcome."

"We have members," Abe concluded, "who can play the flute and the piccolo, but we do not have the instruments. If any staff members possess such instruments and would be willing to loan them to the Band, please call me on Ext. 367."

NEW BOOKS ON BERA RENTAL LIBRARY SHELVES

Mingo Dabney, James Street

The Sea Eagles, John Jennings Bowles

The Wall, John Hersey The Diplomat, James Aldridge

The Terrified Society, H. Teilhet

Stars in My Crown, Joe Brown

Great Mischief, Pinkney Blue Hour, Doner

The Lancasters, E. Nearing

Operation Survival, Hessler

Mysteries

Fourteen staff members attended the organization meeting of the Great Books Discussion Group held last Thursday. It was decided that the first regular meeting will be held on Monday, April 3 at 5:30 p.m. in the Research Staff Lounge. The subject for discussion will be The Declaration of Independenc.

### NEUTRON MIRROR AIDS PHYSICISTS ON ATOM WORK by Richard K.-Winslow in N.Y. Herald-Tribune

Neutron mirrors, off which a neutron beam is reflected much as a visual mirror reflects light, were described for the first time at the annual meeting of the American Physical Society at Columbia University.

new method for This controlling a neutron beam as it issues from a slit in an atomic pile is primarily a research tool which has made the most precise measurements to date of the mysteriousbinding force between neutrons and protons in the atom's nucleus. The neutron mirror, as developed in the last year at Argonne National Laboratory in Chicago, is also expected to be a big help in studying the spin and magnetic properties of nuclear particles, major fields of investigation in modern physics.

Dr. D. J. Hughes, formerly at Argonne and now a physicist at the Brookhaven National Laboratory, compared the neutron beam to a ray of light,-both traveling in a wave-like manner, though the wave length of neutrons is a thousand times smaller than that of light. Diffraction of neutron beams and their polarization have been previously studied.

The problem of reflecting the beams, however, was complicated by the that the neutron fact waves would need for light-like reflection, a mirror a thousand times smoother than an optical mirror, which Dr. Hughes said would be impossible to build. This was overcome by shooting the beam at the mirror at very small angles, about onetenth of a degree on the average, he said.

To make the measurements of neutron-proton

(contd. on page 4)

TWO BNL MEN LLY TO CUBA AND MEXICO

Your reporter recently learned of the intriguing trip made by Paul Lee and Gerald Selvin in an 85 horsepower, single engine, 2-passenger airplane. It seems that as 1949 was drawing to a close, and Winter setting in, they decided to use their flying knowledge to -follow the sun for a 4-1/2 week jaunt.

Packing Paul's little Culver V with the maximum load of 70 pounds of baggage, the plane was coaxed into the air, and they say it instinctively headed south.

After stops -along the way, and a day-long visit at Oak Ridge, the boys ended up at Miami, where warm sun and sparkling water caused a one-week delay.

Official arrangements were easily completed, and the real flying was started by the overwate<del>r</del> hop from Miami to Havana, Cuba. Five days were spent in tramping around and sightseeing Havana and surrounding territory. Havana prices closely parallel New York prices with the exception of rum and tobacco.

Both pilots agree that the next leg of the flight --Havana, from across Cuba, over the Gulf to Cozumel, Mexico, then on to Merida, Mexico, in the Yucatan--was the riskiest ever. But the engine never faltered, in fact there was no airplane trouble on the entire 10,000 mile trip.

In Mexico, where costs are about one-third U.S., Paul and Jerry really relaxed and enjoyed life. After several days in the Yucatan, they flew on to Cuidad Carmen (try and find it on the map), Vera Cruz, and finally the long climb up to Mexico City.

From Mexico City they took side trips including Taxco and the bullfights, and shopped for silver and leather articles, at

2. Fiscal 15 9 14 10 3. Administration 12 12 4. Communica. 11 13 5. Claecephacs 11 13 6. Medical 10 14 7. Biology 7 17 8. Info. & Pub. Schedule - March 14 Biology vs. Communications Administration vs. Claecephacs

Fiscal vs. Medical

Info. & Pub. vs. Purch.

Wednesday - Men

	W	L
1. Mach. Jhops	15	6
2. Purchasing	15	6
3. Pile Operations	13	8
4. Cosmos	12	9
5. Cen. Drftg.	11	10
6. Paint Shop	7	14
7. Cyclotron	7	14
8. Physics	4	17

Schedule - March 14

Paint Shop vs. Physics Pile Operations vs. Purch. Cyclotron vs. Mach, Shops Cen. Drftg. vs. Cosmos

prices that were found to be surprisingly low.

Leaving Mexico City, homeward bound, a stop was made in Tampico; Mexico, and the U.S. reentered at Brownsville, Texas. They stopped at New Orleans for 2 days, but said they couldn't appreciate cities in the U.S. after being in Mexico.

If you let Paul or Jerry get wound up, they rave on and on like a broken record, always on one theme, "Go to Mexico". Why? Wonderful people,excellent climate, beauti ful scenery and very low prices.

Your reporter said he was convinced, so they

AS OF MONDAY, MARCH 13			
<u>s</u>	Thursday - Men		
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h 14	Schedule - March 15		
munica- vs. Claec- cal Purch.	Bldgs. & Grnds. vs. Electronics Accel. Techs. vs. Bookacs Fiscal vs. Photography Meteorology vs. Pile Drivers		
n	High Game - Ladies		
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CHESS CLUB STANDINGS

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High Game - Thurs. - Men

High Geries - Thurs. - Men

	W	Ŀ
l. Cook, C.	3	0
2. Kaplan, I.	4	1
3. Chernick, J.	3	1
4. Bothner-By, A.	3	2
5. Korsos, T.	3	2
6. Mede, J.	2	3
7. Edelman, A.	2	2
8. Slavin, M.	2	3
9. Webster, E.	1	3
10. Cox, G.	0	4

left, still rehashing their experiences and talking about "next time".

PAGE 3

Tuesday - Ladies

1. Purchasing

BNL BOWLING STANDINGS

## NEUTRON MIRROR (contd. from Page 2)

forces a mirror consisting of the surface of  $\frac{1}{2}$ liquid mixture of hydrogen nucleus being the significant component of the mirror, since its mass of one proton is of the same order as the reflecting neutron, it was explained.

The measurements are based on finding the mirror's critical angle, that is, the angle at which complete reflection is attained and above which become the neutrons trapped in the mirror. This angle can be very precisely determined, Dr. Hughes said, and from it the nuclear forces can be computed. The previous method, comparativel<del>y</del> rough, has been to measure the intensity of neuscattered trons from bombarded material.

Dr. Hughes, and others at Argonne, found with the hydrogen mirror that the attraction between neutron and proton was considerably higher than the figure reached by intensity measurements. He said the figure was close to that found by other methods for measuring the nuclear force between proton and proton, a fact which would tend to substantiate the theory that forces in the nucleus are independent of the electric charge of the particles.

To study the magnetic properties of particles, the mirror is made of magnetized iron, he said. The mirror in this case arranges neutrons, which are actually tiny magnets so that their poles are all in the same direction. This polarized beam, he said, would be a "powerful" tool for studying nuclear properties dependent on spin as well as magnetic fields inside solid bodies.



### CLASSIE IED

# For Sale

1937 Buick 4-Door Sedan-Good condition - \$100 -For further information call Al Wise, Ext. 584 or Pat. 543-R.

1939 LaSalle Sedan -Make me an offer - Ext. 456.

1949 Ford 2-Door-Sedan -Custom Deluxe --Completely equipped - Ext. 456.

1-1/2 tons nut coal - Best Offer - Nehemias, Ext. 593.

1949 Late Model Motor ola Radio - Push-button type - \$50 - Call A. Qualtere, Ext. 624.

1941 Pontiac Motor - Also all other accessories for 1941 Pontiac parts - Tires also - A. Qualtere, Ext. 624.

### Building Lot for Sale

#### Price: \$700

Located in Bellport on corner of Browns Lane and Maple Street (former site of the old Methodist Church).

Property has 143 ft. frontage on Browns Lane and 95 ft. frontage on Maple Street. This is an ideal location as it is three blocks from the Bay and approximately three blocks from the shopping area.

Anyone interested in this property should contact Mr. Dey Demarest by March 15th, as the lot may be sold on that date. Mr. Demarest may be reached at Bellport 91 during the day, or in the evening at Bellport 43, or you may call the Housing Office on Ext. 2218.

<sup>&</sup>quot;Accident" is just another word--until you have one.



'I get 'em with the first two barrels, the third one skins 'em.''