



BROOKHAVEN BULLETIN

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January 10, 1975

Seamans Becomes ERDA Head

On December 30, Dr. Robert C. Seamans took the oath of office as Administrator of the Energy Research and Development Administration (ERDA).

Under legislation signed by President Ford last October, ERDA becomes the agency with overall responsibility for federal research and development of energy sources. Incorporated into the new agency will be functions transferred from the Department of the Interior, the National Science Foundation, the Environmental Protection Agency, and the Atomic Energy Commission.

The new legislation creating ERDA is to become effective on February 8, or sooner at the discretion of the President. Tentative plans call for effecting the change on January 19.

Dr. Seamans came to ERDA from the National Academy of Engineering where he served as President. He is former Deputy Administrator of the National Aeronautics and Space Administration and former Air Force Secretary. He was confirmed as ERDA Administrator by the Senate in mid-December.

During his confirmation hearing, Dr. Seamans read a statement before the Joint Committee on Atomic Energy and the Senate Interior and Insular Affairs Committee. Following are excerpts from this statement:

"I believe that the President and the Congress have wisely recognized the importance for a strong R&D agency capable of developing and sustaining a balanced and practical program for energy generation and conservation that will anticipate the needs of our nation. We must make the best use of all viable sources of energy, and we must at all times minimize the possible environmental risks that these sources may pose. The creation of ERDA can meet these goals.

"I bring the strong conviction that science and technology can and must make vital and fundamental contributions to both

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NNCSC Data Storage



Sol Pearlstein, NNCSC Director; Ben Magurno, DAS; and Wolfgang Rothenstein, a visiting scientist from Israel; check neutron reaction data stored by NNCSC. They will be working together to establish a reference nuclear data base to be used by the nuclear power industry.

NNCSC Forms Data Base For Nuclear Power Industry

The National Neutron Cross Section Center (NNCSC), located at BNL, is being funded by the Electric Power Research Institute (EPRI) to establish a reference nuclear data base, to be used by manufacturers in the design of commercial nuclear power reactors.

EPRI is a California-based institute, supported by most of the nation's electric utilities to improve the efficiency and quality of electricity production.

Each manufacturer of nuclear reactors has its own design method and nuclear data base, which vary from one manufacturer to another. By establishing a single, uniform data base to be used by the entire nuclear power industry, the operating design, safety analysis and licensing procedures of nuclear reactors will be made easier.

The better the data base, said NNCSC Director Sol Pearlstein, DAS, the more precise the reactor design. If an accurate data base is not used, then a series of trial

and error attempts are often the result before a feasible design is reached.

The NNCSC reference nuclear data base will include the cross sections of all the elements used in the construction and operation of a nuclear power reactor. A cross section is defined as the probability with which these elements will react with neutrons. Elements present in a reactor fall into several categories: structural materials such as iron, steel, and concrete; moderator materials like water and graphite, used to keep neutrons from escaping from the reactor; nuclear fuel materials such as uranium; control materials, which readily absorb neutrons and are used to slow down a nuclear reaction; and fission products, released following a nuclear reaction.

The amounts of these materials and their placement in a working reactor should be determined with the aid of a nuclear data base. For example, if a group of mechanical engineers propose a certain structure for a reactor and nuclear specialists suggest a particular amount of fuel, both proposals should be checked against a data base to determine whether the amount of fuel is feasible for the type of structure. If the amount of fuel is too great then the reactor will be too reactive.

In formulating a reference data base, the NNCSC is confronted with the problem of making it applicable to all different kinds of reactor designs. As a first step, the NNCSC will examine the methods and data used in the calculation of thermal reactor benchmarks, says Pearlstein. A benchmark is an experiment performed under ideal conditions, specifically to verify nuclear data, and can be easily represented in a calculation and analyzed. They will check their reference data base against data obtained through these ideal experiments.

Once the reference nuclear data base is established, says Pearlstein, the manufacturers will probably be required to use it by utilities and government regulatory agencies in addition to proprietary methods they may wish to continue.

An important byproduct of the NNCSC's efforts will be the practical application of

(Continued on page 2)

Energy & Environment Open 75 BNL Lectures

The first three speakers in this year's Brookhaven Lecture Series will present a mini series on energy and the environment. The lectures will all be related to work underway in the Department of Applied Science.

On January 22, Paul Michael, Head of the Meteorology Group, will lead off with "Smoke Over Tiana Beach," subtitled "Plume Studies Over Land and Sea." For many years BNL's Meteorology Group has been studying the diffusion patterns in the atmosphere of smoke or gas emitted from tall stacks (the stack "plume") under different wind, temperature, and weather conditions. Sets of equations, developed to describe the behavior of these plumes, have been used widely to calculate anticipated ground level concentrations.

This research has been very important because tall stacks have been the generally accepted means of disposing of unwanted, noxious gases. More recently, with interest developing in locating power plants and oil-drilling operations off-shore, emphasis has been shifted to plumes generated several miles out at sea. This has been a little studied area. Michael will describe his group's experimental work off Tiana Beach, near Hampton Bays, and the techniques used and the unexpected results obtained.

The recent release of the draft copy of the Rasmussen Report by the AEC has generated considerable comment, both pro and con, on the safety of nuclear power reactors and the role they should play in the Nation's energy program. Some of the

(Continued on page 2)

New Heating, Cooling & Lighting Regulations

New regulations have been issued by the General Services Administration (GSA), covering the heating, cooling and lighting of government-owned buildings.

The lighting regulations call for specific light levels at work stations, work areas and non-working areas. Until now, BNL's conservation lighting standard has provided for 70 foot candles (fc) at work stations. Plant Engineering will make new lighting surveys where necessary, and will remove additional lamps to comply with the new standards.

The regulations make no distinction between types of work areas, that is to say, lighting levels for detail drafting versus general office work. However, provision is made for exceptions for specific situations. The AEC has reserved to itself the determination of such exceptions. Please notify Plant Engineering of any areas in your buildings which can be justified for exception to the new regulations.

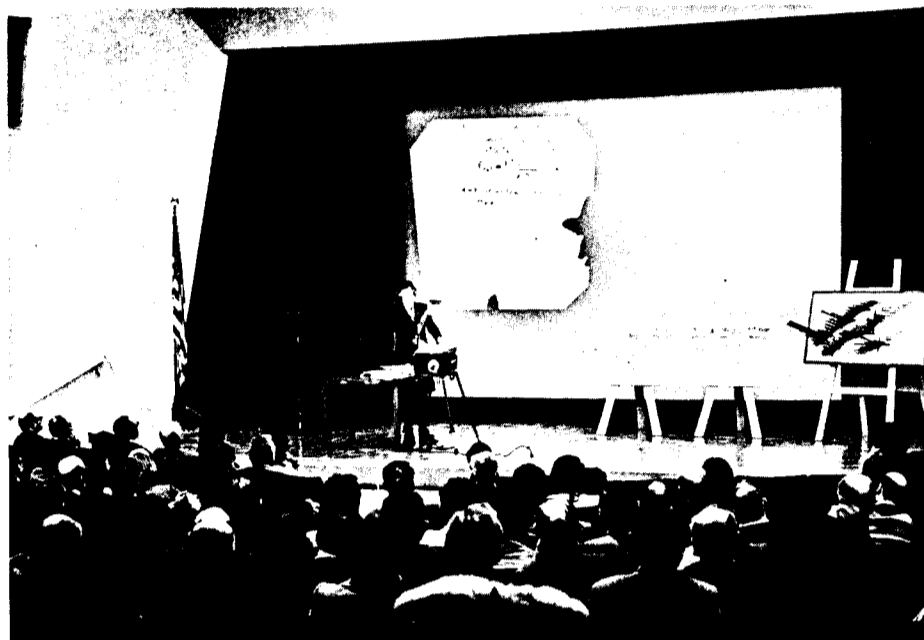
The regulation for heating and cooling, as in the past, specifies heating of work spaces to 65° to 68° during working hours and not more than 55° during non-working hours, and cooling to between 78° and 80°. Where temperatures are maintained by individual heating or air conditioning units, the occupants should adjust their thermostats for these temperature levels. For central heating and cooling systems, Plant Engineering will take whatever steps are feasible to bring these areas into compliance.

Director's Wife Talks On China Visit



At the Hospitality Coffee on Tuesday, Mrs. Phyllis Vineyard entertained questions from an enthusiastic crowd following a slide presentation and talk she gave about her recent trip to the People's Republic of China. Approximately 55 wives of employees gathered in the Brookhaven Center to hear Mrs. Vineyard speak of life inside China.

A Date To Remember



March 24, 1971 is a memorable date in the history of the Brookhaven Lecture Series. It was on that Wednesday that Gertrude Scharff Goldhaber, initiating force behind the lecture series, presented the 100th lecture.

Lecture Series

(Continued)

charges and counter-charges have been quite emotional.

The man at Brookhaven who is probably most familiar with the report is Cesar Sastre, a nuclear engineer in the High Temperature Gas-Cooled Reactor Safety Division. On February 26, he will speak on the subject of power reactor safety as it relates to the public welfare. This lecture should be a timely opportunity to become familiar with a subject that concerns the future of all of us. It is a complex subject that will benefit from a straight-forward and unbiased presentation.

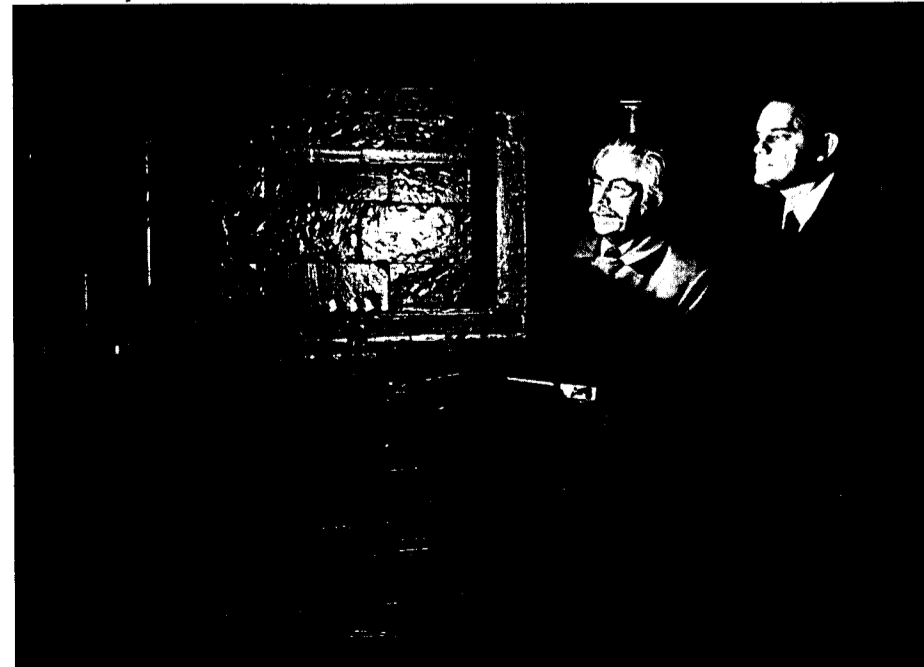
On March 29, Bernard Manowitz, Associate Chairman, Environmental Programs, Department of Applied Science, will describe the Coastal Shelf Oceanography Program at Brookhaven. The program was instituted a little over a year ago and is now well under way. Traditionally, marine biologists have either explored along the shore as far as they could wade, or have gone out in oceanographic research vessels for deep-sea studies. In between the two is the coastal shelf, about which little is known. It extends out to about 100 kilometers (62 miles) from shore and reaches a maximum depth of around 200 meters (219 yards).

The coastal shelf is one of the most productive areas of the world, and its waters teem with a wide variety of life forms. Because of the imminence of off-shore energy-related activities, the AEC is supporting this program to develop an understanding of the physical and biological processes that take place on the coastal shelf, particularly off the south shore of Long Island.

The format of the Brookhaven Lecture Series was originally intended to provide an opportunity for people to meet with friends in their own areas of interest and to become acquainted with people from other departments. Beverage service and a buffet dinner are available in the Brookhaven Center on lecture nights. In addition, refreshments (coffee, tea, beer, and cookies) are provided after each lecture, courtesy of AUI, to stimulate fellowship and provide a chance for attendees to question the speaker.

It goes without saying, that once comfortably settled at home on a winter's evening, it requires strong motivation to pry oneself loose to make the trip back to the Lab for a Brookhaven Lecture. Therefore, we suggest strongly that you consider making an evening out of it. Relax at the Center after work and join in the interdisciplinary camaraderie. —Walter Tucker

Assemblyman Tours Lab



Louis Stang, DAS, explains the process of making medical isotopes in the BLIP facility to Assemblyman Paul Harenberg, 5th AD, (right). Mr. Harenberg recently toured the Lab to get a better understanding of the kinds of research done here.

Cronkite Honored

Dr. Eugene Cronkite, Chairman of the Medical Department, has been awarded the Ludwig Heilmeyer Medal by the German Association for Progress in the Field of Internal Medicine.

The award is in appreciation of outstanding achievements in the field of internal medicine and hematological research.

Major considerations in honoring Dr. Cronkite, were his achievements as a research scientist and his successful efforts in promoting international cooperation in many medical fields, including the decisive, creative impulses given to many younger generation scientists, from all parts of the world, who have worked in Brookhaven's Medical Department.

The gold medal will be bestowed upon Dr. Cronkite at the University of Ulm, sometime during the Spring of this year.

ERDA

(Continued)

the short and long term solutions to our national energy predicament. For the next ten years we must make maximum use of the fuels and the processes that are available to us today, but our capability in the future hinges on new developments that must be pursued aggressively during this decade and the next. Of course I recognize that science and technology are not the sole answer and also that research and development programs require careful management to be effective. This is particularly relevant for government programs – all of which should be consistent with overall national policies and should provide maximum return from public investment.

"I recognize the need to weld the various elements of ERDA together into an effective institution in which existing capabilities will be used rationally and realistically, and in which new capabilities will be developed where currently deficient. I recognize the need to plan and coordinate the activities of ERDA with such other governmental agencies as, for example, the Environmental Protection Administration, the Federal Energy Administration, the newly created Nuclear Regulatory Commission, and the Energy Advisory Council.

"I recognize that ERDA will have to work wisely and well with the university and industrial communities. In this connection, ERDA has sometimes been compared with NASA – our present energy situation being somewhat similar to the space challenge caused by the early Sputniks in 1957 and 1958. But mounting a program for energy sufficiency is enormously different from a program for space exploration – although, of course, persistent research and development is essential to both. But energy presents a more complex set of problems than does reaching the moon. Space exploration, in its R & D and operation phases, remains primarily a government responsibility. In energy, however, considerable research and development is carried out by industry using private resources. What is more, the extraction, processing, generation, and distribution of energy in this country is largely the province of the private sector, and we are all directly affected by the performance of the many companies involved. Clearly, what will be required is collective knowledge and cooperative solutions. What is also needed is to work with other nations to devise new energy sources and power systems. Energy is a worldwide need, knowing no national, ideological, or disciplinary boundaries."

NNCSC

(Continued)

some of the nuclear data stored by them. They will have a chance to verify their data in a real situation – the nuclear power reactor – which could lead to further improvements in the data.

The NNCSC is an information and analysis center for neutron reaction data and a principal organizer and distributor of these data for research and applications. It is one of four located around the world, each assigned to a particular geographic area. The other three are located in the USSR, France, and Australia. The BNL-staffed NNCSC is responsible for collecting neutron data throughout the United States and Canada. It is operated by approximately 27 members of the Department of Applied Science (DAS).

"The NNCSC is an outgrowth of research activities begun at BNL in 1947, when it was realized that scientists in both basic and applied research could benefit from centralized data libraries and publications," said Pearlstein. The collection of neutron data was started in 1951 by D. J. Hughes in the Physics Department. This activity was later moved to DAS where it was organized as the Sigma Center.

In 1967, the Sigma Center and a companion group, known as the Cross Section Evaluation Center, merged to form the NNCSC.

Selected Reading

Bull. At. Sci. 30, December 1974

Plugging the energy sieve. M.D. Rubin. 7-17
Energy policy decision-making: The need for balanced input. A. DeVolpi. 29-33

Perspect. Biol. Med. 18, No. 1, 1974

Research grants. A. Szent-Györgyi. 41-3

New Sci. 64, October 31, 1974

The AEC is dead: Long live the AEC. L. King. 328-9

New Sci. 64, November 14, 1974

Woman as engineer. E. Knight talks to F. Acker. 497

Charles Bell and the roots of physiology. J. Cohen. 498-500

J. Chem. Educ. 51, December 1974

Survey of black scientists in the United States. H.A. Young. 781-2

Technol. Rev. 76, May 1974

Energy self-sufficiency: An economic evaluation. Policy Study Group of the M.I.T. Energy Laboratory. 22+

West Point Plaque To BNL



Associate Director R.C. Anderson accepts a plaque on behalf of the Laboratory from Maj. Andrew A. Dykes of the U.S. Military Academy at West Point. The plaque's inscription reads, "From Physics Dept. U.S.M.A. to Brookhaven National Laboratory in Appreciation for Courtesies Extended to the Cadets."

Medical Service Awards



Medical Department Chairman Eugene Cronkite (left) presents 10-year Service Awards to John Marto and Doris Kiltbau.

Revalidation of Award Certificates

The BERA Awards Committee wishes to announce that all merchandise certificates issued during calendar year 1972 were made valid for three years and therefore must be revalidated in order for the holder to redeem them in the future.

On January 15, 22 and 29, between the hours of 11:30 and 1:00 in the Recreation Office, members of the Awards Committee will be on hand to revalidate certificates.

In addition to revalidating 1972 certificates, awards issued in 1973 and 1974 may be brought in for extension of validation dates.

BERA Election Candidates



Kenneth Batchelor
Accelerator

Graham Campbell
Applied Math



Jack Detweiler
Reactor

Josephine Gazzola
Fiscal

The election of two new BERA Board members will take place during the week of January 20 through 24.

As previously announced in the Brookhaven Bulletin, the BERA Board has made changes in the election procedures. The primary change will be to have in-person voting at designated polling stations (see below) rather than voting by mail. Ballots will not be sent to all employees.

Eligible voters include BNL employees, guests, and full time employees of on-site facilities such as: Bankers Trust of Suffolk, Cafeteria, Gas Station and U.S. Post Office.

Polling Stations and Time Schedules

Cafeteria Lobby
Monday thru Friday, 1/20 - 1/24
11:45 a.m. - 12:45 p.m.

Physics Building Lobby
Tuesday, 1/21
2:30 - 3:30 p.m.

AGS Lobby
Wednesday, 1/22
2:30 - 3:30 p.m.

Bank (Reading Room)
Thursday, 1/23
2:30 - 3:30 p.m.

Bank
Friday, 1/24
11:30 a.m. - 1:30 p.m.

Cafeteria Menu

Week Ending January 17, 1975

Monday, January 13	
Cream of Mushroom Soup	
Chicken a la King on Rice	1.10
Cheese Omelet & 1 Veg.	.95
Tuesday, January 14	
French Onion Soup	
Chinese Pepper Steak on Rice	1.20
Roast Fresh Ham & 1 Veg.	1.15
Wednesday, January 15	
Breaded Flounder Filet & 1 Veg.	1.10
Spaghetti w/Meat Sauce, All You Can Eat Plus Garlic Bread (tax incl.)	1.00
Thursday, January 16	
Cream of Chicken Soup	
Macaroni & Chopped Beef	1.00
Barbequed Spare Ribs & 1 Veg.	1.20
Friday, January 17	
Fish Chowder	
Broiled Filet of Pollock & 1 Veg.	1.10
Braised Beef & 1 Veg.	1.20

Report Available

The following report is now available to the Laboratory staff and to affiliates of the AEC, AUI, and BNL. Others may purchase it from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22151. Staff members should call Ext. 3484:

BNL 50420 \$4.00
Experimental Eutrophication of Terrestrial and Aquatic Ecosystems. First Annual Report of the Upland Recharge Project. February 1974
G.M. Woodwell, J. Ballard, M. Small, E.V. Pecan, J. Clinton, R. Wetzler, F. German, and J. Hennessy

BERA Concert Series



Flutist Michel Debost and pianist Christian Ivaldi will appear Tuesday, January 14, at 8:30 p.m. in Berkner Hall. Both of these artists are widely known throughout Europe and Asia and have toured the U.S. repeatedly. Their BNL recital will include music by Hindemith, Schubert, Beethoven, Debussy, and Bartok. Soon after the BNL recital, the two artists will play in Alice Tully Hall in New York City. Admission to the concert is \$3.50 for adults; \$1.75 for full-time students with I.D. cards and for those over 65; and \$1.00 for those under 18.

Arrivals & Departures

Arrivals

Salil Bose	Biology
Vito R. Casella	Chemistry
Richard T. Cederwall	App. Science
Maureen A. Devereux	Reactor
John W. Herczeg	App. Science
R. Bruce Klemm	App. Science
Jorma J. Kukkonen	App. Science
Mow S. Lin	Chemistry
Stewart C. Malloy	App. Science
William H. Marlow	App. Science
Peter M. Meier	App. Science
Brian R. Oerter	App. Math.
Ioannis A. Papazoglou	App. Science
Emmanuel A. Paschos	Physics
Stephen J. Pendola	Plant Engrg.
Frank A. Perez	App. Science
John Tanaka	App. Science

Departures

Joyce A. Griffith	Reactor
Earl Lazarus	Physics
Barbara L. Sapienza	App. Science

Cooking Exchange

The Cooking Exchange is pleased to announce a "very special meeting" January 22 at 12:30 p.m. in the Recreation Building. Mrs. Jacqueline Newman has agreed to once again work her wonderful Chinese magic for us! If you have ever wondered what really superior Chinese cooking is - now is your chance to find out and taste. This is a do not miss meeting.

Help for Smokers

Smokers who wish to kick the habit are invited to attend a six-session workshop at Brookhaven Memorial Hospital, East Patchogue.

The first session, on Monday, February 3, at 8 p.m., will include a pulmonary function screening test to detect possible lung damage. The course will include small and large group discussions, films and talks by physicians, a psychiatrist and a nutritionist.

The workshop is sponsored by Brookhaven Memorial Hospital and the American Lung Association of Nassau-Suffolk.

For more information and registration, telephone 516-475-5000, Ext. 452. There is a \$7 registration fee, but no one will be excluded for inability to pay.

Official & Special Events

Tuesday, January 14
Concert - 8:30 p.m., Berkner Hall

Wednesday, January 15
Navy Meeting - 7:30 p.m.,
Brookhaven Center
AUI Trustees Meeting

Tuesday, January 21
Low Level Radiation Effects Meeting
AEC Medical Physics Program Review
(January 21-23)

Wednesday, January 22
BNL Lecture - 8:00 p.m., Berkner Hall

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Classified Advertisements

Placement Notices

Each week the Personnel Office lists personnel placement requisitions, currently being processed. The purpose of these listings is, first, to give notice of all non-scientific staff positions being filled and, second, to give employees an opportunity to request consideration for themselves through the Personnel Office. In filling vacancies, the Laboratory's objective is to give first consideration to present employees, as follows: employees within the immediate group having the vacancy, employees within the department or division, employees within the Laboratory as a whole.

For further information regarding a placement notice, or to request consideration for an available position, contact Supervisor, Personnel Placement & Development, extension 2874 or 2882.

9. SECRETARY - Applied Mathematics Department.

10. TECHNICIAN - A.A.S. degree or equivalent in mechanical technology with cryogenics and vacuum experience. Additional experience with helium refrigerator systems especially desirable. Power Transmission Project. Accelerator Department.

Autos & Auto Supplies

TIRES - 1 Sears Dynaglass C78-13, 1 Goodyear 6.50x13, 2 Sears snow tires 6.50x13. Ext. 4110, 698-3856.

TIRES - Used & recaps, most sizes. Ken, 289-8212 eves. 68 DODGE MONACO 8 PSGR WAGON - High mileage but very reliable. \$425. Frank, Ext. 4659, 473-9379.

70 VW BUS - W/bed, dinette, 1 owner, low miles, excel cond. \$2470. Holroyd, Ext. 4329.

71 RENAULT R-10 - Mint cond, less than 28,000 orig mi, 5 Michelin X radials, very economical operation. \$1200. Gil, 924-3283.

2-13" RIMS - 5 holes, \$7; 2-14" rims, 5 holes, \$7; 1-15" Ford rim w/tire, \$5. O. Booker, Ext. 4719.

TIRE CHAINS - Bar reinforced, like new, fit 6.50x13, 6.00x14 & 5.50x15 tires. \$12. Katcoff, Ext. 4341, 475-4005.

73 PINTO STATION WAGON - Low mileage, belted tires, fully equipped. Asking \$2300. 587-3192.

73 PLYMOUTH ROAD RUNNER - Ps/pdb, 340 c.i., 4 spd, radials, rally wheels, sun roof, perf cond. \$2700. 724-6661 eves.

70 SWINGER - 340 hp, bckts, console, r/h, stereo w/reverb, auto trans, ps, 2 new snows, all deluxe extras. 744-9785.

69 VW SQUAREBACK - 1600 cc, fuel injection, stick shift, 6000 miles on everything new. \$1100, call and talk. Earl, 586-5574.

71 TOYOTA - Low mileage, very good cond, 1600 Corolla station wagon. Asking \$1250. Pat, Ext. 3376, 281-1364.

73 VW SUPER BEETLE - Lt blue, r/h, rear window defroster, 4 brand new w/w tires, must sell. Janet, Ext. 2903.

WHEEL RIMS - 2-14" Chevy, 1-15" Ford. \$2.50 ea. Ext. 3601.

71 VEGA HATCHBACK - 4 spd, radio, new brakes & exhaust, good tires + 2 good snows on rims, avail next Wed. Asking \$950. Ext. 3752, 744-9699.

64 FORD STEP VAN - Insulated, paneling, w/w carpeting, cabinets, the works! Brand new int. Sacrifice, \$800. 281-5709.

SNOW TIRE - 1 new F78-15 w/rim, Goodyear Sub polyglass. \$15. Dominic, Ext. 4581, 281-8044.

Miscellaneous

BOYS' BLK FIGURE SKATES - Size 3, new cond. Cost \$12, sell \$5. Levine, Ext. 4212, 878-4070.

GIRLS' BICYCLE - Needs tire & chain, \$3; 21" TV console, for parts or repair, \$5. O. Booker, Ext. 4719.

RADIATOR COVER - 25"x36"x6 1/2", \$15; ceiling tiles, US Travertine white, 92 sq ft; drapery hooks, 1" for 3 1/2" heading, 8 pk, 14 ea, 60¢/pk. Ext. 4727.

DELMONICO REFRIG - Apt size, ideal for finished bsmt. L. Arnold, Ext. 2024, 281-2136.

MINI BIKE - 1973 Gemini, 80 cc, 4 sp, excel cond. Rhodus, Ext. 3284, 924-3522.

DINETTE SET - Period, blond mahog, buffet, china closet, oval table, 4 upholstered chairs, reasonable. 929-6172.

VASES - 1 pr antique carnival glass (marigold color), 14" high, fluted at top, perf cond. \$35. 473-1157.

CAMERA REPAIR COURSE - All manuals, lessons, spt notes, camera parts. \$300, plus some cameras. Charlie, Ext. 2957, 744-3312.

PIPE VISE & STAND - 1" to 2" pipe threader & pipe cutter, rigid, \$75; compl, will not sell separately. Charlie, Ext. 2957, 744-3312.

ANDERSON WINDOW - 2'x4', \$10; 2 int doors 2'x6'8", \$5; misc furn, bassinet, jump seat, meat slicer. Ron, Ext. 4652, 289-1003.

DEEP WELL HEAD - With 3/4 hp motor, compl. \$50. Charlie, Ext. 2957, 744-3312.

ICE SKATES - Men's figure skates, size 8D, used 2 or 3 times. \$8. Charlie, Ext. 2957, 744-3312.

REFRIG - 16 cu ft Admiral, 2 dr excel cond. \$100. 281-5781.

WASHING MACHINE - Sears heavy duty. \$35. Ext. 3330.

BIKE - 3 spd, like new cond, English Triumph. \$55. 878-0071 after 6.

ARMSTRONG FLUTE - Like new cond. Orig \$180, now \$90. L. Toler, Ext. 3942, 727-1412 after 6.

CANDELABRA TEARDROP BULBS - 40w clear, 4 bulbs/\$1; 2 bike tires, size 24x1.75, will not fit Schwinn bikes, 2/\$1.50. John, Ext. 2242.

BOYS' SPORTS JACKETS - Sizes 12-20, new, \$4-\$5; maple antique bureau w/mirror, \$35. Angela, 744-5871.

MOVIE CAMERA - Canon super 8 auto zoom 814 w/F1.4 lens, w/zooming range of 7.5 to 60 mm, 4 yrs old, w/case. \$200 firm. Simack, 325-1963.

BIKE - Girls' hi-riser, w/speedometer, 3 spd, green, mint cond, 6 mos old. \$45 firm. Ext. 3121, 744-5261 after 6.

LADIES' EVENING SHOES - Size 7M, silver sequined w/closed toe, sling back, 2 1/2" heel, worn once. \$5. Josephine, Ext. 4144.

3 SPD GIRLS' BIKE - 2 yrs old, gold, good cond, \$50; 2 G78-15 tires, \$8/both. Bob, 473-3987.

WOMAN'S SKI BOOTS - Size 7 1/2, \$18; 2 girls' bikes, 1-26", 1-20", needs little work, make offer. Jack, Ext. 2485, 473-8060.

TELESCOPE - Mizar reflector, for serious astronomer, \$150; 1 pr men's ice skates, size 9, \$5. Don, Ext. 4576, 281-6160.

23 IN. TV - Zenith, colonial cabinet, 3 yrs, excel cond. \$90. 567-2564.

BELL & HOWELL DESIGN CONSOLE - Has var DC supply, sine-square wave gen, spk & match trans, CT 12.6v AC sup & 180 VDC. Sell \$50. Don, Ext. 4576, 281-6160.

FISHER X100B STEREO AMP - \$65; Garrard RC121 changer, \$20. Bob, Ext. 4551.

ADDING MACHINE - W/tape, works great, \$15; man's valet, beautiful wood, looks new, \$4; ice skates, men's & child's, \$3 ea. 281-5709.

PROFESSIONAL SET OF DEEGAN BELLS - Portable, w/case, great tone, beautiful cond, reasonable. 281-5709.

EPIPHONE GUITAR AMP - Excel cond, has tremelo, 2 inputs. Sacrifice, \$15. 281-5709.

PLAY TAPE MUSIC MACHINE - Brand new, w/tape cartridges (Beatles, Hendrix, etc.). \$10. 281-5709.

PORTABLE B/W TV - Works well, \$15; spkrs, all sizes, all in wooden cabinets, some brand new, sacrifice \$4 up. 281-5709.

POLAROID AUTO 250 LAND CAMERA - W/access. \$35. Ext. 4278, 751-0130 eves.

WASHER/DRYER - Sears Lady Kenmore, portable, still under warranty. \$350. Ray, Ext. 3531.

Real Estate

Real Estate advertised for sale or rent is available without regard for the race, color, creed or national origin of the applicant.

For Sale

3 BEDRM RANCH - Fully capeted, fireplace, compl bsmt, dead end st, has to be seen, Medford. \$32,500. Ext. 3376, 281-1364.

SALE/RENT - Middle Island, 3 bedrm ranch, fireplace, lg fam rm, fin bsmt, 1/2 acre. Ext. 3330.

For Rent

ROCKY PT - 3 bedrm house, fully furn, all appliances, all util, priv beach. \$325/mo. 744-6653.

2 1/2 RM APT - All util, priv entrance, no pets, no children. \$200/mo. 475-4930.

2 BEDRM APT - Bellport, util incl, no children, call Mon thru Thurs. Chris, Ext. 2528.

Wanted

811A'S TRANSMITTING TUBES - Rolf, Ext. 4028.

USED CAR - 1960's, good cond. Ext. 3600, 289-8182.

USED FLUTES & CASES - R. Lundgren, 473-7750.

THE MAN WHO BOUGHT MY CAN OPENER - I still have the magnetic top holder. Call me. John, Ext. 2242.

SERVICE MANUAL - For 1969 Olds 98. Walt, Ext. 3607.

Car Pools

DRIVER WANTED - For established car pool, Bayport/Blue Point area. Ext. 2977.

BROOKHAVEN HAMLET - To form or join, 8:30-5:00. John, Ext. 2242, 286-1348.

Lost & Found

FOUND - 5' long purple toy snake, yellow bow on neck, found in road around 12/12. Ext. 4207.

Services

AUTO BODY REFINISHING & REPAINTING - Reasonable rates. Thomason, 878-2239.

TYPING - Marie, Ext. 4207.

PLUMBING & HEATING ALTERATIONS - New work or repair, Lic & insured. Ext. 3499.

CERAMIC TILE/CEMENT/TERRAZZO - Professional work at reasonable prices, call for estimates. John, Ext. 2242, 281-8848.

VW & FOREIGN CAR OWNERS - Do you have problems but keep getting taken? I'll beat any estimate, compl rebuilt engs, guaranteed. Mark, 234-9414, 277-3325.

BABYSITTING - During the day on site, recorder lessons for beginners. Ext. 3232.

AUTO REPAIRS - All makes & models. 878-2486.

TAXPAYERS - Federal & State income tax forms prepared in the privacy of your home or mine. 475-8330.

CORD WOOD - All oak, split, seasoned & delivered. \$70/cord, \$40/1/2 cord. 727-1329.

TREE SERVICE - Removal, cabling, pruning, chain saw work. 727-1329.

HAVE TRUCK - Odd jobs done, light hauling, yards, attics, cellars cleaned. 727-1329.

OAK FIREPLACE LOGS - Well seasoned, split & delivered. Ken, 289-8212 eves.

TREE REMOVAL & CHAIN SAW WORK - Experienced, free estimates. Ken, 289-8212 eves.

DRY KINDLING - Split, cut for fireplace use, packed in cartons, reasonable. 286-0958.

Classified Ad Policy

Deadline is 12 noon Monday for publication Friday of the same week.

- The Brookhaven Bulletin'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.
- Ads for material acquired for resale in association with a full or part-time business cannot be accepted.
- Firearms offered for sale or trade may not be brought on site.

- Ads not carried because of space restrictions will be held for publication in the next issue.
- Ads are run only once and must be resubmitted if they are to be repeated.
- Ads should be restricted to 20 words or less and typed or printed on the form provided, and must bear the employees signature.

- For Sale: Auto & Auto Supplies
 For Sale: Boats & Marine Supplies
 For Sale: Miscellaneous

- Wanted
 Carpools
 Lost & Found
 Services

Check the heading applying to your ad. Print or type your ad in 20 words or less.

Ads concerning property for sale or rent cannot be accepted on this form. Special Real Estate Ad forms are available at the Office of the Brookhaven Bulletin, Room 111, 40 Brookhaven Avenue.

(Name & Phone No. To Call)

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

Send to: Brookhaven Bulletin, Building 460, 40 Brookhaven Avenue (Ext. 2345).