BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Doug Humphrey

Robert Gergley, Senior Technician in the Environmental Chemistry Division, checks the 60 portable sampling units he, Russell Dietz and Robert Goodrich took to California to do tracer measurements. The units, called BATS for Brookhaven Atmospheric Tracer Samplers were designed by Dietz. They are self-contained, battery-powered and capable of monitoring almost any kind of pollutant. Another member of the division, Edgar Cote, has been instrumental in developing an electron capture technique for analyzing BATS-collected data.

"Effluential" Mother Earth

BNL scientists study geothermal pollution with tracer measurements.

What could be cleaner and more natural than using Mother Earth's heat to produce energy? Well, natural it is, but clean it's not.

Heat within the earth, called geothermal energy, can be used to make steam to turn turbines to produce electricity. Present geothermal power production in the United States is 900 megawatts, a mere fraction of the total. But this form of energy has the potential for doubling early this decade and doubling again by the next decade.

What's the pollution problem? After geothermal steam has done its work, it's condensed into water, and non-condensable gases are released to the atmosphere. Hydrogen sulfide, H_2S, is one of these gases. At low concentrations, H_2S has a rotten egg smell. At high concentrations, it can be toxic.

About 15 geothermal generating sites are already operating in The Geysers in the Anderson Creek Valley area about 85 miles north of San Francisco, California. In that state, odor is defined as a health effect, and there are laws regulating H_2S emission. The question then is what are the levels of H_2S that can be anticipated in this area as geothermal power production develops?

Hilly Terrain

Anderson Creek Valley presents a problem because the area is so hilly. On flat lands, winds disperse pollutants in a relatively simple manner. But in hilly areas, winds swirl and change direction as they pass over and around hills and ridges, making prediction of pollution dispersal difficult.

During the day, the air has a good vertical mix. But at night, mostly during the summer and fall, drainage winds form as temperatures drop. In what is called nocturnal drainage flow, air near the slopes cools, gets denser, and drains into the valleys, where it remains beneath a pocket of warm air circulating at higher elevations. Pollutants caught in these pools of cool air are trapped until the next day when the air warms and rises to escape from the valley.

Unless the U.S. Department of Energy can develop an understanding of atmospheric conditions in complex terrain like Anderson Valley, it will not be able to ensure that new energy technologies like geothermal will satisfy local, state, and federal air quality regulations.

The ASCOT Program

In 1978, ASCOT was created. Short for Atmospheric Studies in Complex Terrain, ASCOT is aimed at devising a method, using computer analysis of field measurements, for estimating dispersal of pollutants in any hilly region. Participants include scientists from DOE-supported research laboratories and various universities.

This past September, a $1 million, three-week-long series of nighttime experiments were conducted in the Anderson Creek Valley. They involved sophisticated measurements of temperature, humidity, and wind speed and direction throughout the valley. Lawrence Livermore Lab directed the effort, and about 100 scientists from 18 laboratories and companies participated.

BNL People Measure Tracers

BNL personnel involved in these experiments were Russell Dietz, Chemical Engineer; Robert Goodrich, Chemical Associate; and Robert Gergley, Senior Technician. All are in the Environmental Chemistry Division of DEE.

Dietz, who supervised the Brookhaven expedition, said their role in ASCOT is to develop sampling capabilities out in the field as well as analytical techniques in the lab. But instead of measuring pollutants, they track dispersal of inert tracer gases.

For the experiments in Anderson Creek Valley, they sampled perfluorocarbon tracers, or PFTs. "Perfluorocarbons are inert, fluorinated organic compounds," Dietz explained. "They are very easily detected by electron capture techniques. And although the environment is full of other compounds that are strongly electron capturing, PFTs are chemically and thermally very stable. So the other compounds can be destroyed by a catalytic process, which leaves behind the PFTs."

Five nighttime experiments were conducted. Each time, from midnight to 1 a.m., two kinds of PFTs were released at the rate of one pound per hour from hilltop locations upwind and about 2000 feet above the valley floors where BNL sampling equipment was set up. Said Dietz, "Our goal was to find out to what extent the tracers were trapped vertically and horizontally."

BATS on the Ground, Cable Aloft

Horizontal monitoring was done with 60 portable sampling units called BATS, for Brookhaven Atmospheric Tracer Samplers. The BATS were located throughout the valley region, from within one to about five kilo-

(Continued on page 2)

Williams To Coordinate Women's Programs

Gail Williams has been named by Lab Director George Vineyard as the new Coordinator of Women's Programs. She will continue with her responsibilities for the Office of Scientific Personnel, Director's Office, but will be expected to spend about a quarter of her time on her new duties.

Williams replaces Janet Whitehead, Personnel Manager, who was the first Women's Programs Coordinator. This position was established in 1975 in order to ensure Laboratory development of programs that would respond to the special needs of women. Since that time, considerable improvement has been made and the effort has been termed quite successful.

Of her new position, Williams said, "I think the real challenge is to develop a systematic approach to increasing the presence of women at BNL." She will work toward increasing the number of women in non-traditional areas and toward elevating women in all job categories.

Williams does not believe in affirmative action that sacrifices quality. "I think the Lab can meet affirmative action goals by aggressive recruiting and career tracking for women," she said. "Good managers should be monitoring people with potential."

She has always been involved with employment concerns of women on the technical staff. As Coordinator of Women's Programs she will be concerned with all BNL women, from scientific to non-technical and both union and non-bargaining employees.

"It is not my intent to act primarily as another grievance mechanism," she stressed. "My interest is to help women develop to their maximum potential."

A native of New Zealand, Williams has been at the Lab since 1975. She started as secretary to R. Christian Anderson, Assistant Director for Scientific Personnel and Public Relations.

"Before coming to Brookhaven, it is fair to say that like many women, I followed the job opportunities of my husband," Williams said. "In fact, that's why I came here." Her husband, Graheme Williams, is a scientist in the Chemistry Department.

Williams has lived and worked in four countries. She has been involved in science administration before at the University of Alberta, Canada, where she was an administrator for the Department of Chemical and Petroleum Engineering.

Some of her recent activities at BNL will be formalized under her new title. She is on the lecture committee of the Women In Science and is the affirmative action representative for the Director's Office.

Mort Rosen

Gail Williams

Mother Earth (Continued)

meters from the release sites.

To measure the tracers vertically, they used a cable attached to a helium balloon. "This was the first time we had ever tried sampling this way," said Dietz. "It might be the first time anyone has."

The cable was made of one-quarter inch polyethylene tubes that ran in a bundle to different altitudes in 400-foot increments from 400 feet up to 1600 feet. Through small holes drilled at 50-foot intervals in the tubes, air was drawn down and into sampling equipment housed in a trailer on the ground.

Dietz described looking up at the stars, seeing the cable fade into the night. "It was like Jack and the beanstalk," he said. "You couldn't see the balloon, just two blinking lights required by FAA for high flying objects."

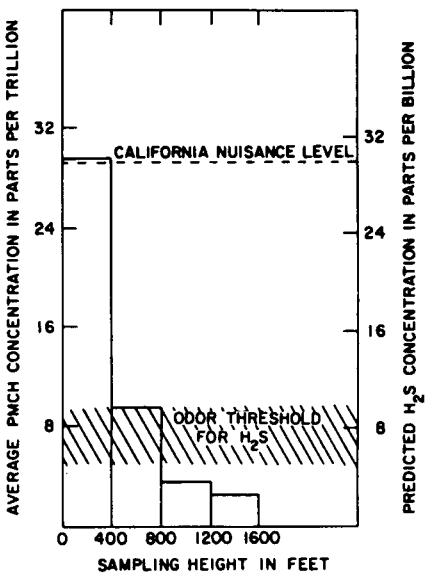
Data collected through the cable was saved for later analysis at Brookhaven. But they also used real-time analyzers out in the field, which gave them concentrations of tracers at any altitude every five minutes. "We did that to make sure everything was working smoothly, that the tracers were coming our way, and that we were pulling them in and measuring them in a meaningful way."

What Did the Tracers Show?

Back at Brookhaven, Dietz, Goodrich and Gergley have been analyzing their data. "It looks like the highest tracer concentrations exist at the lowest, 400-foot altitude we measured," said Dietz. "That supports what we know about the weather patterns in a hilly area like Anderson Creek Valley."

As Dietz explained, when pollutants are trapped overnight by pockets of cool air at the valley floor, they are dispersed only by heat from the next day's sun, which causes trapped valley air to rise and mix with upper level winds.

The ASCOT program will study the area for two to three more years. Information gathered will be used to "tune" computer models of pollution dispersion in complex terrain. These computer models can be used to produce improved air quality assessments of developing resources being considered in hilly regions. Then regional planners can act to minimize impacts of any pollution caused by this development.



This bar graph shows concentrations of PMCH, a perfluorocarbon tracer, to be highest at an altitude of 400 feet. The data was collected during one of five nights of tracer measuring experiments in Anderson Creek Valley, California. The area is the site of 15 operating geothermal power plants, which emit hydrogen sulfide, H_2S. At concentrations between five to ten parts per billion, H_2S has a rotten egg smell. California has set a nuisance level at 30 parts per billion. Using data on PMCH concentrations, the levels for H_2S can be estimated for a 150 megawatt geothermal power plant nominally emitting 100 pounds per hour of H_2S.

Making Connections Easier

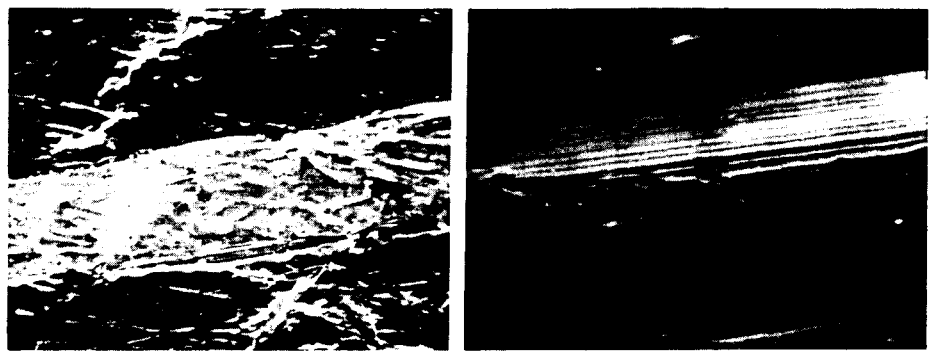
Technology as practiced today is held together largely by wires - wires joined together, wires connected to instruments or to electrical feedthroughs. Most wire connections are accomplished with heat, as in spot welding. But David Edwards Jr., head of the Vacuum Section of the AGS, has devised a new kind of wire connection which he dubbed "cold-formed."

For his process, which was written up in the *Journal of Vacuum Science & Technology* (May/June 1979), Edwards recently received an Award of Excellence from the American Vacuum Society.

Edwards acknowledges that his process is actually very simple. Take a hard wire, like tungsten, and press it into a soft metal such as copper. The softer metal will entrap the wire and form a connection which can be readily ascertained to be a complete and stable joining.

Spot welding, on the other hand, is inconsistent. Due to the fusion process involved in this type of connection, the weld may be unstable. It can break while still hot and remain undetected until a later, less convenient time.

When used in a vacuum, cold-formed wire connections introduce a savings in terms of the time and trouble involved in joining two metals. Adding a greater guarantee of smooth functioning, Edwards' process has been used in vacuum applications ranging from electron spectrometers to ionization gauges.



These frames from a scanning micrograph show a 0.005-inch diameter tungsten wire being pressed into a piece of copper. The frame on the right shows the press at the end of the copper block (the tungsten wire extends beyond the block). Notice there is little entrapment of the wire and little wire damage. The frame on the left shows a typical section of the press along the wire. Seen in that view is a flattening of the tungsten wire due to the vise pressure. A comparison of the two views show the positive entrapment of the tungsten wire in the copper block.

French Club

The next meeting of *Le Cercle Français de BNL* will be held at 8 p.m. on Friday, December 5, in Room D of Berkner Hall. With the hope of reinforcing its treasury to finance future events such as films and lectures, the French Group is holding a "Chinese Auction." Ten tickets, which can be used to bid on the various items being auctioned, will be sold for $3. Refreshments will also be served.

Speakers Bureau

Victoria McLane (DNE); Elizabeth Buzash-Tollert (Bio.), Suffolk County Community College Career Day, Careers in Science, November 6.

R.C. Anderson (DO), Riverhead Gowanus Club, BNL General and ISABELLE, November 18.

Alfred Lewandowski (DEE), Riverhead Free Library, Solar Energy Projects at BNL, November 22.

Martin Plotkin (Accel), Professionals and Executives in Retirement (PEIR), BNL General and ISABELLE, November 25.

BERA Holiday Sales

It isn't too early to stock up on camera supplies for Christmas picture taking. The BERA Sales Office, adjacent to the cafeteria, has everything a shutterbug needs: film, flash bulbs, batteries, etc.

While in the store, why not order some Swersey's candies and cookies?

There are still some Islanders hockey tickets waiting to be sold. Two tickets would be a great gift to give a favorite person for the holidays.

The store is open from 9:00 a.m. to 1:00 p.m., every workday. For more details about any of the above items, call Pat, Ext. 3347.

Singers Take Note

The BNL Singers are now rehearsing Christmas music in preparation for the Christmas season. All interested singers are welcomed. Rehearsals are on Tuesdays and Thursdays in Berkner Hall at noon. Performances at the Cafeteria and the hospital are presently planned for December 23.

1981 BNL Holidays

New Year's Day	Thursday	January 1
Floating Holiday	Friday	January 2
Washington's Birthday	Monday	February 16
Memorial Day	Monday	May 25
Floating Holiday	Thursday	July 2
Independence Day	Friday	July 3
Labor Day	Monday	September 7
Veterans' Day	Wednesday	November 11
Thanksgiving Day	Thursday	November 26
Day after Thanksgiving	Friday	November 27
Christmas Eve (1/2 day)	Thursday	December 24
Christmas Day	Friday	December 25

Arrivals & Departures

Arrivals

Robert D. Benz ..... Medical
Hsing C. Cheng ..... Energy & Env.
Shu Cheung ..... Central Shops
Eugene M. Cummings ..... Plant Engrg.
Medora M. Hardy ..... Biology
Howard H. Hwang ..... Nuclear Energy
Hannah Lane ..... Nuclear Energy
George M. Leskody ..... Plant Engrg.
Daniela Maurizio ..... Physics
Sergio Moehlecke ..... Physics
Richard J. Newcombe ..... Energy & Env.
Robert J. Stamm ..... Chemistry
Nancy J. Swezey ..... Safety & Env. Prot.
Joyce J. White ..... Applied Math.

Departures

James T. Durnan ..... Plant Engrg.
John Ferrero ..... Plant Engrg.
Ling L. Juang ..... Energy & Env.
Gerald S. Levine ..... Nuclear Energy
Debaprasad Majumdar ..... Nuclear Energy
Supramaniam Srinivasan ..... Energy & Env.
James Z. Vance ..... Staff Services

Cafeteria Menu
Week Ending Dec. 12, 1980

Monday, December 8

French onion soup	(cup)	.55
	(bowl)	.65
Baked filet of fish w/1 veg.		1.50
Turkey Brazil & rice		1.55
Hot Deli-Grilled Reuben		1.60

Tuesday, December 9

Cream of cauliflower	(cup)	.55
	(bowl)	.65
Roast top round ot beef w/1 veg.		1.60
Seafood Creole w/rice		1.55
Hot Deli-Pastrami	(on bread)	1.65
	(on roll)	1.75

Wednesday, December 10

Chicken vegetable soup	(cup)	.55
	(bowl)	.65
Baken lasagna & 1 veg.		1.50
Swedish meatballs w/noodles		1.55
Hot Deli-Roasted fresh ham w/barbecue sauce	(on bread)	1.65
	(on roll)	1.75

Thursday, December 11

Navy bean soup	(cup)	.55
	(bowl)	.65
Roasted chicken & 1 veg.		1.55
Beef hash & 1 veg.		1.50
Hot Deli-Philadelphia style steak sandwich		1.75

Friday, December 12

Seafood chowder	(cup)	.55
	(bowl)	.65
Yankee pot roast & 1 veg.		1.65
Broiled filet of fish & 1 veg.		1.50
Hot Deli-Roasted turkey breast	(on bread)	1.65
	(on roll)	1.75

New Pick Up Point

Each working day, a Laboratory vehicle is at the service of visitors who rely on the train to reach BNL. Effective immediately, the afternoon pick up point has been changed to **Building 134**, which is located directly across Brookhaven Avenue from the former pick up point, Building 460.

For those not familiar with this service, the Laboratory vehicle makes two trips each working day. In the morning, it meets the New York City 8:40 a.m. east bound train at the Patchogue Railroad Station at 10:16 a.m.

In the afternoon, the vehicle picks up passengers at Building 134 and transports them to the Shirley Railroad Station. Departure from Building 134 is at 4:25 p.m. to connect with a train that leaves Shirley at 4:55 p.m. A change of trains in Jamaica permits passengers to arrive at Penn Station at 6:32 p.m.

Passengers should make reservations with the receptionist at Building 134 (Ext. 2345) on the day of departure. They should arrive at that building no later than **4:20 p.m.**

NYC Train Trip

The Hospitality Committee is planning a group railroad trip to the city on Wednesday, December 17. Departure will be at 7:55 a.m. from the Patchogue LIRR station. Round-trip fare for adults is $3.25, children under six years ride free.

Reserve a ticket by sending your fare through the U.S. mail to P.O. Box 322, Upton, New York 11973, no later than *Thursday*, December 11. Make checks payable to "Brookhaven National Laboratory." Your tickets will be given to you on the train. Refunds will be made only if cancellations are received by the *Friday* preceding the scheduled trip.

Instrument Exhibit

Tektronix Inc. will exhibit some of their instruments on Friday, December 12, from 10 a.m. to 3 p.m. in Room A, Berkner Hall.

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CARL R. THIEN, Public Relations Officer

Cooking Exchange

Rum balls, wine jelly, cheese spread and other homemade ideas for the holidays will be demonstrated at the next Cooking Exchange meeting on Wednesday, December 10.

Meeting are held in the Recreation Building from 12:30 to 2:30 p.m. There is a charge of $1 per person and babysitting is available at 25¢ per child. Meetings are open to people affiliated with the Laboratory and their immediate family members.

Contact Sharon Galayda (821-0644) or Ruth Fernow (928-8465) for further information.

SCCC Spring Semester At BNL

Suffolk County Community College is offering the courses listed below on-site for the Spring 1981 Semester. Courses are open to all BNL employees. Upon completion of 24 credits, SCCC will grant a General Equivalency Diploma (G.E.D.) to students without a H.S. diploma.

Registration is scheduled for Friday, January 9, 1981, from noon to 3 p.m. in Berkner Hall. Counselors will be available.

The tuition fee is $30.00 per credit and there is no additional school fee. Master Charge or VISA cards will be accepted. For tuition refund, obtain the proper form from Personnel and complete it as instructed.

The minimum enrollent for each class is 15 students. Books will be sold on the first night of each class. Classrooms will be announced prior to the beginning of the session, which will last approximately 14 weeks.

For pre-registration information, or if there are any questions, call Y. Renee Flack, Ext. 3316.

	Course	Cr	Day	Hours (p.m.)	Tuition Fee	Start Date
AC11	Principles of Accounting I	4	T/TH	5:15-7:05	120.00	2/3
BA21	Business Mathematics	3	M	5:15-8:15	90.00	2/2
BA51	Management Principles & Practices	3	W	5:15-8:15	90.00	1/28
DP11	Introduction to Computing	3	M/W	5:15-7:05	90.00	2/2
EG33	English Grammar & Vocabulary Development	3	T	5:15-8:15	90.00	2/3
SO11	Sociology	3	TH	5:15-8:15	90.00	1/29
MA25	Intermediate Algebra	4	T/TH	5:15-7:05	120.00	2/3
TE12	Electricity I	4	M/W	5:15-7:45	120.00	2/2

Missing Volumes

Three important and often used reference works are missing from the shelves of the Research Library. To assist others in their research, these volumes should be returned to the Reference Section without delay.

REF R121 D77	Dorland, William Alexander Newman; Dorland's Illustrated Medical Dictionary, 24th ed. Saunders, 1965
REF R121 S82 1976	Stedman, Thomas Lathrop; Stedman's Medical Dictionary, illustrated. Williams & Wilkins, 1976
REF Q141	American Men & Women of Science; Physical and Biological Sciences, 14th ed. (V.2, C-F) Bowker, 1979

Bowling

Purple & White League

High game for the night was rolled by Ken Riker with a 246. Al Pinelli rolled high series (600) with games of 201/178/221. Other good games were bowled by Walt Milian 222, Jim Griffin 215, Ed Meier 202, Kathy Carter 198, Sue Perri 184.

Green League

The Sparks took 11 from the Pinball Wizards closing the gap for first to within 5 points. R. Sick had a 206 game. The Blue Jays took 11 from the 76'ers with P. Stelmaschuk bowling a 201. The Light Source managed 8 from the Freon Loaders. The Phoubars took 8 from the Trouble Shooters while the Old Timers II could only salvage 3 from the Sandbaggers.

Red League

The Old Timers won 11-0 over Isa Team. H. Frei (243) had a 592-682 series, J. Sauls 613 gross, M. Iarocci 204, E. Sperry IV 200. The Designers took 11 from the Strangers. R. Occhiuzzo grossed 659. The Sandbaggers won 8-3 against the Old Timers II. K. Riker (214) grossed 632, R. Jones 630. The Freon Loaders took 3 in a match with the Light Source. F. Powers grossed 626. The 76'ers were shut out 0-11 by the Blue Jays. M. McKenna (201) grossed 629 and J. Connelly (203) grossed 610.

No Commuter Buses

Despite the earnest offers of both BNL personnel and representatives of the Long Island-Airports Limousine Service Corp., plans have been cancelled for a charter bus service to BNL from western locations on the North and South Shores.

About 80 BNL employees originally expressed interest in using such a service. However, according to Bill Webster, Manager of Staff Services, there were three negative factors involved.

"First and foremost," he said, "was the cost to the prospective customers." When fares averaged out to 9.8 cents per mile, only twelve employees were still willing to try the service, but none were willing to sign up for a long-term commitment.

A second deterrent was the length of travel time involved. With the circuitous route the bus would have to take, a half-hour car commute would take almost 1-1/2 hours.

And last, said Webster, "It was impossible to devise a route that could satisfy a sufficient number of the potential riders."

Webster concluded, "Unless something new and different can be proposed by Long Island Limousine, I consider this a closed issue."

Volleyball

A Division

High Society was defeated by Nuts & Bolts, 11-15, 15-9, and 15-3.

Las Bolas (formerly NADS) triumphed over Mixed Ups (formerly Family Affair), 6-15, 15-12, and 15-8.

No Names beat Kings Court, 15-4, 15-3, and 16-14.

B Division

Leftovers defeated TNT, 15-3, 15-12, and 15-4.

LEMUFs beat Semi Tough 15-12, 15-2, and 15-9 with good saves by Karen Alberico and Gary Smith.

Oh No's won over Puff & Stuff, 15-9, 15-10, and 15-12.

To Your Health!

Andrea L. Brand, M.D., and Caroline Kramer, R.N., Occupational Medicine Clinic, are co-authoring a series of articles dealing with current trends in the medical field. These articles will be published in the *Bulletin* so that employees can gain a better understanding of health maintenance and prevention of disease.

If you are interested in having a particular topic covered, please send your suggestion to: Andrea L. Brand, M.D., and Caroline Kramer, R.N., c/o To Your Health!, Occupational Medicine Clinic, Building 490.

Où Sont Les Toilettes?

Montezuma's Revenge, Calcutta crud, Delhi Belly, Aztec two-step, Turista, the Trots, emporiatric enteritis — call it what you will, but traveler's diarrhea affects about 40 percent of people who travel from the U.S. to Mexico and numerous others who leave home for adventure in both distant and not so far away places. So wherever you travel, learn how to ask, "Where is the bathroom?" in the local language and study the facts given in this article for travelers who want to stay healthy.

The causes of traveler's diarrhea are multiple; the symptoms varied, from a few loose bowel movements to a full blown cholera-like syndrome; the treatment and prevention somewhat controversial. This illness occurs most commonly in people from temperate, industrialized countries who visit more tropical, less developed countries.

Causes

Although several bacteria, viruses, and protozoa may cause diarrhea, most cases of traveler's diarrhea are due to pathogenic strains of *Escherichia coli*. The most common offender seems to be enterotoxigenic *E. coli*, which adheres to the wall of the small intestine and produces enterotoxin, which causes intestinal secretion of water and electrolytes. Traveler's diarrhea may result from contamination of food and water by stool containing the infecting organism.

Symptoms

Signs and symptoms of traveler's diarrhea usually appear within two weeks of arrival in the area where the agent is endemic. Malaise and loss of appetite may precede midabdominal cramps and loose, watery stools (usually 1 to 5 per day) that contain no blood. In disease caused by enterotoxigenic *E. coli*, fever and chills are absent. Major ill effects are due to loss of fluids and electrolytes (dehydration may result) and are most pronounced in the elderly and young children. The average duration of symptoms is one week; carriage of the infecting organism in the stool persists less than one week after cessation of the diarrhea.

To become sick, the traveler must ingest food or water contaminated with the pathogenic strain of *E. coli*. Person to person spread plays an insignificant role except in the most unsanitary environments.

Diagnosis of traveler's diarrhea due to *E. coli* depends largely on the patient's history: date of arrival in the new area, date of onset of illness, the symptom complex described above, and the usual self-limiting course of the disease. Patients with persisting illness, fever, and bloody stools must undergo laboratory testing to rule out bacterial, protozoal, and parasitic infections.

Treatment

Treatment of traveler's diarrhea may be classified as either specific or symptomatic. Specific treatment consists of fluid and electrolyte replacement and represents the cornerstone of therapy. In mild to moderate cases, this may be achieved with oral replacement fluids. In more severe cases, intravenous therapy is required.

Fluid Replacement

Very Mild Case: Any convenient source of drinkable water, Gatorade, Pedialyte.

Moderate Case: Oral rehydration regimen — use one of two methods.

Method No. 1

Sodium chloride (table salt), 3.5 g (1/2 tsp.)
Sodium bicarbonate (baking soda), 2.5 g (1/2 tsp.)
Potassium chloride 1.5 g (1/4 tsp.)
Glucose 20 g (2 tbsp.) or sucrose 40 g (2-1/2 tbsp.)

Instructions: Dissolve in 1 liter of drinkable water. Drink 2-5 liters per day.

Method No. 2

Prepare one glass each of the following.

Glass No. 1
8 oz. apple, orange or pineapple juice (potassium source)
1/2 tsp. honey or corn syrup
1 pinch table salt

Glass No. 2
8 oz carbonated water
1/2 tsp. baking soda

Instructions: Drink alternately from each glass and supplement with other beverages. Drink 2-5 liters per day.

Severe Case: Intravenous fluids

Bismuth subsalicylate (contained in Pepto Bismol) has been shown effective in the symptomatic treatment of traveler's diarrhea. The recommended dose is 30cc (1 oz.) every 1/2 hour until eight doses are achieved. One study demonstrated that Pepto Bismol protected the stomach lining of rats from the action of aspirin (which contains salicylate), but it is not known whether all people may use this treatment safely. Those with a history of ulcer disease, gastritis, or intolerance to aspirin might approach this treatment with some caution. An advantage of this treatment is that it does not prolong the illness when diarrhea is due to *Shigella*, a causitive agent in many cases. Agents such as Diphenoxylate (Lomotil) and Paregoric may prolong traveler's diarrhea and are probably best avoided. Kaolin and pectin have not been proven effective.

Prevention

Traveler's diarrhea may be prevented in several ways. Most important is to avoid possibly contaminated food or water such as salads, uncooked foods, unprocessed water, and ice. Bismuth subsalicylate (Pepto Bismol) in liquid form has recently been shown effective. The recommended dosage is 60cc (2 oz.) four times a day. It is well tolerated by most people, but may cause darkening of the stools and tongue (a harmless side effect). There is some unproved, testimonial evidence that Pepto Bismol tablets, one taken morning and night, may prevent diarrhea. But while tablets are more easily packed for travel, they may not be as effective as liquid. The third method of prevention is the oral administration of Doxycyline (an antibiotic). A once daily dose of this long-acting tetracycline has been shown effective in a recent study. However, this method has several potential disadvantages: 1) It may encourage the emergence of tetracycline resistant strains of *E. coli*, 2) patients may develop allergic reactions or side effects to the drug, and 3) the drug may predispose patients to infection with other pathogens. Iodochlorhydroxyquin (Entero-Vioform) may cause nervous system damage and blindness and should be avoided.

In summary, traveler's diarrhea can usually be prevented or easily treated. However, patients who are ill more than a few days or who have fever, chills, or bloody stools should see a physician for further diagnostic study and proper treatment.

—Andrea L. Brand, M.D.

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.

The determination of the best-qualified candidate for available positions will be based upon education, experience and other job-related criteria. Such factors will be evaluated and measured against the demonstrable requirements of the available vacancy, as well as the Laboratory's Affirmative Action objectives.

The Laboratory is committed to a policy of Equal Opportunity in its selection and placement of personnel. Its objective is equality of opportunity in employment, training, and promotion without regard to race, color, religion, national origin, sex or handicap.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific 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: Opportunities for present Laboratory employees.

1514. TOOL AND INSTRUMENT MAKER (three positions) - Central Shops Division.

1515. CLERICAL POSITION - Requires clerical skills. Will be responsible for typing and processing ILR's and purchase requisitions. Central Shops Division.

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

1516. COMPUTER SCIENCE ANALYST - Requires BS in computer science, mathematics, or engineering or equivalent background. Advanced degree preferred. Must be familiar with FORTRAN programming and have working knowledge of CDC 7600/6600 computing system. Must have knowledge of statistics and ability to solve algebraic and first order linear differential equations. Duties will include application, modification and development of computer codes, principally in the area of nuclear power generation risk assessment. Will modify BNL/NRC-developed FRANTIC II system unavailability code and aid in developing new systems reliability code. Department of Nuclear Energy.

1517. STAFF ENGINEER - Requires BS in industrial engineering or equivalent, experience in maintenance management and knowledge of computer programming. Will be assigned industrial engineering duties in support of maintenance management program. Plant Engineering Division.

1518. ENGINEERING OR SCIENTIFIC ASSOCIATE POSITION - Requires advanced degree in engineering or physics or background in computer programming and good oral and written communication skills. Will perform assessment of solar and/or bio-mass technologies. Department of Energy and Environment.

1519. STAFF ENGINEER - Requires BS in physics or engineering or equivalent background. Will do mechanical design work and construct ultra-high vacuum system for X-ray Beam Line facility. Will also interface experiments with the computer system. Requires at least two years experience in mechanical design, ultra-high vacuum systems and computer interfacing. Previous association with physical science research preferred. Department of Energy and Environment.

1520. REFRIGERATION AND A/C ENGINEER -Requires competence with trouble-shooting, repairing, installing and operating commercial/industrial air-conditioning and refrigeration equipment including steam absorption, centrifugal and helical screw refrigeration machines. Successful completion of refrigeration and A/C apprenticeship program or related coursework is highly desirable. Must be available to work shifts as required. Plant Engineering Division.

1521. EXPERIMENTAL METAL WORKER - Requires experience in all phases of shop work. Candidates must be skilled in the use of sheet metal fabrication, tooling and machining. Ability to work to close tolerances from blueprints on sheet metal, tubing and structural shapes required. Central Shops Division.

1522. CABINETMAKER A - Under minimum supervision lays out, constructs, modifies and maintains furniture, Laboratory equipment and buildings and component parts. Will work from prints, rough sketches and verbal instructions. Requires minimum of seven years experience as a cabinetmaker. Plant Engineering Division.

Autos & Auto Supplies

74 CHEVY - Caprice, p/b, p/s, a/c, reg. gas, $900. or best offer. Ext. 3106.

78 TOYOTA - Liftback Deluxe, 46,000 mi, 28 mpg at speed limit, a/t, a/c. $3,955. $400. below average retail. Webster, Ext. 2549.

AM/FM - cassette radio, good cond. $35; am radio, from 1971 Buick, old but works. $10. John, Ext. 3292.

72 PLYMOUTH - Fury, 2 dr, r/h, p/b, p/s, good cond. Ext. 2914, 286-3742 eves/wkends.

SNOW TIRES - w/rims, w/w, 6.00x12 fits Honda Simca, etc, new. $30/pr. Ron, Ext. 3238.

72 DODGE - Dart, 50,000 mi, interior good, good cond & runs well. color red. $800. 399-0864.

75 MG MIDGET - 25 mpg, 47,600 mi, am/fm Clarion speakers, disc brakes, roll bar. $1,300. 732-8241 after 5 p.m.

TIRES - GR15-78 radial steel belted, w/w, good cond. $20. ea. Ext. 4207 or 727-0560 after 5 p.m.

74 TOYOTA - Celica, 4 cly, 4 spd, am/fm cassette indash, high mileage, asking $1,400. Mitch, 345-4987.

75 FORD - Granada, 2 dr. sedan, landau roof, 302 V8, loaded, new tires. $2,000. Ext. 3381 or 286-1024.

80 CAMARO - Berlinetta, V6, 3 spd, 22/27 mpg, low miles, am/fm cass., smoke tint windows, fantastic cond. Asking $7,200. Call eves, Tues, Thurs, Fri, Sat, Sun. 654-9269.

72 FORD - Galaxie 500 Sta. wgn, good run around & hauling car. Asking $500. 472-1338.

79 FORD - Pick up, F150, 4 WD, blk, oversize tires, roll bar, am/fm 8 trk stereo w/power booster, excel cond, must see 744-0742.

69 CHEVY - Camaro, excel running cond, needs paint & body work, best offer. Marlene, Ext. 4194 or 736-1006.

71 CHEVY - Monte Carlo, am/fm, a/c, all extras, good mpg, good engine. $700. Ext. 2115.

68 MERCURY - Wagon, 10 pass., a/t, p/s, p/b, 71 engine, 6 v.g. tires, new shocks, needs windshield, high mileage. $300. Joe, Ext. 4254 or 281-7683.

65 PONTIAC - Tempest, 326 cu, 4 dr, sedan, best offer. Bill Stars, Ext. 4278 or 298-9648 eves.

74 DODGE - Dart, sport model, a/c, a/t, p/s, p/b, high mileage, some body damage. $500. Firm. Bob, Ext. 3370

TIRES - (2) F78-14, Sears, w/14" Ford rims, $25. Ext. 2575 or 281-2767 eves.

72 OPEL - 75,000 mi, red, 4 cyl. $750. 744-6063.

TIRES - 155x13 on Opel rim, A78x13 snow on Vega rim, v.g. cond. $7. ea. 924-4685 eves.

71 FIREBIRD - HT, a/c, a/t, p/s, p/b, stereo, radials, snows w/wheels, new paint, orig. owner, excel. $2,200. 475-8658 after 7 p.m.

TIRES - pr. of Firestone Cavillino steel radial 165SR-14, $30. Bob, Ext. 4857 or 744-3289.

69 CHEVELLE - clean, 6 cyl. $650. 286-0105.

80 MAZDA GLC - wagon, a/t, a/c, radials, deluxe pkg. 2500 miles, $7,300. 473-2664.

60 JAGUAR - MK9, 48,000 orig. mi., excel cond. refinished. Best reasonable offer over $7,000. 473-2664.

78 MIDAS MINI MOTORHOME - 21' sleeps 6, fully equipped, excel cond, 25,000 mi. $11,000. Carmen, Ext. 4776 or 298-4931 after 6 p.m.

77 JEEP - Cherokee "S" package, a/c, p/s, p/b, shift kit/HDRS/duals/low range/roof rack/bkt seats. $6,200. 289-4536 or 475-3055.

66 FORD - Mustang, 200 ci, 6 cyl, a/t, new brakes, exhaust system, starter, carb, solenoid, voltage reg, interior restored, ext. good. $1,200. 929-8105 or 929-4701.

72 PLYMOUTH - Valiant, a/t, p/s. Good running cond. Original owner. $495. 751-5539.

76 DATSUN - B210, 39 mpg, clean, 4 new tires. $2,650. 744-3509 after 4 p.m.

69 CAMARO - SS, 71 6 cyl, 79 Turbo 350, good cond. $1,200. Bill, 281-7665.

77 DODGE - Club-cab pickup, am/fm cassette stereo, excel cond. $4,200. Ext. 3069 or 736-3112.

TIRES - VW, (3) snow, (1) reg, good cond. $5 ea. Frank, Ext. 3898.

WHEELS & TIRES - (4) mounted western spoke wheels w/10x15 Gillette trailrider tires. 1,000 mi. $325. Glenn, 289-0413.

TIRES - (2) Dunlop SP-68 SP radial 155-SR-14, good tread, off an "MG." $25/pr. Bob, Ext. 3565.

80 DODGE - Omni, 024 Sport, sunroof, am/fm stereo 8 trk, rust proof, many extras, 30 plus mpg, mint. Reasonable. 799-7160.

75 DODGE - van, B100, 50 K mi, 6 cyl, new trans, clutch, brakes, alt, insulated, paneled. $2,250. Ext. 3533.

TIRES - (2) 13" D-60 Goodyear, never used, $60/pr; also (2) B78x13 Sears, used ½ season, $30/pr. Debbie, Ext. 3146.

75 DODGE - Dart Swinger 6, a/c, a/t, p/b, p/s, many new parts, mint cond, 20 mpg, extra wheels w/snows, am/fm 8 trk stereo. $1,595. Tom, Ext. 3273 or 924-9143.

SNOW TIRES - (2) 6.00-13, excel cond, mounted and balanced, rims fit Pinto. Leigh, Ext. 3942.

SNOW TIRES - (2) almost new, C78-13, one w/rim. $25. Ext. 2384.

65 MUSTANG - new starter, muffler, rebuilt trans, excel int. $550; 1970 351 automatic trans. $60. 281-0483.

HOLLEY CARB - 650 double pumper, spreadbore, just rebuilt. $50. Ext. 4715 or 878-8450.

SNOW TIRES - w/rims, almost new 6.00x12 used for Simca Honda, etc. 2/$30. Ron, Ext. 3238.

71 VOLVO - sta wgn. Asking $1,300. G. Kinne, Ext. 4061.

79 KAWASAKI - (KE-100) dirt bike w/helmet, excel cond. Asking $525. George, 929-6009 after 3 p.m.

TIRES - A78-13 w/w Firestone, (1) tire and wheel, new; (2) tires and wheels, 8,000 mi. All for $65. 281-8612.

TIRES - (1) E78-14 snow on Dodge rim, $10; (1) E74-14 belted w/w, very good, $20; (1) G78-15 belted w/w, new. $35; (2) HR78-15 snow radial, w/w, $80. Walt C., Ext 3255.

75 CHEVY - Impala wagon, p/b, p/s, a/c, low mi. Offers over $1,000. Ext. 3400.

67 VW - good transp. 589-5490 eves.

RIMS - 13" Ford Pinto, $8 ea; tires (2) 600.13 snows, $10 ea. Ext. 2554.

63 YAMAHA - 250cc cycle, spare eng, running cond. $200 or best offer. Ext. 7154.

68 BUICK - 6 cyl, good transp, a/t, good tires. $350. George, 588-1713.

SLANT SIX - cyl head, $25; manifold intake and exhaust, $10 ea. John, Ext. 4126.

SNOW TIRES - G78-14 Goodyear suburbanite polyglass, excel cond. $25 ea. Lois, Ext. 2959 or 751-0023.

79 HONDA - XR-80 dirt bike, excel cond. Asking $550. Dave or Jim, 281-8957.

73 VEGA - sta wgn, a/t, a/c, p/s. $800. Rick, 281-9671 days or 281-7486 eves.

75 FIAT - 128, 2 dr, 4-spd, good on gas. $1650. Rick, 281-9671 days, 281-7486 eves.

1969 VW - automatic, good cond. $650. Chris, Ext. 2907.

RIMS - 14", 5 hole. Ext. 3392 or 475-8330.

PLUGS - RBL13Y plugs, 5/$3. John, Ext. 3675.

69 PONTIAC - LeMans, good in and out, rebuilt engine, Cragars, mags, stereo, headers. $750. 751-0578.

SNOW TIRES - w/rims, 7.75-14, 6.50-13, (2) 6.78-14 steel studded and (2) Datsun 280Z tires. Ext. 4715 or 878-8450.

UTILITY TRAILER - 4x6 light weight, excel for small car. $100. 281-8031.

79 FORD PICKUP - F150, 4wd, black, over size tires, roll bar, AM/FM 8 trk stereo w/power booster. Excel cond, must see. 744-0742.

PLEXIGLASS SUNROOF - 1 side for '73-'77 Corvette, $25. Mike, Ext. 7941.

65 CHEVY PICKUP - 1/2 ton, good running truck, 6 cyl, 3 spd, new exhaust, new battery, new tires, new trans. $500. Joe Bush, Ext. 3284.

69 ECONOLINE - standup camper, gas heat & stove, potti, fold down bed, ice box & sink, many recent parts, good cond. $1500. 281-0360.

72 KARMANN GHIA - 64,000 mi, green, 4 spd, a/c, AM/FM 8trk stereo, garaged, mint cond. Ext. 2416 or 265-5218.

74 CHEVY PICKUP - C-10, excel cond. Asking $1600. Jim, 924-5026.

DATSUN GUIDE - Repair & Tune-up, 510, 1200 -'73; 610, '73 thru '75; 710, '74 thru '75; B210, '74 thru '75. $5. Ext. 3284.

76 SAAB - 99GL wagonback, 4 cyl, a/t, a/c, p/b, p/s, 33,000 mi, mint. Ext. 4215 or 286-8338.

78-FORD PICKUP - F100, 6 cyl, std, deluxe CAP stereo-tape, aux tank, sunroof, 32,000 mi, excel. Ext. 4215 or 286-8338.

AM/FM STEREO - Blaupunkt, cassette, model CR-2000, in dash, many features. Asking $125. Pete, Ext. 3292 or 581-1773.

69 BUICK - Sportwagon, 4 dr, a/t, p/s, p/b, a/c, 4 new radials. $600. 473-1573.

75 FORD MUSTANG — 4 cyl, excel. $2500. Julio, Ext. 3188.

78 PONTIAC - Sedan, excel. $4900. Julio, Ext. 3188.

Boats & Marine Supplies

OLD MERCURY - 10 HP outboard motor, runs, needs tune-up. $50. Ken 475-1469 eves.

30' CRUISING CATAMARAN - 1968 Iroquois, sleeps 6, fast comfortable superbly equipped. $20,000 orig. owner. G. Munson, 744-0763.

25' DOWIE BASSBOAT - rebuilt 283, FWC, CB, VHF, DF, excel cond. $3,500. Judy, 878-2441.

20' BEUHLER - jet drive, fully equipped, excel cond, on 4 wheel trailer, in good cond. $2,300. Bob, 286-3280.

5.0 HP OUTBOARD MOTOR - Sears air cooled 2 cycle, extra gas tank and owner's manual. Asking $175. Ext. 3516 or 7527.

PORTA POTTI - heavy plastic, very good cond. $50. Joe, Ext. 7961.

18' WOOD BOAT - good for work, needs work. $50. Tim, 281-7873, any time after 4 p.m.

SAILBOAT - Sunflower, 11', new, great Xmas gift. $325. 727-3608 after 5 p.m.

CHRYSLER CROWN - 135 hp, fresh water cooled, paragon hydraulic trans. with reduction gear, in A-1 cond. $700. 475-8412.

Miscellaneous

ORGAN - Hammond Piper, auto chord, single keyboard, auto bass, rhythm box, fun to play, good cond. $450. Carmen, Ext. 4776 or 298-4931 after 5 p.m.

RADIO - large old European made table model, incl short waves, antique. Best offer. 286-3742 eves/wkends.

TRICYCLE - red, good cond, $10. baby changing table, 3 drawers, $10; dresser, small wooden, good cond, $10; chair for l/r, green upholstered; chair for den/library, green vinyl covered, comfortable, $10 ea.; archology text, large format full of futuristic urban ideas by Paolo Soleri, $10; Sierra Club Bulletins, '71-'76. Andy, Ext. 2948 or 722-3168.

GE FREEZER - good cond, approx 17 cu ft, $150; fireplace items - glass doors, screen, $40; brass screen, $15; wood grate, $6; shovel, tongs and stand, $15; elec edge trimmer w/blade, good cond, $5; pink shag rug, 6x8, fringed, $20; air cond, old but works, $25; push-type lawnmower, no motor, $10. John, Ext. 3292.

AIR COND - Gibson, unit can be installed in window, $60. 281-2289 after 5 p.m.

BIKE - girl's Huffy 20"yellow and white flowered 2 wheel. $20. Ext. 3319.

TYPEWRITERS - portable Royal "Arrow" and Remington "Quiet-riter," $35 ea; Remington-5, $25. 475-8658.

AM/FM - stereo receiver Sta-52, mint cond. $90. Dave, 589-5126.

AMPEG GUITAR AMP - 120 WRMS, (2) 12" speakers, reverb, tremolo equilization, like new. $350. Ext. 3950.

DINING TABLE - mahog, 6 chairs, antique buffet, $700; arm chairs (2) red, $75; (1) orange, $35; French prov twin bed, $40; vanity desk, $70; rolling server,TV stand. 751-5115.

PANASONIC - am/fm receiver w/8 trk player, $50; over forty assorted 8 trk tapes, $3 ea. George, Ext. 4460.

DINETTE SET - rectangular, formica solid wood top table w/2 leaves, 6 chairs, very good cond. $30. Ext. 2372 or 751-7268 eves.

DISHWASHER - portable, green w/butcher block top, $200; wood burning Franklin stove, best offer. Ext. 3431 or 744-9677.

BABY ITEMS - Strolee walker, $10; thatcher crib, $30; Strolee wee care car seat, $25; bicycle seat and Perego stroller. 924-3975.

LABRADOR RETRIEVER - pups, yellow males, AKC champion sired, shots, 11 wks old. $300. 271-0589.

HOUSE PLANT SALE - until they're gone. 80 Hampton Ave., Mastic. Call for directions. C. Hull, 281-2002.

LOUVERED DOORS - (2) wood, 78½"x18", new, unfinished, $15. Walter, Ext. 3397 or 567-9025.

FIRE WOOD - seasoned oak 8 ft long x 4'h x 16-18" logs. $50. You pick up. 924-3236.

SKIIS - Morsan metal 195, no bindings. $15. Frank Rumph, Ext. 4581 or 588-3565.

MEN'S SKI PANTS — size 32, $15; ski bindings Salomon 222, $25; (2) GM 14" rims, $10; portable gas heater, $25; Nordica ski boots, size 10, $40. Ext. 2951.

SANYO - am/fm cassette radio w/auto reverse. Orig. $169. asking $75. 281-8274.

WOOD CHAIRS - (2) matching, very old, dark finish. $10. ea. Ext. 2340.

BUFFET - 5½ ft. custom built, walnut. $150. Ron, Ext. 3887 or 286-0353 after 6 p.m.

GIBSON - P.A. system 4 channels, 2 inputs per channel, 2 columns w/4 (10") speakers. Tom, 325-1759.

ZENITH - 19" B&W TV, no picture, good for parts. $10. John, Ext. 2485.

PIANO - Wurlitzer Spinet, w/bench, excel cond. $650. Ext. 2881 or 286-3372.

MEN'S DRESS WATCH - Jules Jergensen 17 Jewel Classic, new, never used, full warrantee. $65. Ext. 4701 or 271-2877.

RADIANT QUARTZ HEATER - new, guaranteed, modern design, top-control, heats fast, saves money and energy. 924-4991.

CB RADIO - Johnson 323 in working cond. $30. John, Ext. 4680.

CORNINGWARE - 10" fry pan; brand new miscellaneous kitchen items, drainers, turntable, etc. $1 and $2. S. Spark, Ext. 4111.

COLUMBIA WOOD - coal & gas, solid cast iron stove, white porcelain w/covers, $275; Farfisa portable organ, excel cond, $525. 281-9671.

MAHOGANY CABINET - w/Gerard record changer, $25; tall lamp, $7; American Tourister luggage, new. Ann, 286-2280.

TAPE RECORDER - reel-reel, $15; guitar bass electric, $30; amp, $50; table 30" rnd maple, $30; ski boots, various sizes, $3. pr. 281-5565.

KEROSUN HEATERS - most models available, clean efficient heating at reasonable prices. Bob, 757-3178 eves after 7 p.m.

SPANISH - lamp/table combination and Spanish lamp. 589-1893.

BICYCLE - Men's 26" 10 spd Iverson, excel cond, $50; also Avon bottle collection. Smith, 588-3999.

CEMETERY PLOTS - (2) at Pinelawn, reasonable price. 751-8223.

INDIAN HEAD PENNIES - all dates, $20. per roll of 50 and up. Les, Ext. 4074.

SKIIS - Head std, poles, 2 prs. boots, good for beginner. $85. Will sell separately. 744-0262.

FUEL OIL - 275 gal. #2 fuel, needs to be pumped out. $.75 per gal. George, 289-4543.

BICYCLE - 20" boy's, $20; skates, men's size 8, $4; table tennis, new, $10; free standing fireplace, $100. Ron, Ext. 3682/4082 or 289-1003.

SOLID BRASS - fireplace enclosure, glass ovenware doors, airtight, $95. John, Ext. 4680 or 286-1331 after 5:30

YASHICA - TL electro X, 35mm camera w/50mm lens, Soligar 200 telephoto, Vivitar 75-260 zoom, Vivitar doubler, flash & tripod. $400. Rick, Ext. 7585 or 475-7736.

STEEL GUITAR - w/case, Ovation, excel cond. Asking $200. George, 929-6009 after 3 p.m.

BED - full size antique French Victorian bed, walnut, $1,200; Griffith console piano, $950; Lamps & bric-a-brac. 472-0509.

ANDERSON BAY WINDOW - casement, 6'9"w x 4'2"h, never used, w/screens. $450. 325-0609 after 6.

WOOD - approx. one cord, $70; Tech photography books, Densitometer, assorted child's games. Ext. 7772.

PEREGO CARRIAGE - playpen; walker; mobile; balloon lamp; double dresser w/crib; shade/sliding door, all excel. 286-2445.

YOUNG GERBILS - cuddly, friendly, little creatures, good pets, not much work. 25¢ ea. Lois, Ext. 2921.

BED RAILS - $6; changing table, $6; crib mattress, $15; high chair, $5. Paul, Ext. 4156.

BABY CARRIER - Gerry cuddler (newborn to 5 mos.) $3.50; Popular Mechanics Magazine (1957-1974) compl. Dennis, Ext. 4259 or 736-2534 eves.

SKI BINDINGS - Tyrolia Jr. $10. new in box. Frank, Ext. 3898.

BOY'S CLOTHING - soccer shoes, size 5, two slacks, size 14, two blazers. $25 will buy the lot. Ext. 2914 or 286-3742 wknds and eves.

OAK WOOD - aged, approx. cord to cord and a half, $100. 281-2289 after 5 p.m. Tues. & Thurs.

RIFLE - 30.06 Mauser 98 action, unfired, new condition, not military firearm, $150. John, Ext. 4680.

MINK COAT - natural wild mink, size 14, full length, sacrifice, $700. 472-0509.

PANASONIC TV - color, 19", $100; FM/AM radio cassette recorder, $30; men's, kid's bicycles. Ext. 3073.

OIL TANK - 275 gal, upright w/fittings./ $55. Bill, Ext. 2906 or 929-6189.

EXERCISE BICYCLE - Schwinn, new, 1980, hardly used, gold. $150. Ext. 2416 or 265-5218.

REFRIGERATOR/FREEZER - Admiral, self defrosting, 22 cu. ft., side-by-side, 7 yr, $105; Sears gas dryer, 5 yr, $85. Jack, Ext. 3153.

FIREWOOD - 1/2 cord hardwood cut short for stoves, some split, $70. Ext. 7167 or 924-4058 after 5 p.m.

SNOW TIRES - (2) H78-14, new cond, asking $50 for pair; 20 gal glass lined water tank, make offer. 281-7200 after 5 p.m.

ELECTRIC HEATER - wall hung or free stand, red w/brass trim; logs light. $25; above ground pool, 4x24, filter, vac, ladder, access, $100; Genie elec garage opener, $100. 878-8933.

FREEZER - GE upright, no frost, 16 cu. ft., excel cond, white, lockable. $150. Ext. 2611 or 751-3702.

Please see supplement for ads that do not appear on this page.

SUPPLEMENT

Volume 34 - Number 47

December 5, 1980

WOOD STOVE - Fisher, grand PA model, air tight, largest one they make, works great, cost $600, selling for $350; utility trailer, 4x8 for rear of 3/4 ton pickup, heavy duty 10-ply tires, 2 spares. 286-0474 after 5 p.m.

LIVING ROOM - sold separately or as a unit; 3 tables, 3 chairs, sofa, all in mint cond. Ext. 2065.

CORDS OF WOOD - oak, cherry, maple, seasoned 2 yrs. $115 delivered. Ext. 3439 or 878-0897.

WATER TANK - 30 gal, expo line w/air volume control & pressure gauge, $20; Micromet feeder #2, calgon with brass fittings, $15; 1/2 hp shallow well pump & motor rapidation champion with elec switch, $35. 475-2842.

PENTAX SYSTEM 10 - complete 110 outfit w/-lenses, motorwind, filters & flash, all new; TI59 calculator with printer. Ext. 2482 or 732-0974.

GENERATOR - Generac, new 1400 watts, $250; Airens snow blower, 8 hp, chains and elec start, best offer. 921-6411.

PIANO - Yamaha studio upright, walnut, excel cond. Asking $2200. Ext. 3915 or 744-5375.

COUCH - brand new, contemporary style, must sell, $350; paneled stereo unit w/elec fireplace built in, brand new, a steal, $300. 724-6931.

SPEAKERS - Dynaco A-35. $150. Pete, Ext. 3292 or 581-1773.

SKI BOOTS - men's 8½, new, Le Trappeur, black plastic. $40. Ext. 4727.

STEREO - top rated Zenith compact w/turntable, AM/FM receiver, cassette recorder, excel cond, must sell. $300. Cara, 286-8528.

REFRIGERATOR - Kelvinator, 12 cu. ft.; air cond, 5000 BTU; both work well. $40 ea. Ext. 7679.

SKI RACKS - (1) cartop, seldom used, (1) trunk, never used. $30 ea. Greg, Ext. 7960.

CHILDREN'S BOOTS - for snow or rain, size 1, excel cond, $2 and $1; pedal car, good cond, $15 or best offer. S. Spark, Ext. 4111.

GLASS TOP - for coffee table, 22"x52"x¼" thk, bevelled edges, no nicks or scratches. $10. Ext. 4701.

AIR COMPRESSOR - 2 cyl, unloader, $50; stainless lab oven, $50. Ext. 4058 or 286-0436.

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 Rent

PT. JEFF VILLAGE - 3 bdrm ranch, l/r, formal d/r, fam rm w/fp, lg deck, eik, fin. bsmt, completely furnished. $650/mo. plus util. Two year lease desired; will store furniture if tenant wishes. Ext. 4074 or 928-0829 after 3 p.m.

PATCHOGUE VILLAGE - 2 bdrm apt., garage, fenced yard, near shopping, etc. 289-0012.

E. PATCHOGUE - 3 bdrm. furn. house, gas heat, $250/mo. plus util. Feb. 1 - June 30, 1981. J. Olson, Ext. 3382 or 289-8629 after 7 p.m.

BLUE POINT - house to share, 4 bdrms, 2 baths, non-smoker. $150 plus one half utilities. 363-2736.

HOLTSVILLE - 6 rm, 2 bdrm condominium, washer, dryer, a/c, pool, gas, off Expressway. $400/mo. 689-8626.

BELLE TERRE - 3 bdrms, 2 baths, furnished, available Jan. 1. 928-0281 after 6 p.m.

PORT JEFF STATION - 3 bdrm apt, L/R, eik, full kitchen, full bath, basement, gas heat, panelled, a/c, washer & dryer, garage. $425 plus util. Ext. 4094 or 751-6575 eves.

PORT JEFF STATION - 1 bdrm apt, L/R, eik, full kitchen, full bath, panelled, sep. entrance. $300 plus util. Ext. 4094 or 751-6575 eves.

For Sale

MEDFORD - 1/3 acre, Cape, 4-5 bdrm, 2 bath, den w/fp, l/r w/wood stove, large eik, formal d/r, 18x36 in ground pool. $43,900. Jack, Ext. 4254 or 289-6708.

RIDGE - Townhouse/Ranch, 2 bdrms, 5 appliances, a/c, w/w, 2½ mi. from BNL, excel cond. $24,500. or rent $330/mo. avail. Jan. 1st. 821-0794 after 6 p.m.

WESTHAMPTON AREA - mobile home 12'x60', 2 bdrms, eik, stove, refrig, washer/dryer, laundry rm, 2 tool sheds, porch, patio, wooded landscaped plot. $11,000. 698-2501.

CENTER MORICHES - M/D on 2½ acres, residential and business w/200' waterfront, L/R w/fp, lg ctry kitchen, 4 bdrms, 2 baths, attached apt w/L/R & fp, bdrm, bath & kitchen. 878-0642.

Wanted

BUSINESS ASSOCIATES - flexible hrs. Excel income potential, no investment required. Call Mr. B. after 7:30 p.m. 698-5861.

MEN'S DESK - student's desk; bookcase; china; chairs; shelves; lamps; toaster-oven. 924-4991.

STOVE - coal burning fireplace insert, reasonable price. Jerry, Ext. 2934 or 744-2816.

PICKUP TRUCK - a/t, small V8 or V6, sound cab & frame, engine & bed; cond, and age unimportant. Bob, Ext. 3565.

WASHER - portable, any brands, good cond, reasonable price. 924-0581.

JIGSAW - bandsaw, sander, table saw and other shop equip; am/fm portable radio, reasonable. Bob, Ext. 3565.

VOLTAGE REGULATOR - for 283 V8 Chevy. Cheap. Frank, Ext. 3898.

TEMPORARY HOME - for cat while owner overseas, 6 months from Dec. 11, expenses paid. 727-8631.

PERSONS INTERESTED - in skiing either Hunter Mt. or Berkshire East. For info call Bea, Ext. 3571.

PIANO - upright, good cond. for beginner's use. Ext. 2959 or 751-1063.

ANYONE INTERESTED - in taking Calculus II SCCC course on site. Joe, Ext. 7961.

1971-74 Vega Body - I have engine and trans. Duke, 289-3586.

DRUM CYMBALS - good cond, 14" to 16" in dia. Dave, 281-8957 anytime from 3:00 to 10:00 p.m.

LATHE - small metal lathe; also drill press. Jerry, Ext. 2934 or 744-2816.

MATURE PERSON - to clean on weekends, salary negotiable. Must have refs, Ext. 3480 days. 473-8717 eves after 5:30.

MATURE WOMAN - to sit for 4 yr old in Mt. Sinai, M-F, 8-5, refs required. Salary open. Ext. 3480 days or 473-8717 eves.

SEAT BELTS - Toyota, 2 pr, rear seat, non-retracting. Dennis, Ext. 4259 or 736-2534 after 6 p.m.

RIMS — (2) 15" Ford, no tires. 281-8306.

RADIO/TV - Evelyn or Meir, 345-3116 after 7 p.m.

HOUSE SITTER - December 22 to January 8. Call anytime. Claire, 281-2002.

SNOW TIRES - G78-15 or H78-15, used. Bill, Ext. 2906 or 929-6189.

MOOSEHEAD - in any condition. Chuck, Ext. 4474/4481.

WINTER CLOTHES - and blankets for earthquake victims in Italy. Lou DiCarlo, Bldg T-87, Ext. 2302.

MOTORCYCLES - bent or broken, any age or cond. Kevin, 281-8031.

HOME - adorable 6 wk. old male kitten, blk, white paws, litter trained. Ext. 2959 or 751-8647.

1967 to 1969 - Camaro cars or parts, anything. 475-1469 eves.

TOAST-R-OVEN - baby's stroller; bookshelves; vacuum cleaner; men's bike; step-stool; desk; D/R chairs; ironing board. 924-4991.

MOTORCYCLE SEAT - or luggage rack for 71 Honda CB or SL 350. Brian, Ext. 4990.

TRAINS - Lionel, any "O" gauge or "O27" gauge cars, track, and equip. Frank, Ext. 3120.

DRESS FORM - must have stand, professional or home model. Daly, 345-3236.

VEGA 1974 BODY - I have engine & trans. Duke, Ext. 2957 or 289-3586.

PUPPY - Golden Labrador, Husky, Malemute or St. Bernard, reasonable. Bob, Ext. 4857 or 744-3289

HUBCAPS - pr. for 1971 Toyota Corolla, 12" rim. George, Ext. 4812 or 744-3289.

HOME - professional couple desires to rent furnished home. Ext. 3453 or 473-3604 after 6 p.m.

SEAT BELTS - Toyota, 2 pr. rear seat, non-retracting. Dennis, Ext. 4259 or 736-2534 after 6 p.m.

ALUMINUM - or steel support wall for above ground pool, cheap. Dan, Ext. 2012.

RIDE - need a ride or rider to Boston on Thanksgiving wkend. Leave Wednesday, back Sunday. If interested please call S. Ghoshroy, Ext. 4641.

Car Pools

SETAUKET - driver needed to complete 4 person car pool. Dave, Ext. 2943 or Mano. Ext. 2429.

HUNTINGTON/GREENLAWN - start or join existing car pool. Mark, Ext. 3258.

WAVERLY LAKESIDE APTS - Patchogue, would like to start car pool. Terri, Ext. 2484 or 289-9560.

FARMINGVILLE - daily or occasional - 8:30 to 5:00 p.m. Walt Palais, Ext. 2913/2907 or 698-0576.

CORAM - driver wanted to join established car pool from La Bonne Vie Apts. Dennis, Ext. 4259 or 736-2534 eves.

COMMACK - wish to car pool w/one or two others. Conrad, Ext. 2810.

Services

Services are listed as a courtesy to BNL employees. They are neither screened nor recommended by the *Bulletin*.

COAT LININGS - hems, alterations, pillows. Sharon, 878-2591 days or eves.

CANVAS WORK - all types, all work guaranteed. Ken. 654-1650

CARPETS INSTALLED - repaired, quick dependable service. Free estimates. Jim, 821-0187.

PROFESSIONAL CAR CLEANER - wax, compound, motors steam cleaned, interiors shampooed, appt. only. Ken, 475-1469 eves.

PHOTOGRAPHER - Christmas special color portrait pkg., 16 pieces, $29.95. Jerry, Ext. 7611 or 928-2582.

TIRES - new, used, repairs, service. Fred Usack, Lunchtime, Ext. 4798.

LIMO SERVICES - Luxury chauffered driven, for weddings, prom, all occasions. 698-2286 or 698-2266.

KNIT SWEATERS - and velour tops, men & women's. John, Ext. 2485 or 472-4184.

BABYSITTER - Teenager, reliable, experienced. Call anytime after 3 p.m., Gina, 929-4753.

YARDS & CELLARS CLEANED - tree service, pruning, etc. Fir & spruce evergreens 20" to 46" tall. U-dig. 2/$7. 727-1617.

HELEN'S HATS - $7. 878-4979.

FIRESIDE CHIMNEY SWEEPS - fireplaces, wood, coal & oil flues. Dustless removal, Lab discount. Insured. Mike, 584-6425.

PROFESSIONAL TYPING - resumes, reports, $2./page. Ext. 2484.

FIREWOOD SPLIT - seasoned oak 4'x16'x18" $110. Delivered. 924-4284 or 924-3919.

HOUSECLEANING - babysitting or homemaker for Motherless home. Mon. thru Sun. 5 min. from Lab. 924-3755.

FLUTE/CLARINET/SAXOPHONE - professional instruction and repair, your home or my studio. 399-3381 eves.

TILE WORK - cement, terrazzo, tile; reasonable rates. Don, 281-8848 or John, Ext. 3292.

CARPETS INSTALLED - repaired; quick, dependable service; free estimates. Jim, 821-0187.

BABYSITTING - my home, we have 3 yr. old playmate, close to Lab. 924-8297.

PILLOWS - patchwork by Un-Hee. 736-2534.

INTERIOR PAINTING — Custom workmanship, top quality materials, insured. Bob, 289-7657 after 6 p.m.

Classified Ad Policy

Deadline is 4:30 p.m. Friday for publication Friday of the following week.

1. The Brookhaven Bulletin's classified section may be used only by active and retired Laboratory employees.
2. All items for sale or rent must be the advertiser's property.
3. Ads for material acquired for resale in association with a full or part-time business cannot be accepted.
4. Firearms offered for sale or trade may not be brought on site.
5. Ads not carried because of space restrictions will be held for publication in the next issue.
6. Ads are run only once and must be resubmitted if they are to be repeated. One ad per person per week.
7. **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, Building 134.**

☐ For Sale: Autos & Auto Supplies
☐ For Sale: Boats & Marine Supplies
☐ For Sale: Miscellaneous
☐ Car Pools
☐ Lost & Found
☐ Services
☐ Wanted

Please print your ad below in 15 words or less using one word per block. Include name and phone number to call.

Note: The following must be completed for your ad to appear.

NAME (Please Print).....

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

Send to: Brookhaven Bulletin, Building 134 (Ext. 2345)