

Travelers Advisory

If you are taking a trip by automobile and are concerned about the supply of gas along the way, such information can be obtained in advance.

A toll-free telephone number has been established by the National Travelers Gasoline Advisory to inform travelers on the availability of gas along major interstate routes and in most U.S. cities. The number is 800/238-8000.

Under this program, a public service of Holiday Inns, Inc., all U.S. Holiday Inn hotels report daily on gas availability at service stations within a five-mile radius, providing such information as to whether gasoline can be obtained on weekdays, after 6 p.m. and on weekends, and whether quantities are limited.

Liquid Coal In Your Future?

If you depend on an automobile for your mobility, as most of us do, chances are that you were subjected to at least 30 minutes of forced reflection this past week as you sat in your cursed machine awaiting delivery of that increasingly rare and coveted liquid we know as gasoline. Instead of wasting time seething about the lines or the oil companies, however, you might have been encouraged to learn that right here in this country, we possess one of the world's greatest potential sources of gasoline. The source has been working for us for a long time, but only recently have we seriously examined it as a material for running our cars. The source is coal.

The conversion of coal to liquid fuel is not a far-fetched or even a very new idea; the Germans synthesized almost all their motor and jet fuels from coal during World War II. The prospect of performing this operation on a large-scale, economical basis, however, has not been seriously considered until quite recently. Some of the exciting work which has boosted this concept from its former "last-resort" status to a bright and promising possibility is being conducted here at Brookhaven.

The coal liquefaction process which holds promise in terms of economy and practicality, and the one which is being studied here is known as Flash Hydrolysis (FHP). The project is funded by DOE's Office of Fossil Energy. Meyer Steinberg, Head of the Process Sciences Division and a researcher on the project, explained the process, "Basically, it is a rapid hydrogenation of coal. The coal is contacted with hydrogen at high temperatures (700° - 900°C), high pressure (about 2000 psi) and for very short duration (less than 10 seconds). This converts the carbon in the coal to hydrocarbons."

The crucial difference between this and older forms of coal liquefaction is the very rapid heat-up of the coal; "on the order of thousands of degrees per second," according to Steinberg. It is then cooled down almost as quickly to "quench" the hydrocarbon products, or prevent their decomposition. This rapid heat-up eliminates the previous need for a catalyst in the system. Although catalysts allow the reaction to take place at lower temperatures, their cost is high and the cost of removing and recovering them - they act as foreign agents or diluents in the system - has contributed to the traditionally unfavorable cost of coal liquefaction. FHP eliminates the need for a catalyst.

At the BNL project, the coal is first pulverized to a fine powder and dried completely. It is then loaded into a feeder mechanism, at which point the system is pressurized with hydrogen gas. The coal drops by gravity from the feeder down an eight-foot long reaction tube. Here it is subjected to the intense heat and pressurized hydrogen which drive the reaction. Then the products are quenched as they drop through a four-foot long cooling section. The resulting liquids, consisting of benzene, toluene, and xylene (BTX; the lighter oils), as well as heavier oils, are separated from the gases (primarily methane and ethane) by condensation. The char, which is the incompletely burned residue of coal, falls into a char trap at the bottom of the vertical reactor tube.

The one-inch diameter reactor tube - upgraded from a three-quarter inch tube in 1977 - has permitted much more sophisticated instrumentation of the system, including a gas chromatograph which can sample gases in the reaction tube at four different points, every 9 minutes, and analyze these samples for nine different liquids and gases. Thus, the primary function of the BNL apparatus is not to produce quantities of BTX and natural gas (although it does function quite well in this regard, as evidenced by the shelves of sample liquids accumulated during the more than 200 runs performed since 1977), but to generate a process data base which will be applied to a computer model for the design of a liquefaction and gasification plant.

This highly sensitive instrumentation

permits close scrutiny of the efficiency of the FHP system. That efficiency, explains Steinberg, depends on what the processor is aiming for. If the goal is maximum production of liquids, about 20 per cent of the carbon in the coal can be converted to liquids, with another 40 per cent going to methane and ethane. If the goal is maximization of gases, up to 90 per cent of the carbon can be converted to methane and ethane. One of the major advantages that FHP holds over other liquefaction processes, noted Steinberg, is the preponderance of BTX, or lighter-grade, gasoline-type oils which the process yields. Other liquefaction processes yield mostly heavier oils which must then be further refined to lighter automotive fuels.

At the BNL project, the hydrogen gas is supplied from storage tanks. A large-scale, commercial FHP plant, however, would have the additional feature of being almost completely "balanced"; the char which is left unconverted by the liquefaction process would be used to generate the hydrogen by reaction with water. Thus, almost all the coal is utilized and there is very little waste.

Another attractive feature of FHP is that the system is not "fussy" about the type of coal it receives. Steinberg's team has been working with a type of coal known as North Dakota lignite, a "low-grade" coal because of its relatively low BTU value. Other types of coal are also being tried, but Steinberg chose lignite because it is by far the most abundant type of coal found in this country.

"It's Becoming Competitive"

Although synthetic gasoline would be more expensive to produce than a product refined from natural crude oil, "it's becoming competitive," said Steinberg, "A plant which feeds 29,000 tons of coal per day would produce something like 48,000 barrels of motor gasoline and 160 million cubic feet of pipeline gas per day. The gas would cost about \$25-\$40 per barrel. We're talking about a composite cost - we're taking credit for the gas as well as the oil." Recent increases by the OPEC nations have



Because of the very high pressure under which the system functions, the apparatus is isolated and surrounded by blast mats. The mats used here are made of woven steel cables and represent a more intelligent alternative to conventional concrete blast protection; in the event of an explosion, pressure could escape, but solid and potentially dangerous objects would still be contained. James Smith is recording and adjusting the gas flow prior to a run.

—photo by Humphrey

boosted the world price of oil to an average of \$20 per barrel. Beyond purely economic reasoning, however, lies the compelling need for this country to attain a degree of energy independence which coal liquefaction may help to provide.

The people working with Meyer Steinberg on the Flash Hydrolysis project are Peter T. Fallon, Project Engineer, Margaret Greene, Chemist; James J. Hurley, Mechanical Technician; James D. Smith, Technical Associate; and George Woodson, Chemical Technician. They all seem to share Steinberg's infectious but reasoned enthusiasm.

"We have some fairly good technology here," Steinberg concluded. "I think a concerted effort, more of a wartime effort, is required."

—Bradley Stolzer

Craft Show Reminder

Don't forget to enter the craft show opening August 2 in Berkner Hall. The form for submitting articles is reprinted on page 3

Wanted: The committee wants very much to hear from a potter who could lend a wheel to the exhibition and give one or two demonstrations. Please call Sue Chrien at 286-0037.

New Mail Dimensions

Effective July 15, letter mail must meet certain standards.

The maximum standard applies to all First Class mail weighing one ounce or less, and single piece Third Class mail weighing two ounces or less. Such mail is subject to a 7¢ surcharge, in addition to the applicable postage and fees, if any of the following size limits are exceeded:

length exceeds 11½", or
height exceeds 6½", or
thickness exceeds ¼".

The minimum standard applies to all classes of mail. Mail less than .007" thick (uniform thickness) will be non-mailable. Also, items less than 3½" high, or 5" long, or ¼" thick (invitations, for example) will not be accepted by the Post Office. If found in the mail, they will be returned to the sender. The only exceptions are hotel keys, film mailers, identification cards and tags, and such items will be subject to a 7¢ surcharge.

Any questions may be referred to the Postmistress at extension 2539.

Reports Available

The following reports are now available to the Laboratory Staff and to Affiliates of the DOE, AUI, and NRC. Others may purchase the reports from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. Staff members should call Ext. 3484.

BNL-50831-VI \$9.25
Design Guide For Category VI Reactors Air-Cooled Graphite Reactors. W.J. Brynda, et al

BNL-50889 \$4.00
Some Potential Effects Of Acid Rain On Forest Ecosystems: Implications Of A Computer Simulation. D.B. Botkin, et al

BNL-50890 \$7.25
Programmatic Areas For U.S. Assistance For Energy In The Developing Countries. P.F. Palmedo, et al

BNL-50895, Vol. I \$4.50
Data Report: Oceanographic Data From Moored Instrumentation Velocity and Temperature Off Shinnecock, Long Island, In October - November 1976. J.T. Scott, et al

BNL-50902 \$9.25
Brookhaven Energy Transportation Submodel (BETS) Documentation and Results. J.R. Wagner

BNL-50944 \$5.25
Regenerative Process For Desulfurization of High Temperature Combustion and Fuel Gases. Quarterly Progress Report, July 1 - September 30, 1978. M-S Shen, et al

Avoiding "Greenhouse Earth"

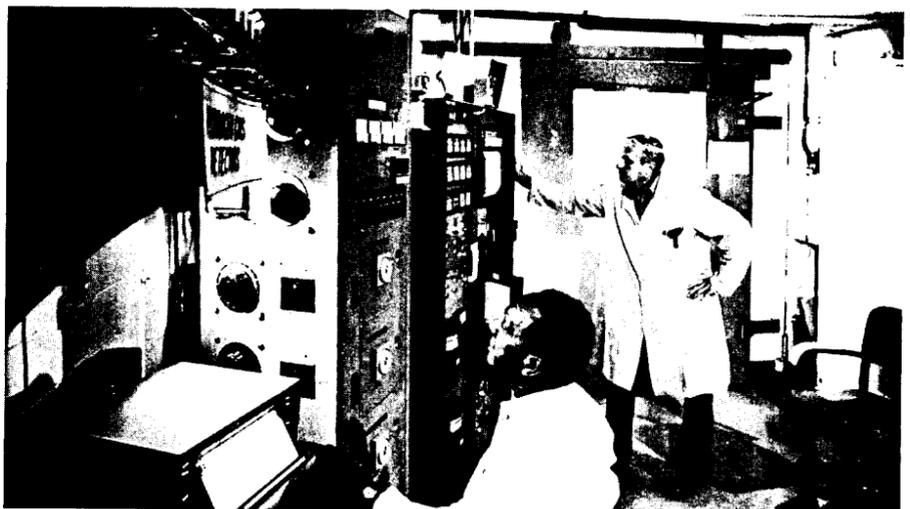
All fossil fuels share a common problem associated with their combustion on a long-term basis; they all contribute to the so-called "Greenhouse Effect."

This refers to the fact that combustion of hydrocarbons produces CO₂, which has the effect of trapping solar heat within the atmosphere; thus, the earth becomes a "greenhouse." By the year 2000, many scientists estimate that our atmospheric CO₂ will have doubled (from .03 to .06 per cent), raising the earth's temperature by two to three degrees; enough to melt the polar ice caps, producing massive flooding and climactic changes.

But even this problem, according to Meyer Steinberg, is far from insurmountable. The idea, he says, is to turn to other sources of carbon for our future hydrocarbons. Combustion of biomass is one possibility, "Photosynthesis extracts CO₂ from the atmosphere, forming cellulose, which is then burned," explained Steinberg, "This is a complete cycle driven by solar energy. You're not adding any more CO₂ to the atmosphere." So biomass as a source of carbon may be one way of limiting the Greenhouse Effect.

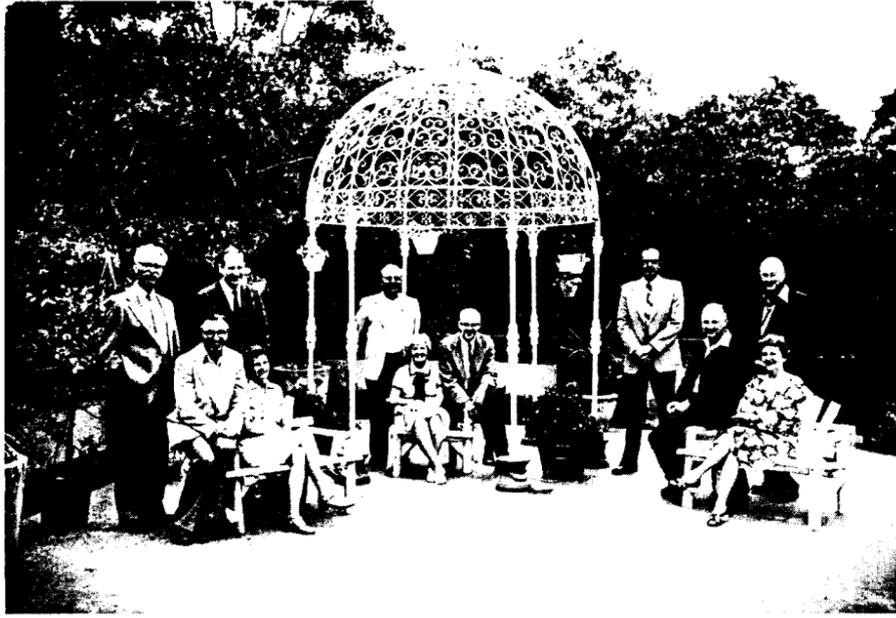
Even if growing large amounts of biomass for a carbon source becomes impractical, says Steinberg, "We can extract CO₂ from the atmosphere or the oceans; we know how to do this. We can use nuclear power, either fission or fusion, to simulate photosynthesis, using CO₂ as our carbon source and electrolysis of water for hydrogen."

—Stolzer



The Control Room is separated from the FHP apparatus for safety reasons. Here George Woodson (foreground) and James Hurley examine some of the voluminous information pouring into the area from the reaction equipment during one of the daily experimental runs. —photo by Humphrey

Luncheon Held to Honor Tandem Group



Eight members of the Tandem Van de Graaff's Research and Operations Group and their wives gathered on the terrace of the Middle Island Country Club where a luncheon in their honor was held on June 22. This group was among the pioneers in the development of nuclear physics facilities and research at BNL. They have been closely involved with the small Van de Graaff, 60-inch cyclotron and in the last 15 years with the development of the Tandem Van de Graaff facility and its research program. From left are Edward Der Mateosian, Irving Feigenbaum and Michael McKeown standing behind Mrs. McKeown. In center are Andrew Sunyar (standing) and Mrs. Sunyar seated beside David Alburger. At right are Robert Lindgren, Frank Rumph (seated) and Edward Reilly, standing behind Mrs. Reilly.

—photo by Humphrey

Saturday Closing

The pool, gym and locker rooms will be closed for maintenance on Saturday, July 7. Normal schedule will resume on Sunday, July 8.

Pool Schedule

- Monday through Thursday**
 - 11:00 a.m. to 1:30 p.m. employees only
 - 1:30 p.m. to 3:00 p.m. children's swimming lessons
 - 3:15 p.m. to 9:30 p.m. employees/family members/guests
- Friday**
 - 11:00 a.m. to 1:30 p.m. employees only
 - 1:30 p.m. to 3:00 p.m. children's swimming lessons
 - 3:00 p.m. to 4:00 p.m. children's special events
 - 4:15 p.m. to 9:30 p.m. employees/family members/guests
- Saturday and Sunday**
 - 1:00 p.m. to 6:00 p.m. employees/family members/guests

The pool and gym are closed on all Laboratory holidays. One guest per employee is permitted at any of the recreation facilities. Advance arrangements for additional guests (but not more than five at any one time) may be made at the Recreation Office in Personnel.

Arrivals & Departures

Arrivals	
Karen Bey.....	Nuclear Energy
John C. Biggs.....	Accelerator
Brian W. Bures.....	Accelerator
William J. Carapezza.....	Accelerator
Robert L. Donnelly.....	Accelerator
Alcides Echevarria, Jr.....	Energy & Env.
Peter J. Gollon.....	Accelerator
Joseph G. O'Connor.....	Safety & Env. Prot.
Helen L. Quinby.....	Biology
Dysart A. Ravenhall, Jr.....	Accelerator
Joanne Rosinski.....	Biology
Paul W. Sawina.....	Safety & Env. Prot.
Henry W. Strelecki.....	Accelerator
Departures	
George Adler.....	Energy & Env.
Dennis C. Albright.....	Nuclear Energy
Mohamad A. Azarm.....	Nuclear Energy
Ruth D. Duffy.....	Energy & Env.
Richard F. Evard, III.....	Accelerator
David A. Lloyd.....	Medical
Michael F. McAllister.....	Safety & Env. Prot.
Chee Tung.....	Nuclear Energy
Jacqueline A. Vernon.....	Applied Math.

Correction

Clarence Robbins, who retired last Friday, was incorrectly identified in last week's issue as Clarence Robinson. We regret the error.

Service Award



Genevieve Zaharakis, Supply & Materiel supervisor, receives her 25 year service award from Materiel manager Phil Borzi. Zaharakis is responsible for replenishing all stockroom supplies and for expediting Lab deliveries. From past records, she also establishes figures for necessary quantities of supplies and forecasts future requirements.

—photo by Humphrey

Cafeteria Menu

Week Ending July 13, 1979

Monday, July 9	
Corn chowder	(cup) .40
	(bowl) .50
Beef chop suey on rice	1.35
Scrambled eggs, sausage, and fr. fr.	1.20
Hot Deli - Turkey	(on bread) 1.40
	(on roll) 1.50
Tuesday, July 10	
Beef noodle soup	(cup) .30
	(bowl) .40
Grilled bratwurst w/home fries	1.30
Roast chicken w/stuffing, 1 veg.	1.35
Hot Deli - Veal pattie and peppers hero	1.30
Wednesday, July 11	
Cream of potato soup	(cup) .40
	(bowl) .50
Braised meatballs à la mode w/buttered noodles	1.35
Broiled filet w/fr. fr.	1.35
Hot Deli - Roast beef	(on bread) 1.40
	(on roll) 1.50
Thursday, July 12	
Chicken vegetable soup	(cup) .30
	(bowl) .40
Cheese ravioli and 1 veg.	1.15
Sauerbraten and potato pancake	1.45
Hot Deli - Grilled Reuben	1.35
Friday, July 13	
Fish chowder	(cup) .40
	(bowl) .50
Spaghetti w/clam sauce	1.20
Breaded pork chop and 1 veg.	1.30
Hot Deli - Smoked baked ham	(on bread) 1.40
	(on roll) 1.50

SAGA FOODS

The Tale of Rufus Robin

Just about anyone in Applied Mathematics could have directed you to Rufus' office, and even if you did get lost, the sign on his door or the steady stream of visitors could have put you in the right direction.

Rufus, the plump robin who resided in the courtyard of Building 515, was brought to the Lab by custodian Henry Shute. Shute found Rufus near dead about three weeks ago after the nest was upset. "He was just about breathing," Shute said, "so we brought him in and fed him oatmeal with an eyedropper." From the start, Shute took exceptionally good care of Rufus: the special mixture of worms he eventually fed Rufus, for example, were (he was later told) like caviar to a bird.

Rufus spent a few guarded days in a dishpan and then in a plastic laundry basket. "With good care," said Shute, "he grew quickly." When Rufus began flapping his wings, Shute realized that larger quarters for the bird were needed. Accustomed to human care, Rufus had no fear of humans. He needed open but protected space where he would not be prey to animals or cruelty. The courtyard (Rufus' "office") seemed the answer and Rufus settled in quickly.

For the next two weeks, the robin was fed steadily and well on a diet of fresh strawberries, June bugs, turkey, dog food, hamburger and just about any and everything else his "colleagues" in 515 cared to bring his way.

"We call him Henry, Jr.," said one member of the staff and Shute indeed watched over the bird closely enough to almost justify the joking remark. "Rufus had his first bath the other day," Shute observed and pointed to the ice cube tray filled with water, "he generally bathes every day." The courtyard was an ideal place for Rufus to learn to spread his wings, but had he flown out of the central area? "If he did,"



Finding time and patience to take care of more than his duties at Building 515 is BNL custodian Henry Shute with Rufus.

—photo by Humphrey

said Shute with a smile, "he hasn't told me." And what of Rufus' temperament? "Actually, Rufus is a pussycat," said one computer operator. "And just last week," said another, "Rufus wrote his first program."

Shute noted that everybody trained him. Rufus could climb up a ladder of fingers, follow Shute like a puppy and waited for his food at his "office" door. While under Shute's care, Rufus was never underweight; on the weekends, in fact, the operators fed Rufus as part of their official morning duties.

When the question arose, a BNL bird expert was consulted to determine whether or not Rufus was indeed a robin. "He is," the expert said, and was quick to add that it is strictly illegal to keep a wild songbird after it is able to fly, a fact of which Shute was not aware. A person retaining such a bird in captivity after it can be independent may receive a visit from his local game warden, noted the expert. He advised that Rufus be taken to a remote area and left to fly off.

But Rufus, not one to wait for warden or regulation, flew off some days ago. "I hope he's alright," concluded Shute. "I know his leaving was necessary, but we still miss him."

Metallurgy and Materials Science Featured

This weekend's mini tour will feature Brookhaven's Division of Metallurgy and Materials Science. Two experimental facilities of this division will be featured: the Electron Microscopy Laboratory and the Mechanical Testing Laboratory.

In the Electron Microscopy Lab, visitors will be shown two types of microscopes used at Brookhaven for studying metals. The Scanning Electron Microscope, which can magnify objects about 20,000 times, is used to study the surface chemical and topographic features of materials. The Transmission Electron Microscope, which magnifies 200,000 times, is used to study defects in metals and alloys.

At the Mechanical Testing Laboratory, scientists will demonstrate the apparatus used to study the special properties of superconductors at very low temperatures (about 4.2° above absolute zero). A better understanding of the mechanical properties of superconductors is important because of their possible use in future energy sources.

In addition to this weekend's mini tour of the Electron Microscopy and Mechanical Testing Labs, visitors will view the 15-minute slide show entitled "Brookhaven's Quest" at Berkner Hall, take a bus tour of the Lab's 80-acre core site and visit the Exhibit Center.

When cold weather has passed and the need for home heating is over, a considerable amount of fuel can be saved by having the furnace pilot light turned off. Be sure to have it reignited before you turn the furnace on again next fall.

For greater efficiency, remember to clean or replace filters in a forced air heating system about once a month. Be sure to check the ductwork for a forced air system, especially at connection points. Repair leaks with duct tape or caulking.

Successful Blood Drive; We're All Winners



Brookhaven's annual blood drive received an excellent response last week as 834 Lab employees contributed 740 pints of blood, an increase of 70 pints over last year's drive. Here are the winners in the drawing held among donors for Exhibit Center tote bags: (seated, left to right) Alfredo Luccio, Bob Krasny, (rear, left to right) Jack Fuhrmann, David Dew-Hughes, Frances Scheffel, Marilyn Galli, George Baer, John Eriksen, Phillip Thomason. Frank Thornhill, another winner, was not available to be photographed.

BROOKHAVEN BULLETIN

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BERNICE PETERSEN, Editor
ANNE BAITTINGER, Staff Writer
ROSANNE PAGANO, Editorial Assistant

40 Brookhaven Ave., Upton, N.Y. 11973
Telephone (516) 345-2345

CARL R. THIEN, Public Relations Officer



Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position, with consideration given to candidates in the following order of priority: (1) present employees within the department, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside applicants.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all nonscientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment, as indicated below. Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Personnel Placement Supervisor, Ext. 2882.

LABORATORY RECRUITMENT: Opportunity for present Laboratory employees.

1037. STAFF ASSISTANT - Requires a BS in business administration plus several years of financial administration in a technical environment or its equivalent. Responsibilities will include budget preparation, control and analyses; participation in the preparation of project and research program proposals; and serving as liaison with Laboratory personnel and with outside agencies. Candidates should possess excellent analytical and communications skills and have knowledge of the development and utilization of information systems. Physics Department.

OPEN RECRUITMENT: Opportunity for present Laboratory employees and outside applicants.

1038. DEVELOPMENT ENGINEER - BS/MSEE or equivalent capabilities with broad experience in the design, construction and testing of sophisticated electronic systems. ISABELLE Project, Accelerator Department.

1039. DEVELOPMENT ENGINEER - MSEE or equivalent experience in accelerator rf systems, specifically beam cavity interactions, low-level rf beam control and beam dynamics. ISABELLE Project, Accelerator Department.

Autos & Auto Supplies

73 YAMAHA M 250 - trail bike, asking \$375; tires for Honda Civic, 155-12, \$5 ea. 821-0599.

65 FORD FALCON - 4 dr sed, a/t, p/s, 40,000 mi, no rust, excel mech cond. \$1650. Carl, 286-0271.

74 BUICK ELECTRA - 2 dr, brown, a/c, tilt-telescopic wheel, in-dash tape, 6-way seats, wire wheels. Asking \$2650. 698-7591 after 6.

77 FORD GRANADA GHIA - 36,000 mi, loaded, excel cond, 2 dr, blk/gray vinyl top. \$4500. Ext. 2878, 878-8008.

69 FORD FAIRLANE - 6 cyl, new batt. \$200. Jack, Ext. 2485.

69 MUSTANG - 302 eng. Ext. 2311, 567-5131.

TIRES - 2 b/w snows; 1 w/w reg belted; all F78-14 on Plymouth/Ford rims. D. Vail, Ext. 2046, 924-4058.

70 PEUGEOT 504 - poor shape, runs, but offered only for parts. J. Kopp, Ext. 3778.

78 PONTIAC PHOENIX - lt blue, V6, a/t, a/c, ps/pb, AM/FM/8 trk, hatchback, showrm cond, good mpg. \$4375. Ext. 3860, 698-5298.

68 CHEVROLET - Caprice, 4 dr sedan, f/p, good cond. Ext. 4503, 472-0035.

DELCO AM CAR RADIO - from Chevette, 1 yr old, excel cond. \$25 firm. Ext. 4144.

70 FORD GALAXIE - 4 dr, good on gas, needs exhaust. Asking \$400. Sue, Ext. 2913, 751-5829 after 6.

78 HONDA XL350 - Road & Trail, like new. \$975. Al, Ext. 4172.

73 CAPRI - V6, 4 spd, AM/FM cassette, new radials, new trans, 25 mpg, body good, excel running cond. Asking \$1800, flexible. Pat, Ext. 2300.

75 MONZA 2 + 2 - ps/pb, a/c, AM/FM-8 trk, GT radials spoke wheels, excel. 941-4581.

TIRES - (5) 8-19-5, (1) 7.50-17. \$10 ea. John, Ext. 4425.

57 VW FLOORPAN - w/roll cage, new master cylinder, no eng. \$125. Ext. 2926, 929-3004 after 6.

CAR RADIO - FM/AM, fits Chevy. \$25. John, Ext. 3533.

75 FORD MUSTANG II GHIA - 6 cyl, 4 spd, p/s, 4 new tires. Henry, 727-3830 after 6.

71 PEUGEOT - 304/SW, good cond, front w/d, excel gas mi. \$500 or best offer. Joe, 286-0139.

69 FORD FAIRLANE - \$300. Mark, Ext. 3291.

ENGINE - Ford 302-V8, 4 bbl, a/t. \$195. 265-1039.

69 CADILLAC COUPE DE VILLE - f/p, a/c, orig owner, good cond, newly painted. \$950. 472-0035.

73 DODGE POLARA STA WGN - \$550. 698-3569.

TRANS - Muncie M22-4 spd racing w/2 Hurst shifters. \$195. 265-1039.

76 VOLVO STA WGN - 5 spd, reg gas, Michelins & mounted Conti steel-belted radials. R. Bergoffen, Ext. 4417, 286-8140.

73 FORD STA WGN - a/t, ps/pb, 400 cid V8. \$900. Ext. 4060, 653-4924.

72 FORD TORINO WGN - good running cond, 4 dr, p/s. \$700. Bob, Ext. 3497, 325-0609.

Dance Fusion

The Long Island Dance Company will present a dance medley to suit every taste, at 4 p.m. on Sunday, July 8, at Berkner Hall. Tickets are available at the door: \$3, general admission, \$2, students and senior citizens, \$1, those under 18.

Ballet

Golf Tournament

The Brookhaven Golf Association's 1979 Golf Tournament will be held at Flag Country Club on Tuesday, July 17, from 11:30 a.m. to 1:00 p.m. Tee-off times will be assigned, so the \$1.00 entry fee must be sent to Dick Murgatroyd in Building 925 by July 13th. This tournament is open to all BNL employees, their spouses, and all retired BNL employees.

Softball

League I

Strikers 16 - Ravens 12
Sweathogs 8 - Phoubars 7
Blue Jays 19 - Six Pax 18
Old Timers - Source I (postponed)

Mixed League

Oh Kays 20 - Who's On First 3
Turkeys - Who Cares (forfeit)
Diamonds 14 - Balls And Strikes 12
Ted Erickson went 4 for 4. Jim Griffin had two home runs.

Source III 20 - Confoozed 18
Good hitting by Mary Grace Meier and a grand slam by Carl Murray.

Random Sample 24 - Nads 5
Tight fielding by Cheryl Namy, Pat Manzella, Judy McKinney and the Van Derlaske's kept the Nads to 5 runs. The Random Samples produced 24 runs mostly due to home runs by George Reiter, Gerry VanDerlaske, Peter Takacs and Ray Kutzman, Kathy Barkigia's first hit and Barb VanDerlaske's double over the heads of the unsuspecting outfielders.

TNT 13 - Underalls 11
Consecutive hitting by all, but home runs by Bill and Mitch turned the game around - perking up TNT for a 13-11 win over the Underalls.

E-Z Riders 14 - Thrids 9

Leagues II & III

Moles 6 - Ice Pops 0
Binary Bombers 18 - Big Sticks 12
Medical 13 - Nuke Powers 3
Nuke Powers 5 - Medical 3
DEEGenerates 12 - AMD Bombers 8

Call For BNL Crafts

Return To BERA Sales and Services Office - Berkner Hall

Name of Artist.....

Title of Art Object.....

Medium.....

Name of Artist.....

Title of Art Object.....

Medium.....



Awards, Dinner and Dancing For BNL Bowlers

Last month, Brookhaven's Bowling Leagues held their annual bowling party at Brookhaven Center where awards were presented to individuals and league champions. Members of BNL's five leagues got together for a buffet dinner, awards presentation and dancing. At left: Chuck Bachsmith helps himself to fried chicken. Top: Party chairperson Carol Beckner (left) joins bowling committee president Bob Jones and recreation supervisor Blanche Laskee prior to presenting bowlers with trophies. Middle: members of the Mixed League's "Upton Downers" (from left), Len Kalmar, Audrey Bangel, Carl Murray and Elsie Murray enjoy dinner on the patio with Henry Boyd (standing), Staff Services. These and other photos taken at the bowling party are displayed at the BERA Sales and Services Store in Berkner Hall. Reprints may be ordered at the store. Employees who wish to organize a bowling team and include it in one of BNL's leagues should contact bowling committee president Rich Larsen, Ext. 3810 for information.

—photos by Reben



Microprocessor Group

A weekly discussion will be held on Tuesdays from noon to 1 p.m. in the Biology Department library to discuss hardware and software. Anyone interested is welcome to attend. Contact Jim Hainfeld, Ext. 3372 for further information.

BERA Sales Office

The BERA Sales Office, located in the Cafeteria, is open weekdays between 9:00 a.m. and 1:00 p.m., and offers the following services:

Film Processing and Supplies

The film service offers employees a discount on processing, film, flash bulbs, and batteries. Cameras, albums, frames, and other photographic equipment may also be purchased. A receptacle is available for dropping off film to be processed during hours when the office is closed.

Ticket Services

Magic Kingdom membership cards, offering benefits at Disneyland in California and Walt Disney's Magic Kingdom in Florida, are distributed free of charge to all employees.

Great Adventure combination tickets (Amusement Park and Safari) are sold at a liberal discount.

Miscellaneous

Assorted greeting cards and "Seasonings," the new BNL International Cooking Exchange cookbook, are available for purchase.

The office telephone extension is 3347.

VW REBUILT MOTOR - & various VW parts. Cheap. 475-7272 after 6:30.

1969 B.M.W. - 2500 mi. \$2000. 751-3062.

70 FORD COUNTRY SEDAN WGN - ps/pb, good running cond. \$500. Al, Ext. 3941, 744-9866.

TIRES - new, used, rims, service, free installations, balance avail, Gillette, BF Goodrich. Fred Usack, lunchtime Ext. 4798.

73 CUTLASS S - ps/pb, a/c, 2 dr hdtp, very low mi. \$2400. Ext. 2472, 473-8146 after 6.

75 HONDA SUPER SPORT 750 - Custom bike, seat, sissy bar, luggage rack, headers, custom bars, 6000 mi. \$2200. Frank, 732-3722.

78 CHEVY CAMARO - ps/pb, AM/FM tape, a/c, tilt steering wheel, Rusty Jones undercoating, 8000 mi. \$6000. 981-5993 after 6.

70 CHEVELLE MALIBU - 307 eng, vinyl top, 4 new tires, 2 mag type wheels, eng excel. Gil, Ext. 3506.

74 CHEVY IMPALA - 4 dr, a/c, ps/pb. \$1500. Ext. 2460, 744-9822.

66 DODGE CORONET 500 - a/t, p/s. \$300. 744-7577.

77 FORD XLT - pick-up cap camper, loaded. Was \$6500, sacrifice \$5000 firm. 281-2186.

73 FORD LTD WGN - immaculate, low mi, new tires & exhaust. \$1500. Ext. 7730, 286-8097.

69 FORD FAIRLANE - 6 cyl, new batt. \$200. Jack, Ext. 2485, 473-8060.

AUTO HOODS - 1970-73 Camaro, \$40; 1971-73 Chevy Vega, \$20; both excel cond. S. Norton, Ext. 2050.

68 CHEVROLET - Caprice, 4 dr sedan, f/p, a/c, good cond. 472-0035.

72 CHEVY IMPALA - gold/blk top, p/s, p/b, 64 K mi, new motor, shocks, batt, muff, tires good. \$1200 firm. 727-8744.

Boats & Marine Supplies

19' O'DAY MARINER - 4 hp Evinrude, excel cond, many extras, sale/rent, in PJ Marina. 473-2473.

1972 WELLCRAFT V-20 - I/O 165 hp, new full canvas & seats, extras, very clean, trailer. Asking \$4495. 821-0599.

15' WOODEN SKIFF - w/18 hp Evinrude, boat excel cond, motor ran well when last used (1975), extras. Asking \$325. Terry, 281-0360.

CONTROLS - w/twin cables for 15' boat, for Merc 35 hp, single lever operated. Asking \$25. Terry, 281-0360.

17' FIBERGLASS SAILBOAT - 3 dacron sails, lg deep cockpit, good family daysailer. \$600. P. Fallon, Ext. 3043, 878-2266.

2 FOLDING FISHING CHAIRS - wood w/Lees chrome plated gimbals. \$35 ea. Lou, Ext. 4615.

7' DINGHY ATLANTIQUE - glass, oars & locks. \$115. Ext. 2876, 654-3175.

HOBIE 18 - sail #282, trailer & access, excel cond, rarely sailed. \$3100. Ext. 4650.

FISHING CHAIR - pedestal mount, white, like new. \$80. Lou, Ext. 4687.

2 FOLDING FISHING CHAIRS - wood w/Lees chrome plated gimbals. \$35 ea. Lou, Ext. 4615.

33' PACEMAKER twin Chrysler Crowns 125 hp, sleeps 5, camper back, in water, dinette, galley, stand-up head, make offer. Ext. 2876.

14' ALUM BOAT - 7½ hp motor, trailer, oars, anchor, gas can. \$350. 585-8395.

BOAT TRAILER - Cox type, for 15/16' boat, needs work. \$50. Bill, Ext. 4605, 281-0557.

7' DINGHY - Atlantic fiberglass, oars & oar locks. \$115. Ext. 2875, 654-3175.

12' SEARS SUPER GAME FISHER - 7½ hp motor, less than 20 hrs, & extras. \$480. Don, 4650.

Miscellaneous

FIREWOOD SPECIAL! - 6 stacks of 4'x8'x18", seasoned hardwood, split, delivered. \$250. 744-8387.

FREE - elec stove, you pick up. 878-4261.

25" B/W TV - good cond. \$40. Izzy, Ext. 3696.

BIKE - 10-spnd woman's, good cond. Asking \$50. Dilip, 345-3235.

WOOD BURNING STOVE - used 1 season, pipes incl, reasonable. Gary, 345-3305 after 4.

CAPTAIN'S BEDS - matching pair. \$250/set. Ext. 4139, 581-7841.

WOODEN FIREPLACE - white colonial, good cond, acc incl. \$50. Ext. 3742.

CORD ORGAN - silvertone w/bench, 3 octaves. \$50. 286-2120.

GOLF CLUBS - 2 woods, 4 irons, putter, golf bag & practice balls. \$55. 744-2549.

2 WINDOWS - combo alum s/s, w/frames, (1) 28"x64", (1) 26"x52". \$5 ea. 281-7844.

SWIM FINS - Calypso med, 2 pr. \$3 ea. J. Olson, Ext. 3382.

TOILET TANK & BOWL - 1 pc low-boy combo. \$17.50. Bill, Ext. 2378.

A/C - Carrier 7000 BTU window unit, EER 8.1, 115 v, excel cond. \$75. N. Rohrig, Ext. 3465, 744-7981.

FREE PUPS - sm mixed breeds. Ext. 2957, 981-0917.

A/C - Whirlpool, 110 v, 9000 BTU, excel cond. Best offer. 286-2798.

LOVESEAT - plaid, nearly new, \$75; sm tables for L/R. 286-2320.

FOX MINIBIKE - Tecumseh eng, eng needs work. \$50 or best offer. Jon, 928-6654.

SOFA - colonial 90", beige & green plaid, like new. \$200; kit set, 42" round w/ext leaf, white pattern w/6 brown chairs. \$90. 751-0637.

CHAIN SAW - Echo 20", excel cond. \$200. 878-1310.

PLAYER PIANO - \$400 invested in new parts, moving, must sell. \$500. Rich, Ext. 4027, 277-1129.

GE DISHWASHER - built-in, avocado face, working order, \$25; elec, 50 gals, high recovery, hot water heater. \$100. Lawrence, Ext. 4107, 472-0721.

TAKE MY CAT, PLEASE - grey tiger-calico 6 mo old female, very affectionate, excel pet, must find home soon. Sue, Ext. 2913.

ELECTRONIC - VOM, semi conductor tester, Fet VOM auto cassette deck, 8 trk tape deck, design console, freq counter. Don, Ext. 4551.

TABLE & 4 CHAIRS - walnut finish formica top, 3 extensions. Asking \$150. Ext. 3596, 821-1039.

BLUE GAUCHO DRESS - dbl knit, brand new, size misses 7/8. \$10. 281-0843.

BIKE CARRIER - holds 3-4 bikes, excel cond, never used, mount on trunk. \$10. 744-5801.

TYPEWRITER - Sears elec portable, 12" roller, elite type, seldom used. \$100. Connie, 475-0465.

A/C'S - GE Fashionaire 7600 BTU, 110 v, high efficiency, very good cond, \$130; Sears 4000 BTU, old but works well, \$15. Maria, Ext. 7933.

CANADIAN GOOSE DECOYS - plastic, over-size. \$4 ea. 286-2616.

COMPRESSOR - refrigerant sealed, new, unused, Copeland. Asking \$15. Ext. 4058, 286-0436.

FISH TANK - 15 gal compl set-up incl stand. \$35. Ext. 2611, 751-3702.

CONTENTS OF HOUSE FOR SALE - moving to S. America. 744-6482.

4 DIN CHAIRS - by Liberty, beautiful bamboo motif, off-white finish. Cost \$150, sell \$80. Doris, Ext. 3488, 924-7832 after 5.

BED - full size frame, new box spring, matt, mod solid maple headboard, footboard. \$70. Bob, Ext. 2973.

A/C - Westinghouse Mobilair, heavy duty, 9300 BTU, excel working cond, \$59; Magnavox amp & elec guitar, both \$49. Anne, 924-6015.

WICKER HEADBOARD - twin, yellow, like new. \$15. M. Tesla, Ext. 3284, 669-9482.

WASHING MACHINE - Westinghouse heavy duty, temp & spd selector, water saver. Asking \$90. Bill, Ext. 4662, 298-4089.

CERAMIC KILN - Skutt model 231-18, new; United upright freezer, 72"x34"; accordion, "Crucianelli," made in Italy. Antoinette, 821-0832.

24' COLECO POOL - stainless earth filter, in-wall skimmer, heavy duty liner & ladder. \$600. 821-1285.

COOL WITHOUT LILCO - blk canvas custom made awning, 15', w/hdwre, used 1 summer. \$45. Watson, 286-3679.

B/W TV SET - \$10; recliner, \$7; reel mower, \$35; hair dryer, \$7; record stand, \$5; asstd items. Palais, Ext. 2907, 698-0576.

ADDING MACHINES - paper record elec type, Rem Rand, SCM, Victor, good cond. \$10. Bob, Ext. 2819, 289-0357.

ELEC OVEN - range top, asstd ham radio equipment. 929-4202.

BICYCLE - 27", 3-spnd girl's. \$34. Jack, Ext. 4447; Joan, Ext. 3399, 744-3919.

S/STEEL SINK TOP - 5', new, s/steel sink w/faucet. \$100. GR5-0831.

KITCHEN SET - oval table w/leaf, 4 chairs. \$50. B. Gergley, Ext. 3080.

GUITAR - Gibson Les Paul deluxe, w/case, mint cond. Phil, Ext. 2563.

L/R SECTIONAL SOFA - 4 pc, good cond. Mary, 727-0552 before 10 a.m. or after 6 p.m.

BIKE - 10-spnd Mossberg, med wgt, good cond. \$100. P. Oster, 286-1248.

FREE - beautiful blk female puppy, 2 mos old, w/all her belongings. John, Ext. 7614.

DACHSHUNDS - long hair, red, 5 wks old. \$175. Glenn, 744-1679.

EVENING GOWN - pastel blue, size 14, worn once. Orig cost \$60, asking \$40. Lois, Ext. 2921, 929-4753.

A/C - 10,000 BTU hi-economy 110 v, 7½ w, GE Custom Superthrust, 5 hrs use, perf. New \$340, now \$190. Jack, Ext. 4087.

BR SET - hdbrd, dresser, chest, mirror, tables, lt modern. \$100. Ext. 2443, 751-0637.

COUCH - lg, blk & white check w/custom rust cover. Asking \$150. Ext. 3596, 821-1039.

TREAT YOURSELF TO A SONY - 17" Sony color TV, \$100; old records, \$1 ea; table mats (oval w/2 leaves), \$25; natural gas 40 gal hot water heater, \$25. Lawrence, Ext. 4107, 472-0721.

BEDRM CORNER GROUP - by Schooffield, blk & white campaign style, good cond. Cost \$595, sell \$350. Doris, Ext. 3488, 924-7832 after 5.

FREEZER - Sears frost free, 19 cu ft, excel cond, \$325; Frig refrig, white, 16 cu ft, bottom freezer, \$100. 744-5801.

SYNCHRONOMETER - GR-1103A, new cond, asking \$25; heavy gauge metal combo worktop & cabinet, 7'h, 23"w, 16"d, asking \$10. Ext. 4058, 286-0436.

LAWN SCREEN HOUSE - 12x12, plastic roof, all-weather carpeting. \$100. L. Kopp, Ext. 2265, 289-0567 after 6.

LG DOG CAGE - heavy duty steel, 60"l, 35"h, 27"w, ideal for training. \$60. 475-8658.

SWAG LIGHT - yellow shade, basket weave, like new. \$15. Ext. 4144.

PR SIDE CHAIRS - high cane back w/arm rests, antique white, avocado seats. \$80/pr. JU4-6019.

FREE DOG - Fox Terrier, male, white, 1 yr old, lovely, playful. Ext. 2611, 751-3702.

36" GAS RANGE - gas saving dutch oven, storage space, white, cookbk, good cond. Irene, 589-5126. 1979 CHRISTMAS CARDS - imprinted w/your name. Ext. 2534.

BICYCLE - woman's 3 wheel, gold w/2 carrying baskets, lock & chain. \$110. 231-6540.

ZOOM LENS - Nikon mount, f4.5, 85-210mm Kenlock, like new. \$95. Ext. 3790/4873.

BEDRM SET - Fr Prov antique, 6 pcs, glass tops & canopy. \$300. 281-3992.

FISH TANK - 10 gal w/light, gravel, \$10; elec Roto-Broil w/roisserie, \$15. Ext. 4403, 281-5439.

DRESSER - w/mirror, \$25; a/c, 6000 BTU Westinghouse, \$35; all very good cond. 281-7844.

ENTIRE CONTENTS OF HOUSE FOR SALE - moving to S. America. Otto, Ext. 4605, 744-6482.

BIKE - 10 spd Mossberg, med wgt, good cond. \$100. P. Oster, 286-1248.

SPRINKLERS - Rainmaker, \$3; variable pattern up to 80', \$5; excel swag lamp. \$10. Dalal, Ext. 7790.

SWIMMING POOL - 8'x20", like new, used 1 season, w/full cover, perf for children. \$20. Richie, Ext. 4254, 734-7342.

MOVING - selling contents of house. 473-6386.

TAPPEN WALL OVEN - stainless steel front w/chrome int, auto time setting, gas. \$30. Ext. 4070. 475-7272 after 6:30.

REFRIG - 4.5 cu ft, 6 mos old, ideal for summer house; bar. Make offer. Ganu, Ext. 3379.

BABY GUINEA PIG - Peruvian length hair, blk w/ & tan spots, 6 wks old. \$3. M. Mcnturff, 286-8890.

CB RADIO - 23 AM channels, AC/DC pwr, S/RF/SWR meter, excel cond. \$125. Tom, 878-8241.

¾ HP MOTOR - & pool filter w/fittings, "A" frame ladder, w/telescopic skimmer. \$100 takes all. 475-2842.

ICE BOX - sink, & 12 gal water tank for RV's, new, used once. \$90 or best offer for all. S. Norton, Ext. 2050.

BABY ITEMS - changing table, \$20; bicycle seat, \$8; GM car seat, \$10; walkers, \$6; high chair, \$15; stroller, \$18. Judi, 928-5714.

REFRIG - lg size, RCA, excel cond. Tien, Ext. 2060, 821-1296.

BX CABLE - 4 conductor, size 6, 40 ft, good for elec range feeder or for a sub panel. \$20. 727-3608.

FLEA COLLARS - lg dog flea & tick collars. \$1.75 ea. Gail, Ext. 7646.

Yard Sales

SAYVILLE - 38 Pine St, Sat July 7, 10 a.m.-4 p.m. Bill, Ext. 3354.

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

SETAUKET - 3 bedrms, 2 baths, ranch, lg eik, fp, central air, full bsmt, ½ acre w/harbor view, w/w. \$75,900. Ric, Ext. 2266, 689-9210 eves.

SETAUKET - Nassakeag Ridge, 3 bedrm colonial, lg fam rm, ½ acre treed, to walk to Univ & elem school. \$63,000. Ext. 2443, 751-0637.

CALVERTON - mother-daughter 3 bedrm ranch, oil fired heat & water, s/s, fin bsmt, 1 acre prop. \$31,000. Ext. 2022, 727-9058.

MASTIC ACRES - 6 rms, full bsmt, baseboard heat, usable attic, ¼ acre. Ext. 2547, 281-5498.

SHOREHAM NORTH - beautiful 4 bedrm colonial, 2-½ baths, den w/fp, fin bsmt, lg deck & 8x12 barn, tree-lined prop for privacy. \$61,000 by owner. Ext. 2531, 744-5124.

N. SHIRLEY - mother-daughter hi ranch, 4 bedrms, L/R, den, patio, landscaped ½ acre, fenced, s/s, carpeting, fp, oven, stove. \$39,500. Ext. 3696, 281-9022 eves.

ROCKY POINT - 5 yr old ranch, 3 bedrms, L/R, D/R, full bsmt, gar, walking distance to beach, assumable 9% mtg. \$39,000. Ext. 2621, 744-8334.

N. SHIRLEY - must sell, mother-daughter hi ranch, 3 bedrms over 2 bedrms, curved driveway. \$29,900, way below market. John or Joe, Ext. 3533, 924-6040

SOUTH SETAUKET - 4 bedrm Jamestown ranch, bsmt, 3 Village schools, den w/fp, 2-car gar, fenced, extras \$46,500. Paula, Ext. 2253, 698-8950, 473-8433.

CORAM - beautiful Tudor cape, treed ½ acre, 2-car gar, w/w, 6 rms, all appl, gas heat, 7% assumable, excel cond, avail immediately. \$31,900. Ext. 2249, 732-6421.

SOUTH SHIRLEY - 3 bedrms (possible 4th), 1 full + 2 half baths, L/R, D/R, eik, den w/fp & woodburning stove, bsmt, 2-car gar, many extras, 7 mi from BNL. \$37,000/negotiable. Ext. 281-0804 eves.

PORT JEFF STA - 4 bedrms, den, fam rm w/fp, 2½ baths, detached gar & ½ w/workshop, lg eik, insulated, partially fin bsmt, new stockade fence. \$36,500. Ron, Ext. 3162, 473-6862.

SHIRLEY - 75x125, custom built hi ranch, 3 bedrms, 2 full baths, formal D/R, fam rm, fp, huge eik, 2-car gar, enclosed patio, many extras. Ext. 3284, 281-3945.

HOLTSVILLE - condo, transferred, must sell, 2 bedrm Townhouse, a/c, DW, W&D, new w/w, economical gas heat, mint cond. \$26,990. Ext. 2876, 654-3175.

For Rent

VT CHALET - beautifully furn, stone fp, woodland hiking trails, swimming pond, lake, canoeing, fishing, near golf, tennis, antiques, alpine slide, rent weekly. Ext. 3448, 757-5599 after 4 & weekends.

OLD FORGE, NY - 2 cabins avail for wk of 7/22-28 at The Mohawk Inn & Country Club located on Fourth Lake, Old Forge, NY. Pete, Ext. 3297, 821-9547.

HOLTSVILLE - 3 bedrm house, furn, ½ acre, 2-car gar. \$400/mo + util. Ext. 2913, 265-8827.

MOD LOG CABIN - 30 min from Whiteface, sleeps 9, all conveniences, avail by the wk including the Olympics. Ext. 4417, 286-8140.

STRATHMORE RIDGE - 2 bedrms, 1½ baths, 5 appl, w/w, a/c, patio, storage rm, 5 min to Lab. \$325/mo + util. Ext. 3886, 928-8122.

SHOREHAM - contemporary ranch, 3 bedrms, 2 baths, 1½ blocks from beach, prvt beach rights, avail July/Aug. \$450/mo. Ext. 2440, 929-8165.

Wanted

MOTORCYCLE - 350-500 cc, reasonable. John, Ext. 3651.

PORTABLE ELEC TYPEWRITER - P. Kavanagh, Ext. 4432, 929-6003 eves.

TRICYCLE - in nice cond. Maria, 924-3756.

OLD SWIMMING POOL LINERS - holes & all, needed for fresh water pond experiment. Ernie, Ext. 3357.

1 BEDRM APT - less than 15 mi from BNL, prefer Pt Jeff/Stony Brook areas. Ext. 4528.

UMBROLLER TYPE STROLLER - in good cond. Ext. 4875.

TENT - 2-man w/rain flap. Robert, Ext. 2372, 928-2784.

HOME - for spayed female cat, long-haired calico, beautiful markings, no longer allowed in apt. Gail, Ext. 7646.

PLAYPEN - good cond, reasonable. 472-3994.

TUNING CIRCUIT - from old 19" b/w XAM TV. Ext. 7985.

CATAMARAN TRAILER & HITCH - for 69 Nova, galvanized, 6' beam, good, reasonable. Ron, 473-6862.

USED CAR FOR WORKING GIRL - good eng/body, 6 cyl preferred. 924-3756.

BABYSITTER - loving, responsible person to care for 2 children (3 & 1), Tues/Thurs, my home (near Lab) Sept. 924-0030.

Car Pools

PT JEFFERSON - to start 2-seater car pool, 8-4:30 or 8:30-5. Jack, Ext. 3433.

SOUND BEACH - Rocky Pt area. Chris, 744-3654 after 5:30.

E. PATCHOGUE - Munsell Rd to Southern Blvd, vicinity S. Country Rd. Bud, Ext. 4423.

OAKDALE - would like to start or join car pool. Mike, Ext. 4293.

EAST MARION - still room in 8-4:30 car pool. Gordon, Ext. 4095.

SO. SETAUKET - to Lab via Hawkins Rd. Paula, Ext. 2253, 698-8950.

W. PATCHOGUE - would like to start or join sm car pool. A. Bangel, Ext. 4070.

DIX HILLS - would like to start or join car pool. J. Lukachinski, Ext. 2249.

E. ISLIP-ISLIP AREA - start or join existing car pool, 8-4:30 shift. Steve, Ext. 2022.

Lost & Found

FOUND - Gold bracelet, Bldg. 830. Linda, Ext. 4525.

Services

SPEAKER - experienced American Indian speaker avail for lectures, free brochure upon request, Box 174, Mastic, NY.

BABYSITTING -