

# BULLETIN BOARD

Volume 22, Number 1

Published by the BNL Public Relations Office

January 4, 1968

## Year-End Statement By AEC Chairman

*Dr. Glenn T. Seaborg, Chairman of the Atomic Energy Commission, issued the following year-end statement:*

December 2nd marked the 25th anniversary of the first nuclear chain reaction, climaxing an important year for the Atomic Energy Commission which in January of 1967 observed its own 20th anniversary. Highlight observance of the December 2nd observance was President Johnson's internationally televised statement in which he offered to permit International Atomic Energy Agency safeguards on all U.S. nuclear activities, excluding only those with direct national security significance, in an effort to achieve the broadest acceptance of a non-proliferation treaty.

The Silver Anniversary of Enrico Fermi's "First Pile" in Chicago was an appropriate reminder of the growing number of peaceful applications of the atom and of future uses expected to ease mankind's age-old problems of food, water and health.

In one important development during 1967, the AEC and the Department of the Interior signed a contract providing for government participation in the world's largest dual-purpose desalting and electric power project on a 43-acre man-made island at Huntington Beach, California. The Bolsa Island nuclear power and desalting plant, the first such commercial plant to be nuclear fueled, will generate about 1800 megawatts of electricity and eventually produce 150 million gallons of distilled water per day. This project is a key element in extensive plans for additional uses of desalting to meet the water requirements of the future. Great interest has been shown in the potential of large-scale desalting using nuclear energy to change the character of the arid regions of the world.

Outstanding in 1967 - as it was in 1966 - was the trend by electric utilities to "go nuclear." During the year, utilities announced plans for at least 32 nuclear power plants and ordered 30 reactors. The new reactors represent a capacity of more than 24 million kilowatts. The 1966 figure was 28 plants and 21 reactors. The nation enters the new year with 15 operable nuclear power plants and 21 under construction. The trend points to a generating capacity by nuclear plants of between 120,000 and 170,000 net electrical megawatts by the end of 1980, or 25 percent of the total national capacity.

Design work began on the 200 BeV (billion electron volt) accelerator, to be built near Chicago, which will enable the United States to maintain its preeminence in the field of high energy physics research. The facility will be the highest energy accelerator in the world and will enable man to attack, in depth, the most fundamental problems regarding the structure of matter.

The first model of a cardiac pacemaker, to be powered eventually by nuclear energy, underwent testing during 1967. It is designed to relieve interruption of the nor-

(continued on page 4)



Dr. Samuel A. Goudsmit, retiring Deputy Chairman of the BNL Physics Department.

Photo by Garfield



Workman (foreground) prepares cables for towing tanks of Van de Graaff generators into position in new facility adjoining Cyclotron Building on Cornell Avenue. The two tanks which weigh about 140 tons each were moved into the new facility on a 400-foot railroad constructed inside the building. More pictures of the moving operation appear on page three of this issue of the *Bulletin Board*.

Photo by Rosen

## Goudsmit Retires Joined Physics Staff at Brookhaven in 1948

Dr. Samuel A. Goudsmit, Deputy Chairman in the Physics Department, retired from his administrative duties on December 31, to take up a post-retirement assignment as senior physicist, and to devote more time to his duties as Managing Editor of the *American Physical Society*.

Goudsmit, who was born in The Hague, Netherlands, came to the United States in 1927. He was a student at the University of Leiden from 1919 to 1926, and a research assistant at the University of Amsterdam from 1923 to 1926. In 1925, in collaboration with G.E. Uhlenbeck, he was discoverer of the spin of the electron. He received his Ph.D in Physics from Leiden in 1927, after receiving a Rockefeller Foundation Fellowship in 1926. After coming to the United States he joined the faculty of the University of Michigan and in 1932 became professor of physics.

In 1942 he went on leave to the Radiation Laboratory at MIT, and in 1944 was detailed to the War Department as Chief of a Scientific Intelligence Mission to Europe.

Alsos, the code name given to the mission, went into Europe on the heels of the invasion forces to discover what progress German physicists were making on the building of an atomic weapon. The mission found that contrary to expectations, the German scientists were several years behind the Allies in research in this field.

The soldier-scientists under Goudsmit's command occasionally found themselves ahead of the invasion forces, and at one point were forced to set up a town government that functioned until the army came along to officially capture the town. After the conclusion of the mission Goudsmit was awarded the Medal of Freedom and the Order of the British Empire.

Goudsmit's assignment to military-scientific intelligence was made easier because of a course in detective techniques taken while an undergraduate student. Deciphering laboratory notes of the German scientists was no great task as Goudsmit had also learned how to read Egyptian hieroglyphics.

After the war he became a professor of physics at Northwestern University until 1948, when he joined Brookhaven National Laboratory as a Senior Scientist. In 1951 he became Editor of the *Physical Review*, and in 1952 was appointed Chairman of BNL's Physics Department.

In addition to his administrative and editorial duties, Goudsmit kept up his scientific work and was active in the National Academy of Sciences, the American Philosophical Society, the American Physical Society and the American Nuclear Society. He had earlier co-authored with Linus Paulding "The Structure of Line Spectra" and with R.F. Bacher, "Atomic Energy States." He wrote "Alsos," the story of his war-time mission, in 1947, and "Time" (with R. Claiborne and the editors of *Life Magazine*) in 1966.

Since 1957 he has been Visiting Professor at Rockefeller University where he has just recently lectured on Egyptology. He is planning a book on Egyptian hieroglyphics for the layman.

Dr. Goudsmit has earned many awards since the start of his career, the latest being the Max Planck Medal in 1965. He has made many important contributions to physical research since his 1925 discovery of electron spin. He was also the inventor of the magnetic time of flight mass spectrograph in 1948.

Dr. Goudsmit and his wife, Irene, live in Bayport. His daughter, Dr. Esther Goudsmit, is a biologist at Johns Hopkins.

## Calling All Skippers

The Patchogue Bay Power Squadron, a unit of the United States Power Squadrons, has announced that a course in Piloting and Small Boat Handling will be given at the Bellport Senior High School, Beaverdam Road, Brookhaven, starting January 15, at 8 p.m.

The course will consist of a series of lectures and classroom work, covering subjects such as Safety Afloat, Seamanship, Aids to Navigation, Charts and Piloting, Mariner's Compass, Government Regulations, Rules of the Road, and Small Boat Handling.

The United States Power Squadrons is a nationwide, non-profit, educational organization of boatmen. Organized in 1914, it has grown to an approximate membership of 64,000, and 362 squadrons. Since its inception, over a million men and women have taken advantage of its Free Piloting Course. While primarily slanted towards safety afloat, the course is taught in a most fascinating manner, capturing and maintaining the students' interest for the duration of the course, about ten weeks.

All interested men and women are cordially invited to avail themselves of this opportunity. Further information may be had from the Squadron's Educational Officer, Past Commander George C. Wagner, Ext. 7373 or YA 4-3267. Registration will be January 15.

Also starting in January, District 3, of the United States Power Squadrons will conduct Free Boating Classes at 30 locations in Brooklyn, Queens, Nassau and Suffolk. For information on the nearest location, send a post card to USPS, P.O. Box 588, Freeport, New York, 11520.

## New Mail Rates

### In Effect Sunday

Increased rates for all classes of mail except parcel post and international mail will go into effect January 7, Postmaster Garrett reminded postal customers today.

"Even with the new rates of six cents for first-class mail and ten cents for air mail, postal service is still a real bargain," Postmaster Garrett declared. "For six cents you can send a letter to any of the 50 states, to any U.S. territory or possession, to Canada or Mexico, or to an American Serviceman stationed anywhere in the world."

He pointed out that the new rate for post cards will be five cents, air mail post cards eight cents.

The added cent in the letter rate is a 20% increase compared to a 24% boost in the rates for mailing newspapers and magazines, and a 34% hike for advertising circulars, "occupant" mail, and other material in the 3rd-class category.

The new rate of six cents per ounce for 1st-class mail applies up to 13 ounces, and the new rate of 10 cents per ounce for air mail applies up to 7 ounces. Under the new rate structure, all 1st-class mail over 13 ounces and all air mail over 7 ounces will be merged into a single category.

These heavier pieces of 1st class mail and air mail subject to the single rate schedule will be delivered by the fastest available means of transportation. A flat rate of 80 cents will be charged for all mail in this category up to one pound. For all mail weighing more than one pound, the present air parcel post rates will continue to apply, except that the postage on matter weighing between one and 5 pounds will change at 1/2-pound intervals rather than one pound intervals.

The new rate structure will mean a reduction on some parcels.

Another rate change will be the increase from four to six cents for the first two

## BERA Film Series

Thurs. January 11 - 8 p.m. - Lecture Hall

### Zulu

Starring Stanley Baker, Jack Hawkins, James Booth and Michael Caine.

In 1879 the British in South Africa started a "preventive war" against the peoples of Zululand. The commanders of the British forces completely underestimated the capacity of the Zulus to put up an effective defense. After routing the invading army at Isandhlwana, the superbly disciplined Zulu army advanced upon the Buffalo river which was the boundary of Zululand. At a mission station at Rorke's Drift a little over a hundred British troops and some local militia were stationed and suddenly found themselves faced with over four thousand Zulu troops. This film tells the stirring story of the defense of Rorke's Drift and the amazing gallantry on both sides. Eleven Victoria Crosses were awarded for this action, more than for any other battle in English history. Rarely has a film presented a more accurate historical account without sacrificing excitement, vivid color and excellent dramatic impact. If you like a bold action epic this is definitely your cup of tea.

**Added Attraction:** The first two history buffs who can document two inaccuracies in the film version will receive two free admissions to any two BERA films. Send your comments (with documentation) to H. Lyman, Medical.

No short.

## Theatre Group Announcement

There will be a general meeting of the Theatre Group on Monday January 8, 1968 at 8:30 in the theatre. After the meeting Ron and Julie Peierls and Jean Andelson will give a lighting and make-up demonstration. This will show the capabilities of the new lighting consol and illustrate two approaches to make-up while showing the various effects of lighting techniques on make-up. Newcomers and visitors are invited.

ounces of individual pieces of 3rd-class mail. Unsealed greeting cards may be sent at this rate, Postmaster Garrett said. He emphasized that the new rate on unsealed greeting cards will not go into effect until January 7, and until then, they can be mailed at the old rate of four cents.

He also noted that effective January 7, special handling will be available on 3rd-class parcels weighing between 8 and 16 ounces. Special handling has not been available on these parcels since 1958, when packages weighing between 8 and 16 ounces were transferred from 4th class to 3rd class mail.

There will be no changes in the charges for special delivery, special handling, registered mail, cash on delivery or insurance, Postmaster Garrett said.

"We have an ample supply of one cent stamps on hand for those people who have five cent stamps and need one cent stamps to make up the postage required under the new rates."

Higher rates also will go into effect January 7 for all categories of 2nd-class mail, bulk-rate 3rd-class mail, controlled circulation mail, and the educational materials category of 4th-class mail. Mailers using these classes who need information on the new rates should contact the local Post Office, Postmaster Garret said.

## The Rain In Spain . . .

The BERA Theater Group is offering a unique opportunity to the children of BNL employees. They are planning to sponsor a Junior Workshop for those between the ages of 10 and 18. The Workshop will be divided in two sections according to ages, 10-14 years and 15-18 years. The purpose of the Workshop is to acquaint young people with Mime, Voice and Acting Techniques.

The workshop, under the direction of Bonnie Hughes, will start sometime during the week of January 15, and will run for 12 to 15 weeks, a two-hour session each week.

If you are interested or would like further information, please contact J. Friedman, Ext. 2548. Application blanks may be obtained at the Recreation Office.

## Safety Glasses Issued On New Time Schedule

Starting Monday, January 8, the optician will be on site to dispense safety glasses on Monday mornings and Wednesday afternoons. The services of a new optician, Mr. John Seffert have been contracted for by the Laboratory.

The dispensing will continue from the Personal Protective Room in Building 535. The new schedule for optician services will not affect the issue of safety shoes, which will continue on Monday afternoon and Thursday morning. There will be no optician services on Thursday, January 4, 1968.

## Arrivals & Departures

### Arrivals

Earl W. Graves.....Applied Math.  
Kanti R. Rai.....Medical  
Norman M. Rose.....Plant Maint.

### Departures

Miodrag S. Carapic.....Instr. & H.P.  
Bertha Conway.....Medical  
Robert L. Hellens.....Nuclear Engrg.  
Martha A. Ingram.....Personnel  
John A. Leake.....Physics  
George W. Maxey.....Purchasing  
Robert G. Miller.....Fiscal  
Kenneth C. Packer.....Medical  
Shlomo Szapiro.....Chemistry  
Lilias L. White.....Medical

## USNR Research Co. 3-9 Brookhaven National Laboratory Upton, New York YA 4-6262, Ext. 2910\*

### Drill Schedule

For Quarter Ending 31 March 1968

10 January\*

Regional Marine Resources Council  
Clarke Williams, BNL

17 January

Nuclear Power for Space  
David Schweller, AEC

14 February

Current Biosatellite Experiments  
Arnold Sparrow, BNL

21 February

Puerto Rico Nuclear Center  
R.C. Anderson, BNL

13 March

Calculation of Decompression Schedules  
for Deep Sea Dives

Capt. J.S. Robertson, BNL

20 March

Radiological Assistance Program  
Speaker to be Announced

\*Please note changes.

## BULLETIN BOARD

Published Weekly for the Employees of  
Brookhaven National Laboratory

CARL R. THIEN, *Editor*  
DOLORES DEL CASTILLO, *Editorial Assistant*  
JUDY KALTSCHMIDT, *Copy Preparation*  
40 Brookhaven Ave. Upton, N.Y. 11973  
Telephone 516 924-6262 Ext. 7238

NORBERT J. DERNBACH  
*Public Relations Officer*

## Here and There

Dolores del Castillo

Morris Skibinsky (Applied Math) presented a paper entitled "Extreme nth Moments for Distributions on 0,1 and the Inverse of a Moment Space Map to the N-Dimensional Unit Cube" at the Annual Meeting of the Institute of Mathematical Statistics, held in Washington, December 27-30.

Carl A. Christianson (ME) was named the inventor of Ratchet Drive for which U.S. Patent 3,358,519 was issued to the AEC on December 19, 1967.

On December 26, 1967, U.S. Patent 3,360,646 was issued to the AEC for the Uniform Gamma Irradiation of Bulk Grain Material invented by Earl M. Reiback (contractor) and Otto A. Kuhl (NED, deceased).

Friends of James Ryan (Central Shops) will be sorry to hear that he is in Good Samaritan Hospital recuperating from an operation. He will be away from the Laboratory 6-8 weeks.

Herman Postma has been named director of Oak Ridge National Laboratory's Thermonuclear Division. An ORNL staff member since 1959, Postma's work has been primarily in the fields of low temperature physics, cross section measurements, and accelerator design measurements.

Having received the Bronze Star with Oak Leaf Cluster, his third medal while serving with the Fourth Infantry in Vietnam, Robert Gardner, son of Harold Gardner (S&M) returned home on December 15, and received his honorable discharge on December 16. He served in Vietnam for almost 12 months.

Alan Astbury of Rutherford is visiting the Laboratory today and tomorrow for discussions on high energy physics.

George M. Woodwell (Biology) was a guest on the Today Show the morning of December 27. He appeared with Hugh Downs discussing the very serious problem of world-wide pesticide pollution.

Roger R. Adams and Calman Lasky (Accelerator) have recently returned from Erlangen, West Germany and West Berlin where they had discussions with representatives of the Siemens Company, with whom BNL has signed a contract for the AGS Conversion power supply, to arrange details of design and design approval.

Robert L. Louttit (Physics) has recently returned from Saclay, France, where he participated in tests of the full-scale model of the hydrogen bubble chamber "Mira-belle."

Harold H. Smith (Biology) has returned from Vienna, Austria, where he participated in an IAEA meeting, "International Cooperative Program on Neutron Irradiation of Seeds," held December 11-15.

Robert J. Spinrad (I&HP) will give a talk at the New York Academy of Science on January 9. The title of the talk is "The Automated Laboratory."

140-Ton Tanks moved at Tandem Van de Graaff



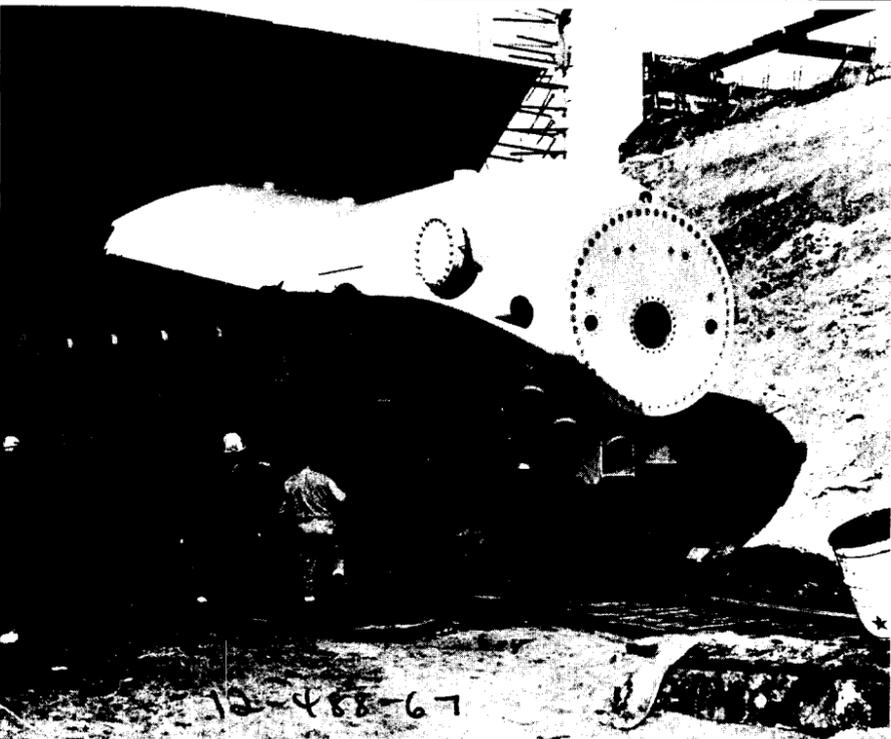
12-480-67



12-456-67



12-487-67



12-488-67



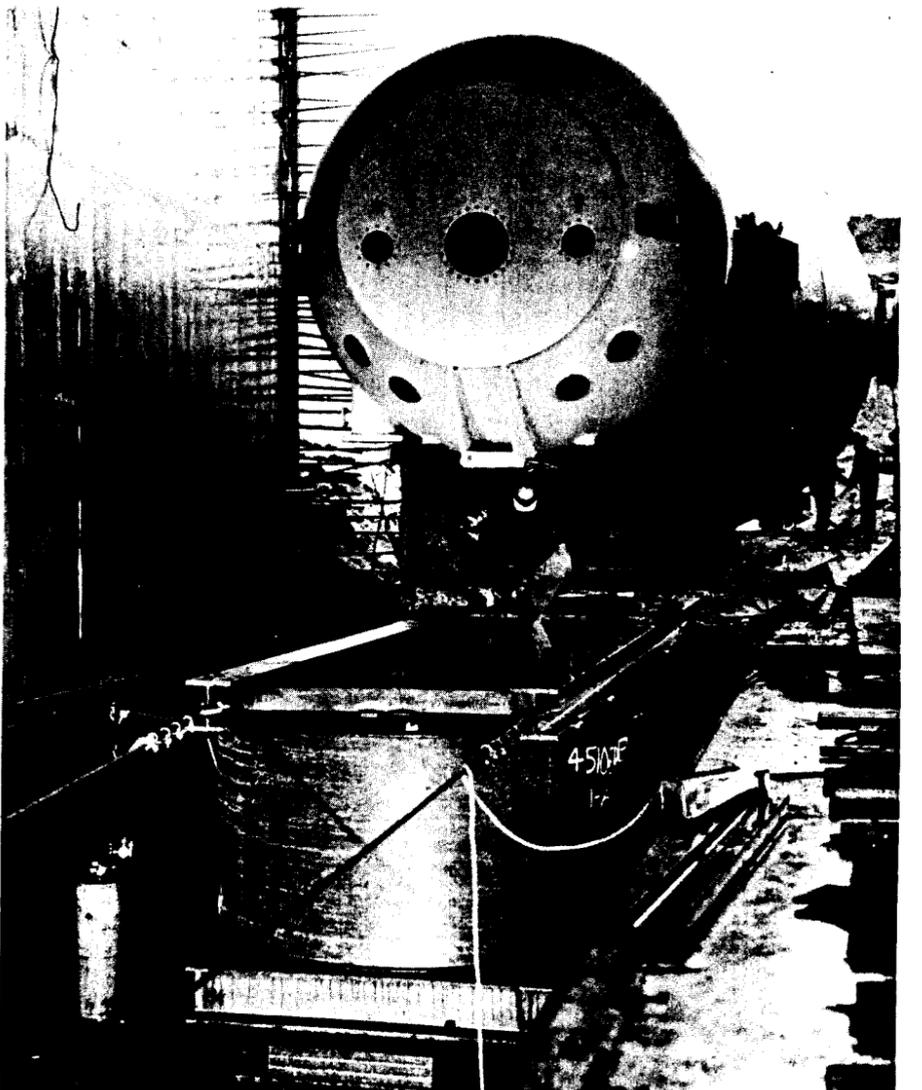
12-471-67



12-434-67

Moving two 140-ton tanks into the Tandem Van de Graaff facility was an arduous job that called for many months of preparation. Rails and ties were shipped in to the Lab, and a 400-foot rail line was constructed inside the new building. A railroad car was built on the tracks inside the building to carry the heavy tanks to their final position, and then the tanks had to be skidded on to the car and winched into place. Movies and still pictures were taken during the operation which took several weeks to complete. The 18-foot-diameter tanks will house the machinery of the two 20 MeV accelerators that can be used as individual machines or as a unit to produce up to 30 MeV. The \$12 million project is expected to be completed in 1970.

Photos by Rosen



12-435-67

## AEC Year-end

(continued from page 1)

mal stimulus to the heart. Also under conceptual study is a radioisotope engine to power a pump which would assist or replace functions of a diseased or damaged heart.

Limited distribution began in late 1967 of a purified multiple vaccine which gives immunity to several different types of flu viruses in a single inoculation. Production is to be a zonal centrifuge system developed by AEC's Oak Ridge National Laboratory and Oak Ridge gaseous diffusion plant. The National Institutes of Health was a joint sponsor of the development.

An AEC truck-mounted irradiator began a cross-country tour last fall demonstrating to interested food firms at their own fields and plants the laboratory-tested techniques of food preservation by irradiation. The tour continues through 1968. (Editors note: This irradiator was fueled and tested at Brookhaven.)

There were other developments in the food irradiation program in 1967. A demonstration and research grain irradiator to disinfect grain products was opened in Savannah, Georgia. A pilot plant for irradiating tropical fruits for preservation and to overcome insect quarantine barriers was dedicated in Honolulu.

Space applications of nuclear power also moved ahead in 1967 in mid-December, an experimental NERVA/nuclear engine for rocket vehicle application/reactor was successfully tested at Jackass Flats, Nevada. The device was operated at full design power of approximately 1100 megawatts for 60 minutes which is longer than would be required for most operational missions in space. The test, the sixth in the NERVA experimental reactor series, ran twice as long as any previous rocket test at rated power.

Research at AEC laboratories resulted in spin-off benefits to industry in 1967 through study of the atomic structure of crystals in alloys at Lawrence Radiation Laboratory at Berkeley, a new series of alloy steels was developed. The new steels, combining high ductility with high strength, have potential applications in prestressed concrete, high strength chemical processing equipment and containers.

Another example was the development of "Rolamite," a new engineering concept involving controlled interaction of two or more rollers with a flexible band or tape. The development at Sandia Laboratory, in Albuquerque, may be used to produce nearly frictionless devices requiring no lubrication for use in relays, bearings, pumps and sensing devices.

Project Gasbuggy was conducted December 10th as part of a joint project by the AEC, El Paso Natural Gas Company and the U.S. Department of the Interior. The purpose was to investigate the use of nuclear explosions to stimulate the economic production and ultimate recovery of natural gas from tight gas-bearing formations. Results of the experiment are not expected to be known for some months.

The Commission, as part of its service to the public sponsored lecture demonstrations on atomic energy before some 1,650,000 secondary students during the year. A total of more than 4,500,000 persons attended various AEC exhibits in this country during 1967. About 450,000 persons viewed major AEC exhibits which held one-month showings during the year in Ankara, Turkey; Tehran, Iran; Panama City, Panama; and Quito, Ecuador, at the invitation of the governments of those countries. AEC exhibits are designed to acquaint the general public in this country and abroad with atomic energy, its peaceful applications and to furnish a laboratory and training center for scientists and students.

## Classified Advertisements

### Autos & Auto Supplies

- 61 PLYMOUTH VALIANT - Auto trans, r/h, excel cond, 5 new tires. Mary, Ext. 7426, 286-8620 after 6 p.m.
- 63 IMPALA STATION WAGON - 9 psgr, ps/pb, r/h, 8 cyl, 41,000 mi, exceptionally clean car. Lou, Ext. 2126.
- TIRE - 8.3/60-15, 4 ply tubeless, DeSoto bumper jack. Make offer. Lou, Ext. 2126.
- 4 SPD TRANS - Clutch, fly wheel, Hurst linkage for 63 Super Sport Chevy. HR3-5063.
- 36 DODGE COUPE - Rumble seat, dual sidemounts, luggage rack, no eng, car disassembled. Price inc 38 Dodge parts car, compl \$150. Sauter, Ext. 7272.
- SEATS - Radio & hub caps for 64 VW Bus. P. Ettari, Ext. 2407, 273-6436.
- 67 OLDSMOBILE CUTLASS SUPREME - Crystal blue, 2 dr hard top, 4 spd, bucket seats, dual exhausts, posi, 4 BBL carb, snow tires, 11,000 mi. \$2400. Claire, Ext. 2131.
- 66 RAMBLER - American 220, 4 dr sedan, r/h, auto trans. Larry, Ext. 2441.
- 68 CHEVROLET IMPALA - 9 psgr Station Wagon, r/h, safety belts, top luggage rack. Must sell, \$3100. 281-7765, 281-5062 evenings.
- 66 SUNBEAM ALPINE - Red w/black detachable hard-top & conv top, new eng & clutch, snow tires, very good cond. \$1700. Judy, Ext. 2357.
- 58 CHEVROLET - Station Wagon, 6 cyl, auto trans, runs well. \$50. Matko, Ext. 613.
- 57 CHEVROLET - 4 dr Station Wagon, V8, auto trans. \$125. Bob, Ext. 2576, HR3-9180 after 6 p.m.
- CAR BATTERY - 12 volt, 1 yr old. \$7. HR3-0288.

- 52 PLYMOUTH - 65,000 mi (honest!), new valves recently, reliable friend regrettably replaced by more stylish foreign model. Offers? Ext. 7652.
- 63 PONTIAC - 4 dr, fully equipped, 1 owner, low mileage. Ext. 7201.
- 67 VW - R/h, seat belts, w/snow tires. 281-7765 evenings.
- 64 VW - Square back, green, 37,000 mi, excel cond. \$995. M. Hansen, Ext. 2389.
- 55 FORD TOW TRUCK - Has boom, excel cond. Must sell, \$525. 732-8202 after 6 p.m.
- 62 PONTIAC TEMPEST - Auto trans, snow tires. J. Shapiro, Ext. 2427.

### Boats & Marine Supplies

- 55 CHRIS CRAFT 30' - Twin 150 Interceptor, fb, df, ss, sleeps 4. \$3500. LT9-5649 after 6 p.m.
- 64 LONE STAR - 14' Aluminum boat, like new. \$225. AT6-8247.
- 56 CELEBRITY 20' SAILBOAT - Keel; deck & hull fiberglassed, sails, mooring, etc. \$500. P. Bodlaender, Ext. 386.
- 4 LIFE JACKETS - Approved type, \$5 all; marine eng cooling system fittings, reasonable. F. Truman, Ext. 2741, GR5-4627.

### Miscellaneous

- GORDON REMO BANJO - Case & compl, compl set home study lessons, Port Washington School of Music. \$60 firm. John, 878-2863.
- WATER PUMP - Hand operated type, large, never used. \$20. 924-3124.

DRAWING BOARD - 42"x31" w/attached desk stand & sliding T square, excel cond. \$10. 924-3124.

MANICURE SET - Sunbeam Electric, brand new cond, compl w/factory warranty. \$12. 924-3124.

BICYCLE - Boy's 20', new tire. \$10. AT6-0795.

SKIS - 6'8"; buckle-type French ski boots, size 12; ski poles & boot tree; all excel. \$50. 363-6895.

GIRLS ICE SKATES - Size 5, white, \$3; men's hockey skates, size 8, \$4. Ext. 2203.

BOY'S BICYCLE - 26" Columbia, excel cond, seeing is believing. \$40. J. Palmer, Ext. 2373, 751-1315.

SEWING MACHINE - ZigZag "White," like new. \$65. Henry, Ext. 2120.

BOY'S SKI BOOTS - Good leather, size 2, + skis & poles. \$15. AT6-8849 after 5 p.m.

BABY CARRIAGE - Atlas Coachette, navy w/accessories & mattress, perfect cond. Paid \$85, will sell for \$50. Lou, Ext. 2126.

CHRISTMAS PUPS - Weimareners, AKC, home bred w/children, for pet & show. 585-3721.

SKI PANTS - Man's, stretch, black, size 36. \$10. N. Schinn, Ext. 2706.

REFRIGERATOR - 8 cu ft, International Harvester, 17 yrs old, good cond. \$35 firm. Schoener, Ext. 2295.

RIFLE - Marlin, perfect cond, used once, full magazine - 6 shots, 30-30 caliber, 1 1/4 barrel. Asking \$60. 281-6220.

DOLL - New 16" from Viet Nam, perfect for doll collection. \$10. Pat, Ext. 430.

POGO STICK - \$4; chest exerciser, \$2; assorted old ("O" gauge) trains, track, etc. 924-3124.

OAK FIREPLACE LOGS - Split or unsplit. 10-\$1, 1/2 cord-\$22, Del-\$25, Cord-\$40, Del-\$45. Ext. 7218, 732-4101.

STEREO TURNTABLE - 3 spd, manual operation. Reasonable. P. Ettari, Ext. 2407, 273-6436.

HO TRAINS - Track, switcher, new power pack, loco, some cars. Ray, Ext. 2962.

40" KENMORE GAS RANGE - A-1 cond, glass door bake oven, broiler oven, storage drawer. GR5-0124 after 6 p.m.

DOUBLE WHITE STONE WASH TUBS - Very good cond, w/faucets & leg stand. \$10. JU5-8322.

BATH TUB - 5', white, l.h. drain, very good cond. \$10. JU5-8322.

LEAVING STATE - Must sell 7 rms of furniture plus tools & toys by Jan 15. GR5-4627.

GARAGE SALE - Jan 4, 5, 6, 7. GR5-4627.

CRIB & ACCESSORIES - Excel cond. \$25. Bob, Ext. 2265, AT9-1568.

UNITED UPRIGHT FREEZER - 3 yrs old, used very little. Make offer. Ext. 597.

COMPL HEATING SYSTEM - Steam boiler, burner & controls, 9 radiators, piping, oil tank, have changed to elec heat. \$550. GR5-0124 after 6 p.m.

GRAND PIANO - Sohmer, 6'3", very good finish, action recently adjusted. \$400. Ext. 7235.

AUTOMATIC GAS PUMP NOZZLES - 3 for \$45, must sell. 732-8202 after 6 p.m.

CASH REGISTER - 7 positions, elec, 7 rolls of tape. Must sell, \$325. 732-8202 after 6 p.m.

SKIS - Rossignol "Olympique," 7' length, excel cond, bindings incl. \$25. Corliss, Ext. 2482.

8 WK SUMMER PLAYSCHOOL PROGRAM - For Lab children (4-6 yrs), highly qualified directors. For information call collect 212-427-6133 after 6 p.m.

MINOX CAMERA - w/built in light meter & filters, flash attachment & cases, excel cond. \$85. N. Azarito, Ext. 586.

LAWSON SOFA - W/cover; kitchen set; bedroom rug; recliner; end tables; lamps; tea wagon; Colonial sewing bucket. AT9-1277 after 6 p.m.

G.E. PORTABLE DISHWASHER - Very good cond. \$80. Ron, Ext. 2969.

MARLIN BOLT ACTION SHOTGUN - 12 gauge, adjustable choke, very good cond. \$25. F. Rumph, Ext. 2221.

MAUSER RIFLE - Cal 30-36, military stock, tapped for scope, very good cond. \$40. F. Rumph, Ext. 2221.

### Houses

WADING RIVER - 2 bedrm ranch, ww carpeting, baseboard h/w, double garage, full basement, 130'x150', dogwoods surrounding area. 929-4714.

PORT JEFFERSON VILLAGE - 4 bedrm Cape, fireplace, double garage, 2 baths, mud rm, 1/2 acre, private beach, low taxes. \$27,300. HR3-6212.

HAUPPAUGE - 3 bedrm Ranch, 1/2 acre professionally landscaped lot, compl storms & screens, must be seen to be appreciated. Lou, Ext. 2126.

OAKDALE - 4 bedrm front to rear Split Level, cathedral liv rm, family rm, on wooded-landscaped lot w/patio. \$19,500. R. Strand, Ext. 7658.

RIDGE - 3 bedrm Ranch, eat-in kitchen, din rm, storms & screens, full basement. 924-6860.

PORT JEFFERSON VILLAGE - 4 bedrm Colonial in Harbor Hills, low taxes, .4 wooded acre, 2 yrs old, many extras. \$26,990. HR3-8958.

BLUE POINT - The only available waterfront property, high & dry house on 141'x118' corner plot, walking distance to stores, beach & church, inspection invited. P. Ettari, Ext. 2407, 273-6436.

BROOKHAVEN VILLAGE - 4 bedrm ranch, liv rm, din rm, porch, 1 1/2 baths, 2 car garage, 1 1/2 acres fully landscaped, 150' frontage. \$31,000. AT6-1358.

### For Rent

3 RM PENTHOUSE APARTMENT - Beautiful waterfront view, furn, yrly lease w/utilities, single only. \$125/mo. 878-0214.

FURN ROOM - Kitchen privileges, clean house, Mastic, 10 min to Lab. \$65/mo. Ken, Ext. 2442; Al, Ext. 2726.

2 BEDRM HOUSE - Furn. \$125/mo. 289-1511.

### Wanted

CABIN TRUNK - For family of 4. Nardi, Ext. 7243, AT9-3596.

GAS TANK - W/hose & connector for 2 hose system outboard. Ext. 2713.

FALCON ENGINE - 144 or 170, for 60-61, in reasonable running cond. Rich, Ext. 2735.

BUYER - For 2 bedrm Ranch, ww carpeting, baseboard h/w, double garage, full basement, 130'x150' dogwoods surrounding area, Wading River. 929-4714.

1 BEDRM APT/SMALL HOUSE - In or near Oakdale, moving late Jan 68, married couple, no children. Ext. 7424.

5 BOOKS TRIPLE S BLUE STAMPS - Will give you Plaid Stamps in exchange. Ext. 2275, ANS-7183.

SURFBOARD - Suitable for 16 yr old girl. Under \$50. J. Baranosky, Ext. 668.

COINS - All collectable U.S. coins wanted, no amount too small or large. J. Giordano, Ext. 2324, 928-1222 after 6 p.m.

PORTABLE WASHER - Wringer or Twin Tub, floor polisher, small tricycle, hobby horse, folding crib. 281-8287.

ATTENTION - International cooking exchange, British section, recipe for Crumpets needed. Binnington, Ext. 2294.

STATION WAGON - 64-66. V. Abbruscato, Ext. 481.

### Carpools

CHAPMAN BLVD, HOT WATER ST, MANORVILLE - Want to join or form carpool from this area. G. Glover, Ext. 373.

PAYING RIDER - Needs ride from E. Northport. Rich, Ext. 2735.

EAST ISLIP - 1 or 2 additional drivers wanted for current 3 man carpool. S. Kalish, Ext. 2524.

4 MAN CARPOOL - Needs 2 drivers to compl from Wantagh area. N. Schumburg, Ext. 2579.

BABYLON-WEST ISLIP - Established carpool will welcome 1 driver. A. Mahlmann, Ext. 7373.

### Classified Ad Policy:

- The Bulletin Board's classified section may be used only by active and retired Laboratory employees.
- All items for sale or rent must be the advertiser's property.
- Persons listing houses, apartments, or rooms for sale or rent, do so with the understanding that these must be available without regard to race, creed, color, or national origin.
- Ads associated with a full- or part-time business cannot be accepted.
- Ads should be restricted to 20 words or less and typed or

printed on the form provided. (Additional copies of the form are available at the Bulletin Board office.) Twelve noon on Friday is the deadline for inclusion in the following week's issue.

6. Ads are run on a space-available basis; those not carried because of space restrictions will be held for inclusion in the next issue.

7. Ads are run only once and must be resubmitted if they are to be repeated.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> For Sale: Auto & Auto Supplies    | <input type="checkbox"/> For Sale: Houses | <input type="checkbox"/> Carpools                               |
| <input type="checkbox"/> For Sale: Boats & Marine Supplies | <input type="checkbox"/> For Rent         | Check <input type="checkbox"/> the heading applying to your ad. |
| <input type="checkbox"/> For Sale: Miscellaneous           | <input type="checkbox"/> Wanted           | Print or type your ad in 20 words or less.                      |

(Name & Phone No. To Call)

If this ad concerns housing for sale or rent, such housing is available without regard to race, creed, color, or national origin.

Employee's Signature..... Life No..... Ext.....

Send to: BULLETIN BOARD, 40 Brookhaven Avenue