



Scientists Organize To Intervene In Shoreham Hearings

A group of 40 scientists, educators and conservationists, many from BNL, have banded together to form an organization to intervene as an interested party in the May 25 hearings for the Shoreham Nuclear Power Station.

The group, which first met formally on April 9th, has elected Vance Sailor of the Physics Department as its Chairman, and Andrew Hull of Instrumentation & Health Physics, treasurer. After a meeting on Tuesday, it was decided to designate the group as the Suffolk Scientists for Cleaner Power and Safer Environment.

In its petition to intervene in the Shoreham hearings, the group stated its aim to present expert witnesses to demonstrate that approval of the Shoreham plant will be in the best interests of the people of Suffolk County and of New York State.

Most members of the organization have been professionally engaged in nuclear research, reactor research, and the protection of the public from the effects of ionizing radiation on biological and ecological systems. Many of the members have for years been active in environmental and conservation organizations, and have developed a special awareness of the necessity for reducing all sources of environmental pollution.

According to Chairman Sailor, the organization feels that each time a nuclear plant is rejected, a fossil plant will be built to take its place that will have a very destructive effect on the environment. The organization also believes that nuclear plants are safe, and that the public is not being exposed to a catastrophic event. They feel that existing standards of radiation exposure are adequate to protect the public.

Some of the members of the organization are already engaged in research on some of the problems connected with the generation of power, both nuclear and fossil. Other members are looking at the biological and medical aspects of pollution of the environment.

Members of the organization at BNL and elsewhere are concerned about the inaccurate information that is being distributed in the news media about nuclear power plants. They feel that by presenting accurate up-to-date information some of the feelings of opposition generated by scare-type stories can be overcome.

BNL Speaker, Display At Smith Haven Mall

On Saturday, April 18, Environmental Awareness Day will be celebrated at Smith Haven Mall with an all day program. Starting at noon, films, lectures and displays will offer a wide variety of topics all aimed toward problems with the environment.

"Who Killed Lake Erie?" the first offering of the day, is a film about the death of this body of water that is larger than Long Island Sound. Dr. Alden Hinckley, of the BNL Biology Department will lecture on the subject, "Ecology and Pollution - Leaky Ecosystems." Nine other speakers will present topics ranging from garbage disposal to the efficiency of the home cesspool. There will be displays from schools and local conservation groups as well as one from Brookhaven Lab and another from Stony Brook University.

Jules Elias of the Medical Department of Brookhaven Lab is the coordinator of the event which hopes to reach the non-expert who is concerned with the environmental problems of Long Island.

Camera Club Meeting

In order to select slides for the Camera Club May exhibit, a meeting will be held on Tuesday, April 21, at 8:00 p.m. in the Recreation Building of the Apartment Area.

Please bring any slides that you enjoy to the meeting. There will be a very "soft" contest for the selection. Slide sizes should be 35 mm and 2 1/4" by 2 1/4".

Nuclear Data Center at BNL



Published and unpublished literature containing neutron data are stored in the NNCSC library. Georgia Irving retrieves data for use by the scientists working at the National Neutron Cross Section Center at Brookhaven National Laboratory. —Rosen

Nuclear Data Center Part Of Global Net

The National Neutron Cross Section Center at Brookhaven National Laboratory is one part of a world-wide network that gathers scientific intelligence. CJD, or Po Jaderum Dannym does the same job for the Soviet Union; CCDN, located at Saclay, France, and NDS, the Nuclear Data Section of the IAEA in Vienna between them collect the information from all the rest of the world.

Intelligence gathering is not all cloak-and-dagger work. In fact, when the intelligence to be gathered is scientific data, it is best to do it out in the open, freely offering data to everyone in a spirit of helpful cooperation.

At least, that's the way it works in the "four centre world" where the intelligence concerns such things as cross section data of interest to the designers of nuclear reactors.

The National Neutron Cross Section Center here at Brookhaven and the other three centers divide the earth into a "four-centre" world where each center has a monopoly on the gathering of nuclear data in its own zone. But, contrary to the known operations of the CIA and the KGB, most information is exchanged between countries on either side of the Iron Curtain.

Neutron data compilation was started at BNL in 1951 by Donald J. Hughes as a supplementary activity to the neutron measurement program in the Physics Department. Upon his death in 1960 the compilation activity was moved to what is now the Department of Applied Science and organized as the Sigma Center. At the same time, a companion group, specializing in cross section theory and data evaluation, was organized and later became known as the Cross Section Evaluation Center.

In September 1967 these two centers were merged to form the National Neutron

Medal Of Honor To Employee's Son

Garfield M. Langhorn, son of Garfield Langhorn of Plant Engineering & Planning, was posthumously awarded the Congressional Medal of Honor on April 8 at a ceremony in Washington, D.C.

President Nixon made the presentation of the nation's highest honor to the parents of Pfc. Langhorn in a solemn ceremony in the East Room of the White House.

The citation accompanying the medal revealed details of the death of Pfc. Langhorn that were not previously known to his parents. It said that Army Pfc. Garfield M. Langhorn, a radio operator with the 17th Cavalry, First Aviation Brigade, was killed in Pleiku Province on Jan. 15, 1969, when "an enemy hand grenade landed in front of Private Langhorn and a few feet from personnel who had become casualties. Choosing to protect these wounded, he unhesitatingly threw himself on the grenade, scooped it beneath his body and absorbed the blast. By sacrificing himself, he saved the lives of his comrades."

Bubble Storehouse Deflates



The bubble storehouse used by the AGS to store iron plates to protect them from the environment was deflated several times last week due to planned power shutdowns. After each deflation of the building many phone calls were received by both the Plant Protection and Security Division and the Accelerator Department. —Humphrey

"World of Enrico Fermi" Film To Be Shown Here

BNL has obtained a short-term loan of the film "The World of Enrico Fermi." It will be shown in Berkner Hall on Thursday and Friday, April 23 and 24 at 1:00 p.m.

This documentary film, produced by Harvard Project Physics with a grant from the Ford Foundation, follows the life of the great physicist, and shows how his work helped to transform not only the content of physics and the style of doing science, but indeed the course of modern history itself.

Some of the scientists depicted in the film are: Allison, Amaldi, Bohr, Chamberlain, Chew, Compton, Mme. Curie, Einstein, Goudsmit, Heisenberg, Lawrence, Meitner, Michelson, Millican, Oppenheimer, Rabi, Seaborg, Segre, Szilard, Urey, Yang, and of course Fermi.

Safety Shoes

There will be no issue of safety shoes on Thursday, April 23rd, and Thursday, April 30th.



Theorist Ted Krieger reads data from a plotting device.

Cross Section Center, with status of a Division within the Department of Applied Science. Dr. Sol Pearlstein was named Director of the Center in August, 1968.

The NNCSC is organized into four main technical groups headed by an administrative staff consisting of Dr. Pearlstein and Assistant Director, John Stehn. Secretarial work is taken care of by Joyce Wasson and clerical duties by Georgia Irving. Cross section theory is under the direction of Theodore Krieger.

Evaluation of nuclear data is in the domain of Marvin Drake, Mulki Bhat, Gus Prince, Thomas Stephenson and Ben Murgano. Compilation of the data is done by Murrey Goldberg, Said Mughabghab, Donald Garber, Victoria May and Helene Baumann.

Computer Programming Applications are done by Dermott Cullen, William Kropp, Helen Connell, Odelli Ozer, Frances Scheffel, Alyce Daly, Anthony Fuoco and Krystal Miles.

For the last two years there have also been one or two industrial physicists resident at the NNCSC for an extended period while developing nuclear analysis techniques under the auspices of the USAEC Industrial Participation Program. At present the industrial participant in the pro-

(Continued on Page 2)

Data Center

(continued)

gram is Austin Livolsi, of the Babcock & Wilcox Company.

Recently a computer facility was installed for the center in the Cosmotron Building. The fact that the NNCSC has exclusive use of this machine ensures reliable and efficient handling of the Center's large store of data.

The main objective of the NNCSC is the acquisition and dissemination of neutron data. NNCSC personnel routinely scan published and unpublished literature for experimental data; data are also received directly from experiments. The Center generates and collects evaluated neutron data sets for use in physics or engineering calculations. A computerized system is maintained and continually developed for the storage, retrieval, and distribution of data.

The NNCSC serves as a point of interaction for measurers, evaluators, and users



Don Garber checks data on a computer-produced film display of material to be published.

of neutron data. At meetings held regularly at BNL, the NNCSC coordinates many cross section activities with other laboratories. These working arrangements provide an effective basis for cooperation among industrial concerns, academic institutions, and governmental agencies.

In the U.S. the NNCSC coordinates its activities with those of the Argonne Code Center (Argonne National Laboratory), the Radiation Shielding Information Center and the Nuclear Data Group (both at Oak Ridge National Laboratory), and is in timely contact with other information centers as needed.

The experimental neutron data library already exceeds 1,000,000 points and, as a result of automated experimental techniques, is expanding rapidly at a rate of approximately 200,000 points a year. The neutron data library consists mainly of resonance parameters and energy- and angle-dependent cross sections, although other types of information are also stored. An automated storage and retrieval system has been in use since 1964, but only recently have all available data been



Gus Prince curve-fits experimental data.

entered into the system. Information can be selected according to element, isotope, reaction type, energy range, reference, laboratory, and other criteria. Descriptive text and comments about the data are also part of the library.

The Evaluated Nuclear Data File (ENDF) was started at BNL in 1964 by Henry Honeck. The purpose of this library is to place data sets from many different sources into a common format for use in neutronics calculations, thus establishing a link between the data library and processing codes.

The NNCSC activities strongly emphasize the computerization of data processing. Computer codes perform comprehen-



A plot of data from the ENDF library is examined by Marvin Drake (foreground) Murrey Goldberg (left rear) and Sol Pearlstein (right rear).

sive checks for consistency of the evaluated data by comparing the data with well-known empirical limits and theoretical values. Other codes are developed that perform least-squares fitting of the experimental data.

The publication of neutron data compilations is now automated. An edition of BNL 400, *Angular Distributions in Neutron-Induced Reactions*, will appear in 1970, the contents of which will be produced almost entirely by computer. The graphics portion is photographed on 35-mm film with use of a cathode-ray tube device - a process that is 100 times faster than mechanical plotting. Publication proceeds directly from the film.

In the future the Center plans to implement a system that will permit scientists to analyze data by means of display tools. One such example of an interactive display system already using the NNCSC data files is SCORE.

In summary, the NNCSC is a USAEC-supported information center whose func-



Ben Magurno checks the print-out of evaluated data from a computer.

tions include the following: Compiling experimental and evaluated neutron data; Disseminating information through regular publications and in answer to specific requests; Developing new methods of neutron data analysis; Coordinating neutron data activities through working arrangements with other laboratories; Developing computerized systems for the storage, retrieval, analysis, and publication of neutron data.



Alyce Daly (right) delivers computer tapes to Anthony Fuoco.

Here and There

Claire Lamberti

Marco A. Jamini (formerly I & HP) was the recipient of U.S. Patent 3,498,852 for "Accelerating Lithium Drifting in Germanium," granted on March 3, 1970 and assigned to the AEC.

Raymond Davis, Raymond Stoenner and Edward Nielsen (all of Chemistry) spent several days at the Manned Spacecraft Center in Houston to ready equipment for the Apollo XIII mission.

Minato Kawaguti (Applied Math) was the inventor of "Flying Image Digitizer Utilizing Means for Sweeping the Focused Image Past a Linear Array of Photodetectors and Grating Means for Locating Recorded Data in Space and Time," for which U.S. Patent 3,501,643 was awarded to the AEC on March 17, 1970.

Robert L. Chase (I & HP) and Louis R. Poulou (formerly I & HP) were the joint inventors of U.S. Patent 3,501,707 for "High Counting-Rate Base Line Restoration," granted to the AEC on March 17, 1970.

Ivan Bernal (Chemistry) gave a seminar at the University of Florida on March 12; his talk was entitled "The Crystal Structures of Some Transition Metal Complexes and Their Chemical Significance."

Norman Sutin (Chemistry) gave an invited talk at the IBM Thomas J. Watson Research Center in Yorktown Heights on April 2. He spoke on "Bridging Effects in Electron Transfer Reactions between Metal Ions in Solution."

Retirement



Robert C. Brown, Plant Engineering & Planning, has retired from the Lab as of April 3, 1970. Mr. Brown had been employed at Brookhaven since April 3, 1962.

Projects Outside Art Calls For Applicants

Billy Klüver, President of Experiments in Art and Technology and Theodore Kheel, President of the American Foundation on Automation and Employment, announce plans for an exhibition of realizable projects in the environment, to be held at Automation House, 49 East 68th Street, New York City, opening October 22, 1970. The exhibition, *Projects Outside Art*, was conceived and organized by Experiments in Art and Technology with initial support from the National Endowment for the Arts.

Projects Outside Art will consist of five projects presented by five teams, each composed of artists, scientists, engineers, and other professionals working in collaboration. The project will deal with such areas as education, health, housing, environmental control, transportation, communication, food production and distribution, leisure activities and entertainment. Presentation will be in the form of films, models, or any other suitable materials.

The five teams will be assembled on the basis of submitted ideas and material. Individuals who wish to participate in a project should submit their ideas in the form of either short descriptions, published articles or granted patents.

Preliminary ideas for projects should be submitted to E.A.T., 235 Park Avenue South, New York, New York 10003, by May 1.

Published Weekly for the Employees of Brookhaven National Laboratory

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In Memoriam

Albinus Hanlon, a 31-year veteran of federal employment and an accountant in the AEC Brookhaven office, died Tuesday, April 7. Hanlon, who lived in Hicksville, is survived by his wife Helen. He was 54 years old.

Up, Up, And Away

Taxes, groceries, appliances and cars all go up - up - up. Similarly, Schrafft's finds that they pay more for groceries, and labor too. Therefore, it has become necessary to effect some modest price increases at the Cafeteria. A comparison of BNL prices with those at other installations has been made. The need to effect some increases has also been felt elsewhere. The new price structure which becomes effective on April 20th compares favorably with those found at other institutions.

There is a way in which the rate of price increases in the Cafeteria can be slowed. Each customer can initiate a one-man campaign to convert a "brown bagger" to Schrafft's fare. Doubling the volume of business would do a great deal to help keep prices from rising rapidly.

Community College Has Three-Day Conference

A three-day conference devoted to discussions and lectures about the environment will be held at the Islip Arts Theatre at Suffolk Community College starting on Thursday, April 23.

The programs on Thursday and Friday will begin in the evening, and the Saturday program will run all day starting at 9:30 a.m. Dr. Victor Bond, Associate Director of BNL will speak on Saturday about Radiation and Our Future Energy Requirements. Other speakers will report on conditions of Long Island Sound, the Great South Bay, and Thermal Pollution. After each session there will be a question and answer session.

Cafeteria Menu

Week Ending April 23, 1970

Friday, April 17	
New England Clam Chowder	
Codfish Cakes/Spaghetti Italiane	.75
Salisbury Steak/Onion Sauce & 1 Veg.	.80
Fish 'N' Chips/Tartar Sauce	.75
Monday, April 20	
Cream of Tomato Soup	
Barbecued Roast Pork & 1 Veg.	.85
Beef Loaf/Brown Gravy & 1 Veg.	.80
Creamed Chicken a la King on Toast & 1 Veg.	.85
Tuesday, April 21	
Beef Barley Broth	
Veal Parmigiana & 1 Veg.	.85
¼ Roast Chicken/Stuffing/ Cranberry Sauce	.80
Baked Macaroni & Bacon Strips	.70
Wednesday, April 22	
Cream of Mushroom Soup	
London Broil/Mushroom Sauce/ French Fries	.80
Swedish Meatballs on Rice	.80
Fried Filet of Sole/Tartar Sauce/ French Fries	.90
Thursday, April 23	
Onion Soup	
Round Roast of Beef & 1 Veg.	.80
Chicken Chow Mein on Rice/ Crisp Noodles	.75
Knockwurst/Mashed Potatoes/ Sauerkraut	.75

1969-70 Basketball Champs



Champions of the Associated League, the Knacks, are: James Hooper, Captain (center). (Left to Right, Rear) Bob Kowalski, Jack Detweiller, Bob Casey, Tom Prach, Andy Fogarty, Bob Jansson, Ed Gill and Jack Brennan.



Universities League Champions, the Tandems, are: Howard Bell, Captain (Center Right) and Leroy James (Center Left). (Left to Right Rear) John Olness, James Morris, Ernie Warburton, Rubin Goldstein, Burleigh James and Robert Rowley.

Tandems Cop Crown — Knacks Bury All-Stars

Last Thursday night's action was the end of the season for the BNL Basketball Leagues. Over 100 turned out for "Basketball Night" that saw action in both leagues. Players and spectators were treated to free refreshments.

The Tandems overcame a Biology half-time lead to win the Universities League Championship 38-29. Burley James with 11 points and Robert Rowley with 10, paced the Tandem attack. Joe Abata and Ken Mantai had 7 apiece for Biology.

The Knacks met the Associated League All-Stars in the second game. The Knacks presented their usual balanced attack with

Andy Fogarty, Ed Gill and Jim Hooper in double figures, and won 57-49. Larry Johnson led the All-Stars with 12 points, and Ike Haword hit for 10 points.

At half-time, George Sabine presented awards to the championship teams in behalf of the Laboratory and BERA. A round of applause was given to George Latham from the players for his outstanding contribution as League Chairman for the past eight years. George, who is retiring as Chairman, was to be presented with a gift of appreciation from the players. Unfortunately, it did not arrive in time and will be presented in the near future.

Stony Brook Events

The State University of New York at Stony Brook invites the public to the campus for a series of lectures, and an art exhibit scheduled from Saturday, April 18, through Thursday, April 23.

Saturday, April 18

A symposium honoring the late Nobel Prize-winning Chemist Irving Langmuir will be held at 8 p.m. in the lounge of Langmuir College. Panelists are Nobe. Prize-winner, Dr. C.N. Yang, Director of the Institute for Theoretical Physics at Stony Brook; Dr. Bentley Glass, Distinguished Professor of Biological Sciences and Academic Vice President at Stony Brook; Dr. Vincent Schaeffer, Director of Atmospheric Sciences Research Center at SUNY at Albany, and Langmuir biographer Mr. Albert Rosenfeld.

Monday, April 20

An art exhibit featuring assemblages and sculpture by Stony Brook Art Professors Jacques Guilmain and Ronald Lusker will be presented at the University Art Gallery in the Humanities Building daily from 11 a.m. to 5 p.m. through Friday, April 24.

Tuesday, April 21

Stony Brook Professor Robert Nathans will discuss "Engineering and the Urban Environment" at 7 p.m. in Room 100 of the Lecture Center.

Wednesday, April 22

Canadian Poet Earle Berney will present a reading of poetry at 5 p.m. in the lecture hall of the Humanities Building.

New Payroll Check And Stub

Payroll checks are now prepared on IBM card type stock which will permit computer processing of the returned check after it has been cashed. In order for this operation to be a success, all employees are requested Not to Bend, Mutilate or Fold the new check. Those employees who have uncashed payroll checks in their possession are urged to cash them. The redesigned payroll stub form now provides an appropriate box for salary rate and annuity option amounts. In addition, the Year-to-Date (1970) United Fund contributions are also included which may prove helpful in preparing 1970 tax returns. The new checks are being distributed to weekly employees starting this week, and to monthly employees starting April 30.

Dr. Henry Bullock, Professor of History and Sociology at the University of Texas, will discuss "Black Education from the Plantation Economy to the Present" at 8 p.m. in the Stony Brook Union.

Professor Jonathan Mirsky of Dartmouth College's East Asian Institute will deliver a lecture on "Why I am a Revolutionary Pacifist" at 8:30 p.m. in Kelly-Gruzen Cafeteria.

Thursday, April 23

Israeli Poet Yehuda Amichai will present a reading of his poems at 8:30 p.m. in Room 101 of the Lecture Center.

Bowling News

Irma Carl

Purple

One more night and the second half will be history. The Designers need to win one game for a lock on the second half championship. The Designers had three 500 bowlers: Ed Sperry 199/542, Tom Lee 211/524, and Carl Cantera 188/524. The rest of the league contributed two: Joe Nocar 198/559 and Hank Ach 178/504.

Rose

Sure Shots still leading the Bloopers by a half point. High games were bowled by Dot Dioguardo 167/192/495 and Marty Heine 185/187/511. Helen LaSauce wound up with a nice round 170, Louise Russo 166, and Carol Moyer 158.

The Rose League has a special prize night of their own and Bobby Rubesh with an average of 84 came in with a high gross series of 633, making her the winner, and Nancy Rapp walked away with the booby prize with her 489 gross series!!

Pink

Betty Walczak (171) and Audrey Bangel (466) were high scorers for the night; quite a few two-digit games were recorded; and splits were quite common with one or two spectacular conversions.

As you read this, position night will have come and gone and the victorious are either the Hopefuls who dominated first place during most of the second half or the All Toes who were always within reach of it.

Red

The Sparks have a slight lead over the Pinheads for first place. Position night will tell the outcome of the 2nd half. D. Lingg, Joe Ferrante and C. Murray all rolled a 212 and S. Kiss a 201.

Softball

Tom Lee

As of April 10th we had 15 teams entered and the possibility of more with the extension date for new teams.

Scorebooks, catcher's masks and bats are on sale at the Recreation Office now.

If you are not attached to a team and wish to play softball in the League, stop at the Recreation Office and have your name put in the Players' Pool.

Starting the 20th of April the softball fields will be made available to teams for practice. Sign up for fields at the Recreation Office.

A meeting of the Softball Executive Committee will be held shortly to decide on League structure and the Captains will be notified of their meeting following that.

Soccer

M.T. Hutchings

BNL - 0 Vs. Staten Island C.C. - 4 (0-1)

Our first game of the year resulted in our worst-ever defeat at the hands of a cricket club eleven which contained a fair number of talented soccer players. Maybe we'd exhausted ourselves marking out the field at Yaphank, but we certainly never got going as a team - despite our weekly activities in the Gym. The ball club rarely played smoothly from our overworked defense to our somewhat rigid forward line, and the result was a succession of Staten Island attacks relieved by an occasional sortie on our part. The goals were mostly a result of defensive mistakes, but we can't deny that our visitors deserved to win. Never mind, we'll get 'em next time!

Better news, however. BERA has granted our request for support handsomely - we'll soon be equipped with goal posts, nets, and a marked-out field. Monday evening (5:15) outdoor games will start as soon as the time changes (which, rumor has it, is not long now). We hope to organize an 8-a-side inter-department competition later in the spring, but our initial activities will be full scale games with sides picked on the spot. So come along, or call 7608 (Mike), 7193 (Ralph), or 2582 (Mac), for details. Our scouts tell us there is a large number of ex-, or would be-, soccer players lurking behind desks and laboratories. Recall that feel of hitting the ball into a billowing net? Now is the time to start again! We shall be arranging more weekend games against outside teams, and all who wish to play in these will be given the opportunity to do so.

April 20-24 Pool Hours

Because some of the schools in the local area will be having spring recess during the week of April 20-24, the swimming pool will be open the following hours during that period.

12:00-1:30 Employees Only
1:30-9:30 Employee/Family/Visitor

Classified Advertisements

Positions Available

The Brookhaven Bulletin each week will list job openings which have come to our attention and may be of interest to Lab employees. In the future, each listing will be repeated (if still available) only once.

PRODUCT ENGINEER (Electro-mechanical hardware) Technicon Corporation, Tarrytown, New York

TECHNICIAN (Hematology & Automated Systems & Instrumentation) Technicon Corporation, Tarrytown, New York

TECHNICIANS (Hematology, Biology, Chemistry, Mechanical, Electronic) - Technicon Corporation, Tarrytown, New York

OPTICAL ENGINEER - Crypton Optics, Roslyn, New York

MECHANICAL ENGINEER - Crypton Optics, Roslyn, New York

TOOLMAKER (FIRST CLASS) - Crypton Optics, Roslyn, New York

TECHNICIAN/PROGRAMMER (A.A.S. or equivalent in Electronics Technology with experience in Fortran IV and IBM 360 systems) General Telephone & Electronics Laboratories, Bayside, New York.

MECHANICAL ENGINEERS - Technicon Corporation, Tarrytown, New York.

ELECTRICAL ENGINEERS - Technicon Corporation, Tarrytown, New York.

DESIGNERS - Technicon Corporation, Tarrytown, New York.

ENGINEERS (Nuclear, electrical, mechanical, metallurgical, civil design and architectural) - Burns & Roe, Inc., Oradell, New Jersey.

ENGINEERS (Mechanical, Structural and E.E.) with Fossil Fueled or Nuclear Power Plant Experience. Stone & Webster Engineering Corp., Jackson Heights, New York.

GROUP MANAGER, ANALYTIC STUDIES - General Telephone & Electronics Laboratories, Inc., Bayside, New York.

LOGIC DESIGN - General Telephone & Electronics Laboratories, Inc., Bayside, New York.

STAFF PHYSICIST - Data Panel of the Physics Survey, National Research Council, Washington, D.C.

ENGINEERS - (E.E.'s, M.E.'s, C.E.'s) New York Telephone Company, New York, New York.

ELECTRONICS (ALL LEVELS) - Telephonics, Huntington, New York.

SALESMEN - The Union Labor Life Insurance Company, Melville, New York.

LABORATORY TECHNICIAN - Health Sciences Center, State University of New York, Stony Brook.

LABORATORY TECHNICIANS - Cold Spring Harbor Laboratory of Quantitative Biology, Cold Spring Harbor, New York.

SCIENTIFIC PROGRAMMERS - Atomic Power Development Associates, Detroit, Michigan.

SUPERVISOR, CENTRAL MARKING AND RECEIVING SECTION - Swezey & Newins Department Store, Patchogue, New York.

SYSTEMS ENGINEERS AND PROGRAMMERS - Technicon Corporation, Tarrytown, New York.

SCIENTIFIC PROGRAMMING ANALYSTS, Applied Mathematics Department.

TECHNICAL SPECIALIST (ELECTRONICS), Applied Mathematics Department.

REGISTERED NURSE, Medical Department.

TECHNICAL SPECIALISTS (DIGITAL ELECTRONICS), Physics Department.

CHEMIST - (B.S. or M.S.) General Telephone & Electronics Laboratories, Inc., Bayside, New York.

CHEMICAL ENGINEER (or Mechanical Engineer) - Argonne National Laboratory, Idaho Falls, Idaho

ENGINEERS (Electrical, Mechanical, Nuclear and Chemical) - Westinghouse, Inc., Pittsburgh, Pennsylvania.

ELECTRO-MECHANICAL DESIGNER/DRAFTSMAN - General Telephone & Electronics Laboratories, Inc., Bayside, New York.

LAB WIREMAN - Maxson Electronics Corp., Great River, New York

SHIPPING & RECEIVING CLERK - Maxson Electronics Corp., Great River, New York.

BACTERIOLOGIST - Suffolk County Department of Health, Riverhead, New York.

PUBLIC HEALTH ENGINEERS (Civil or Chem. Eng. degree) Suffolk County Department of Health, Riverhead, New York.

For further information, please contact Employment Supervisor Ext. 2109 or 2513.

Autos & Auto Supplies

69 FORD F350 - W/14" chassis mount camper, sleeps 6, feeds 6, fully equipped, incl TV & 2 stereo tape players, perf cond. \$6400. Bob, Ext. 2304.

69 CHEVY - Excel cond, must sell. Torre, Ext. 7356/423, 281-5050.

65 MERCURY STATION WAGON - Colony Park, low mileage, good cond. \$1300. 281-7017.

60 JAGUAR - 4 dr sedan, 4 spd & overdrive, owner's handbk, service manual. Claus, Ext. 7477, 744-2017.

68 GTO - Green/Blk vinyl top, excel cond, 400 cu in eng, new tires, Hurst 3 spd shift, many extras. \$1,800. 722-3153.

69 FIAT = 124 CONV - Only 7000 mi, am/fm radio, mags. Ext. 423.

68 OLDS 442 - 4 spd Hurst, very good cond. \$2100. AT9-8236 offer 6.

63 CORVAIR MONZA - 4 dr sedan. \$150. Ext. 7231.

64 CHEVROLET - 2 dr, 6 cyl, auto trans, r/h, solid transportation, see this one. Ext. 629, 928-1529.

67 HARLEY-DAVIDSON - 50 cc, 3 spd, very good cond, good for beginners. Asking \$130. 744-3339 after 4.

66 VW 9 PSGR BUS - Clean, orig owner, recent clutch & motor job by VW. \$1150. Ext. 2501.

55 PONTIAC - 4 dr hdt, ps/pb, r/h, excel cond. \$200. W. Luncigren, Ext. 7525.

2 MAG WHEELS - 14" Chevy, asking \$50 for both. A. Greener, 924-3431.

64 RAMBLER 770 WAGON - Auto trans, ps, radio, roof rack, 6 tires (2 snow), good cond int & ext, less than 40,000 mi, good gas mileage on hwy. \$600. 744-8950.

66 MUSTANG CONV - Red/white top, V8, 4 spd, console, bckts, extras, excel cond, never raced. \$1295. C. Nielson, Ext. 7677, 325-0968.

64 FORD GALAXIE - 4 dr, V8, auto trans, ps/pb, r/h, good cond, uns great. Vince, 475-7912 after 5; Jeanne, Ext. 2403.

68 DODGE CHARGER - Ps, auto on floor, 318 V8, low mileage, 1 owner, r/h. \$1900. JUS-8322.

58 CHEVROLET - 2 dr, 6 cyl, new tires, rebuilt std trans, new muffler, universals & radio. \$190. 928-1230.

63 COMET CONV - 6 cyl, new top, good transportation. \$300. YAI-6885.

TIRE - 6.00x13 on Valiant rim, good for a spare. P. McHugh, Ext. 7164.

68 CHEVROLET - 6 cyl, std shift, excel cond, new brakes, etc., gold. John, Ext. 2971.

67 SUNBEAM MINX - 4 dr, r/h, auto trans, 23,000 orig mi, excel cond. \$995. Jake, Ext. 2580.

59 FORD GALAXIE - R/h, auto trans, 2 dr hdt, new tires, batt, fuel pump. \$175. Jake, Ext. 2580.

66 MUSTANG HDT - 289 V8, 4 spd, console, 42,000 mi, new batt. \$950. S. Wingard, Ext. 2478.

COMPL GASKET SET - For eng overhaul, '61 or '62 Olds V8. \$12. Rich, Ext. 7228.

2 TIRES - 8.25x14 Royal w/w, balanced on rims, very good thread. W. Hulak, Ext. 560, 732-2248 after 6.

65 FORD - 4 dr, 6 cyl, auto trans, heater, needs work on rt front fender & headlight, also possible paint job. \$125. J. Schirmer, Ext. 2450/111.

53 JEEP PICKUP - V8, 4 w/d, snow plow, many extras. Steve, Ext. 2852, 727-0920.

69 VW - White, am/fm radio, eng lock, bumper guards, leatherette upholstery, under warranty. \$1675. 751-6459.

64 CADILLAC - Perf cond, "come see how luxury feels." Ext. 2810, 744-6636.

65 VESPA G.L. MOTOR SCOOTER - Perf, 3700 mi, 7.5 hp, 80 + mpg, rear seat, carrier. \$150. Nick, Ext. 2193.

Boats & Marine Supplies

SAILING DINGHY - 9½' fiberglass, compl w/dacron sail, oars. \$275. Ext. 691/2353, 929-4270.

2 OUTBOARD GAS TANKS - 6 gals ea, all plastic, w/ext to form 1 tank. H.O. Ach, Ext. 2411.

20' CABIN CRUISER - Plywood hull, 95 hp f.w.c. inboard, excel snape, bunks, head, galley, etc., extras. Petruk, Ext. 2142, AT6-0124 eves.

ANCHOR - Folding, navy type. \$5. Walt K., Ext. 2457.

18' CRUISERS INC - 75 hp Johnson Elec Shift, '68 Tee Nee trailer, extras. \$650. B. Weinberger, Ext. 7415, 744-5404.

12' SAILBOAT - Penguin, in perf racing cond, dacron sail, extras. \$395. P. Meyers, Ext. 614, 929-4199.

18' RED FIBERGLASS SPORTCRAFT 1966 - 65 hp Mercury 1966, oil immaculate; water skis; tow rope; 100 lb mushroom anchor. H. Parmentier, 744-5471.

SAIL-A-SEASON - Rent an 18'-26' sloop for 20 days @ ½ the daily rate, lessons provided at cost, Oyster Bay or City Is. Bill, 473-7534.

PROFESSIONAL CLAM RAKES - \$15; clam tong handles, \$10. 473-0178 eves.

16' SPORTCRAFT 1966 - Fiberglass, 40 hp elec start Evinrude 1966, navy top, side curtains, cover, 2-6 gal gas tanks, extras. \$1150. Ext. 7353, 587-9372.

17' LARSON FIBERGLASS RUNABOUT - W/65 hp Johnson motor, navy top, side curtains, 18 gal built in gas tank, Dilly trailer, used 2 seasons. \$1950. Ext. 486.

22' LUHRS HDT SKIFF 1958 - 106 Grey Marine eng, sleeps 2, head, ss radio, outriggers, compass, anchor. \$1250 firm. Joe, MO7-7292.

SAILBOAT - Skimmer Seadog, 9½' fiberglass, dacron sail, used 1 season, easily car-topped. \$435 (new \$499 + tax + extras = \$537). P. McHugh, Ext. 7164, 586-3579.

19' THOMPSON 1959 - A-1 shape, '62-100 hp Mercury, good cond, 56 tandem axle Holsclaw trailer, elec winch, 4 wheel brakes, best offer. 751-2083 after 6.

9'6" FIBERGLASS "SEAL" SAILBOAT - 40 sq ft sail. \$300. Thornber, Ext. 2351, 878-2342.

12' MFG CARTOPPER - W/4 hp Evinrude, both 1969 & used 3 times. Both/\$300 or sell separately. Roy, 473-9109.

10' ROWBOAT - Plywood semi-v bottom, fiberglassed registered for outboard. \$55. Ralph, Ext. 2814, AT6-0615.

16' LYMAN - W/windshield, remote controls, navy top. \$125. Ralph, Ext. 2814, AT6-0615.

17' THISTLE SAILBOAT - Dacron sails & spinnaker, good cond, ready to go. \$950. HR2-1833.

SAILBOATS - I have 2 & can keep only 1; 17' Tiger cat catamaran w/trailer; 14' Flying Tern; both ready to sail. Tom K., Ext. 7396.

21' CHRIS CRAFT CABIN CRUISER - 60 hp inboard, 2 bunks, head, good cond. \$750. L.P. Hatch, Ext. 2206.

Miscellaneous

"ARABIA" DINNERWARE - 5 place setting for 8. \$50-worth \$150. M. Smith, Ext. 664.

BEDRM SET - 5 pc, walnut modern, fine cond. 289-2811 after 6.

HOT AIR HEATER - Oil fired, portable unit, excel cond. \$50. Bob, Ext. 2304.

CONTRACTOR'S WHEELBARROW - Excel cond. \$10. Bob, Ext. 2304.

CUSTOM BUILT WORK BENCH - 10' long, w/matching top cabinets, excel cond. \$60. Bob, Ext. 2304.

GOLF CLUBS - Woods (1,3), irons (2-10), incl bag & cart, used twice, high quality. \$60. Danny, 286-9211.

ANTIQUE - Victor crank-up victrola, excel physical & mech cond, table model w/lg collection classical records in binders. \$50. Walt K., Ext. 2457.

REEL LAWN MOWER - Hand pushed, top quality, sharp. \$5 takes it. Walt K., Ext. 2457, 286-0246.

2.5 KW HOMELITE GENERATOR - 115 vac, good cond \$100. Walt K., Ext. 2457, 286-0246 after 5:30.

6 GAL GAS TANK - Like new, for Johnson or Evinrude outboard motor. \$12. Walt K., Ext. 2457, 286-0246.

VACUUM CLEANER - Cannister, Supre Macy, w/all attachments & extra bags. \$25. H.O. Ach, Ext. 2411.

FM-TUNER - Scott Stereomaster 312. New \$200, now \$95. Dave, Ext. 7660, AT6-8453.

TV - 21" GE console, works well, \$25. Dave, Ext. 7660 AT6-8453.

HI-FI - Tuner, preamp, 25 watt, amplifier, speaker & cabinet. All for \$110. Dave, Ext. 7660, AT6-8453.

1 PR METEOR COMBI WATER SKIS - Tow rope, 2 ski belts, all perf cond. \$25. B. Weinberger, Ext. 7415, 744-5404.

6½' SPIN ROD - Garcia gold line, w/ #710 Penn spinning reel. Both for \$20. D. Albert, Ext. 7525.

SCULPTURED BROWN RUG - 10¾"x12", Mohawk "Verilee," Dupont 501 nylon, excel cond. \$50. 941-4328.

DBL BED - Box spring & matt, bookcase headboard/frame. \$35. Conn, Ext. 7411.

REFRIG - 12 cu ft Westinghouse, white, w/freezer. \$20. Baum, Ext. 645, 475-5543.

RICOH "35" CAMERA - W/leather carrying case, flash attach, GE light meter. \$30. B. Weinberger, Ext. 7415.

REMINGTON RAND TYPEWRITER - Old upright, good cond, make an offer. Ext. 2245.

SIAMESE BLUE POINT FEMALE - 9 wks old, beautiful, full bred, no papers, reasonable. Bob, Ext. 2576, HR3-9180.

REFRIG - Westinghouse, white, good cond. \$10 or best offer. C. Kelley, LT9-7504.

BEAUTIFUL FOREIGN STAMP COLLECTION - 90% compl mint, 4 albums + new issue. Dick, Ext. 7343.

WINDOW - 35"x50", six over six, compl w/white alum s/s, all trim. H. Forsberg, Ext. 2293.

HUMAN HAIR WIG - Brown, med length, w/case & stand, worn once. \$40. 286-1056.

1 REEL TYPE LAWN MOWER - 1 Thor gladiron. 929-6261.

SOFA - \$30; bureau, \$10. A.C. Nunes, Ext. 7606.

LAWN SPIKER-AERATOR - 8 discs. \$20. John, Ext. 7388, 744-5867.

BUILDING A HOME? - Set of oak stairs, new compl w/bannister, 8'6" floor to floor, 3'6" wide, Ext. 2989, 473-7657.

AKC REG BEAGLE - 8 wks old, female, \$35. Ext. 7343.

ASTHMATICS - Almost new positive breathing machine by Ohio. Orig cost in Oct. \$120, sell for \$80. Dave, Ext. 2824.

TYPEWRITER - Old office type Underwood, as-is cond. \$20. Dave, Ext. 2824.

PIANO - Baby grand (cable), full keyboard, bench incl, excel cond. \$800. Dave, Ext. 2824.

LAWN SWEEPER - Sears, new was \$23, now \$10; trimmer-edger, Sears, 2½ hp, used twice, new was \$83, now \$40. John, Ext. 7388, 744-5867.

27" LAWN ROLLER - \$10. John, Ext. 7388, 744-5867.

FREE - Heinz puppies, ready about 1st wk in May. Mothers' Day present? P. Ettari, 273-6436.

HIFI AMPLIFIER (MONO) - Heathkit 20w, & preamp; both work fine. \$25. J. Danburg, Ext. 2230, 928-2386.

6 HP RIDING MOWER - Eska Co. Mark 26, 26" cutting blade, belt driven, cutter disconnect, 5 spds & reverse. \$175. Ext. 481.

POOL TABLE - Frederick Willy, 7'x3½', slatex top, 8 adjustments, billiard balls, sticks, cover. \$100. F. Stapel, Ext. 481.

CB SET - 5 channel mobile unit, channels 9 & 22 incl. \$25. Andy, Ext. 2592.

65 APACHE TENT CAMPER "CHIEF" - W/canopy, very good cond. \$350. 281-8529.

COLONIAL BED - Headboard, footboard, extra long, dbl, dk oak finished. \$10. Lawrence, Ext. 2354.

WALL OVEN - Coppertone, "Starline," size of opening 22" wide x 33" high. \$30. Ext. 586, GR5-7372.

MAPLE CORNER TABLE - 30" square, 26" high, 2 tier. \$35. Ext. 586, 475-7372.

19" RCA TV CONSOLE - Old but works; radio, Panasonic am, ac/batt; new, must sell, leaving country. Ext. 528.

435 NEW USE BRICK - Buyer must pick them up. \$25. 286-9485.

INTERNATIONAL CUB CADET - 10 hp" rotary mower, elec starter. \$500 firm. Webster, 286-3647.

CEDAR FENCE POSTS - 6' x approx 5" diam. \$1 ea. 286-3647 eves. & weekends.

LAWN PLAY CROQUET - 6 player set, 2 yrs old but never used. \$5. Matsui, Ext. 2338.

CAMERA - Minolta SR-2, F1.8 auto, Rokkor PF & Rokkor TC 135 mm telephoto lens. \$100. Matsui, Ext. 2338.

GE COFFEE MAKER - Model P33 for 10 cups w/mini brew basket. \$10. Matsui, Ext. 2338, after 6 Ext. 529.

GE AUTO TOASTER - Model T142. \$9. Matsui, Ext. 2338, after 6 Ext. 529.

AM/FM RADIO - Almost new. \$18. Agnes, Ext. 2849.

SOLID STATE TRANSISTOR RADIO - Sony fm/sw/mw. Matsui, Ext. 2338.

KITCHEN SET - Agua formica top, bronzetone legs, 6 matching chairs. \$25. C. Curran, 744-2005.

CHANDELIER - Colonial, Williamsburg pewter, 6 bulb, in orig carton, never used. Cost \$119, asking \$65. Clarence, Ext. 566, LT9-4538.

POLAROID CAMERA - Model 80B, wink light, bounce flash, case. \$15. Jerry, Ext. 449.

BABY FURN - Lullabye crib & bureau in white birch, \$45; feeding table w/walnut formica top, \$10; dressing table, \$10. GR5-2998.

REFRIG-FREEZER - GE 19.1 cu ft side by side, 4 mos old. Was \$525, now \$350. 298-4453.

4 ALBUMS (SPORT) STAMPS - Mint plus new issues, 90% comp, must see. Approx \$1600 cat. Dick, Ext. 7343.

REMOTE CONTROL TRANSMITTER - 27.255 megacycles, output meter, 1 mi range, excel cond. \$30. Hans, Ext. 686.

PRECISION AM TUNER - Excel selectivity, has 2 tuned RF stages, 3 IF stages, 4 gang variable tuning capacitor, variable BW, tuning meter. \$30. Hans, Ext. 686.

BARBER-COLEMAN GARAGE DOOR - 9'. 924-6972.

ELEC BROILER - \$5; baby walker, \$2. 744-6636.

TWIN CARRIAGE/STROLLER - Folding type, w/extra pad, excel cond. \$25. Ext. 7826, 929-4039.

SINGLE CARRIAGE/STROLLER - Folding type, excel cond. \$25. Ext. 7826, 929-4039.

CHILD CAR SEAT AND/OR TOTE - Conv back carrier or car seat. \$8. 744-6636.

HOT WHEELS TOY RACE SET - Excel cond, avail in 2 sets: supercharger set, stunt set, used, low prices. Bob, 744-5096.

MARBLE COCKTAIL TABLE - Mod, excel, \$50; sofa, tuxedo style, very good, \$50; bench, 72"x14", very good, \$10. 234-8229.

DYNA SCA 35 STEREO AMPLIFIER - Superb instrument, 35 watts RMS (equiv 100 watts usual ratings), 6 mos old. \$80. Mel, Ext. 2728.

4 SIAMESE KITTENS - 1 sealpoint, 3 bluepoint. Karen, 744-5741.

WRIGHT CHAIN SAW - 19" blade, model C-50D. \$75. Tony M., Ext. 7525, 924-8225.

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

SHIRLEY - 5 rm split level, 3 zone h/w heat, 1½ baths, separate garage & workshop bldg 25'x30', 150'x125' fully landscaped, ½ mi from Smith Pt Bridge. \$21,500. 281-8396.

BELLPORT VILLAGE - 3 bedrm ranch, 3 yrs old, 2 baths, 2 car garage, ½ acre, 6% mort. \$29,000. Tunney, 286-9723.

ROCKY PT - 3 bedrm colonial, liv rm, din rm, fam rm, lg eat-in kitchen, 1½ baths, w/w, s/s, custom basket-weave fence, air cond, priv beach. 744-8377.

For Rent

FURN HOUSE - E. Patchogue, 3 bedrms, study, sun porch, fenced-in yard, 1 mi from G.S. Bay, avail 6/22/70 or 9/1/70 to 6/30/71. \$300/mo. J. Olson, Ext. 441, 289-1463.

FURN HOUSE - Brookhaven, 5 yrs old, spacious, 5 bedrms, 3 baths, attractive location, avail 8/25/70 to 8/23/71. \$295/mo. Lacks, Ext. 359, 286-0002.

Wanted

BOY SCOUT SUMMER UNIFORM - Size 10; 4.80-4.00 x12 trailer tires. Don, Ext. 7113, AT6-1205.

STUDENTS - Interested in taking lessons in piano, accordion or organ, my home or yours. Don, 281-8044.

SWIMMING POOL - 4'x18' min. Ted, Ext. 426.

DRESSMAKER'S FORM - Size 12-14, adjustable, in good cond, on stand, reasonable. R. Francois, EM3-6527.

HOUSE - 3-4 bedrms in Three Village area. 751-4942 after 6.

BABYSITTING JOBS - High school girl avail to babysit eves in Bellport, E. Patchogue & Patchogue area. 286-0906.

1 PR BICYCLE OR MOTORBIKE WHEELS - Lg tired, to make a garden cart. K. van der Kolk, Ext. 2924.

AUTO WASHER & ELEC DRYER - In good working order, reasonable. Chris, 281-4124.

LIGHTNING - Fully equipped & in good cond, boat trailer would also be welcome. 286-0783.

SOMEONE TO LOVE 6-WK OLD KITTENS - Males or females, pan trained. Jim, Ext. 668, 751-0023.

MEN & WOMEN - Interested in forming a mixed Softball League. Georgia, Ext. 2186; T. Clifford, Ext. 398.

BOAT - Any cond, will pick up, very reasonable or free. Paul, 744-3807.

EMPTY S & H GREEN STAMP BKS - As many as you can spare. Ginette, Ext. 7356, 286-0091 after 5:30.

TREE REMOVAL - Will do chain saw & grounds, home maint, painting, etc., free estimate. Bob, 732-9517.

ALCORT SUNFISH TRAILER - Good cond, reasonable price. Shirane, 286-0334.

HOUSE TO BUY - 20 mi radius of Stony Brook U., ¾ acre minimum, 2 or more bedrms. Mrs. Lyman, 281-6550.

BIKE - 2 wheels, 20" or thereabout, good cond, for active 5 yr old boy. Shapiro, Ext. 7704.

PETS - Going on vacation, reliable pet sitting, day, wk, mo. Tony, 924-8225.

SELL OR TRADE - 2-8 track cartridges, "Oldies! But Goodies Vol 2" & "Elvis Presley in Memphis." Bob, Ext. 2556.

DOG HOUSE - 924-6972.

Carpools

PAYING RIDER - Or driver in carpool from Lake Grove, Centereach area. 588-1566.

DRIVER - Carpool, Stony Brook area. Dick or Frank, Ext. 481.

1 RIDER WANTED - From Bellport-S. Country Rd area. Ext. 7775.

WOULD LIKE TO ORGANIZE - E. Islip carpool. Ext. 2524.

RIDE WANTED - Paying rider, 1 day/wk from Pt. Jeff/E. Setauket area. Ext. 2479.

Lost & Found

FOUND - Set of keys found in Xerox room of 510 on April 8. Ext. 7600.

Classified Ad Policy

Deadline is 12 noon Friday for publication the following 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 Wanted
 For Sale: Boats & Marine Supplies Carpools
 For Sale: Miscellaneous Lost & Found

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 112, 40 Brookhaven Avenue.

(Name & Phone No. To Call)