

Sewage Under Glass In Newark Street

Last Tuesday on Amsterdam Street in an industrial section of Newark, Jack Fontana of DAS, climbed down into a 12-foot trench and supervised the connection of two five-foot sections of glass polymer sewer pipe to existing sewer lines, while Barry Galen was busy with equipment overhead. The flow of sewage was shut off for a few hours while the old broken pipe was removed and the 320 pound sections of glass polymer pipe developed at Brookhaven were inserted.

Fontana, a chemist, and Galen, a technician, are part of the team which also includes George Arnold and Jack Amaro, who are involved in making the pipe from start to finish.

The services of the DAS pair were required because of their familiarity with the pipe. With the assistance of equipment and crew supplied by the city, they slogged through the ground water and tried to ignore the strong smell of nitrobenzene wafting from the trench.

This is a somewhat different version of the sewer pipe installed at Centerport two years ago which, incidentally, appears to be holding up well. The Newark pipe is larger and, as it will carry acidic industrial waste, will be a more severe test of the glass pipe. The waste glass for the project includes about five percent organic materials in its composition and was provided from municipal refuse by the U.S. Bureau of Mines from its resource recovery plant in College Park, Maryland.

The New Jersey installation is a cooperative venture between Teledyne National, a private firm specializing in recovery of resources from municipal solid waste, and the city of Newark which is investigating the feasibility of recycling waste glass, and the Process Technology section in DAS, headed by Meyer Steinberg.

Over a year ago, Teledyne sent Robert Rayfiel, a chemical engineer, to study Brookhaven experiments, with an eye to developing a practical process for the man-

(Continued on page 2)



Jack Fontana (in light jacket) down in the trench as first section of the glass pipe goes into place.



Barry Galen places joint seal on the pipe before it is installed in the line.



Christmas Memories

Chestnuts roasting by the fire ... The crunch of the milkman's sleigh runners on the snow... That was the way of Christmas when I was a boy. Simple - beautiful - meaningful and full of pleasant memories.

I remember the joy of shopping a few weeks before Christmas. Going to the 5 & 10-cent store to look at all the wonders on display; sometimes I would be able to talk my Dad out of fifty cents to buy a gift for Mother. I didn't need more than that for my shopping, because all of the big presents had been made in school a long time ago.

Dad was going to get a calendar with a beautiful mounting. The calendar pad was supplied by the teacher - the mounting was a piece of oak tag supplied by the school and decorated by me. Mom would get a pin cushion that was also a work of art. That was one of the big projects.

I didn't have to worry about the present for my teacher - Mom took care of buying the handkerchief that was presented each year. From the school, I knew I would get a small box of hard candy that had a jolly

Santa on the front.

Sometimes, when I felt daring, I would wait for a good chance and then look in all the closets to see if I could guess which wrapped package was for me, and what it could be.

It seems to me that it always snowed on Christmas Eve. Usually I was shunted off to bed at an early hour with the admonition about not going downstairs until I was given permission in the morning.

Somehow or other, when I woke and was allowed to go downstairs, the TREE had arrived, magically trimmed, and full of all the old ornaments that I loved so well. Dad would usually have to fiddle a bit with the lights to get them all working at once, but that was while I was searching under the tree for packages that had my name on them.

Of course, if it was a good year, in the back of the tree would be something that was too big to wrap in paper. Perhaps a sleigh, or even a new wagon! But after the big presents, the most fun was in the stocking that was tacked to the fireplace mantle.

No knitted wool production was this stocking. It was one of my regular cotton

(Continued on page 2)



Inspecting the pipes before they are installed are (from left) Barry Galen, Bureau of Mines officials Howard Heginbathan and Harry Makar, Robert Rayfiel from Teledyne, Gary Liss, Principal Engineer, City of Newark and Jack Fontana.

Senator Supports Solar Institute Here

U.S. Senator James L. Buckley will visit Brookhaven today, on a trip to Suffolk County, in support of a proposed Solar Energy Research Institute on the Laboratory site. The Institute, which will have an estimated \$50,000,000 budget and 1000 employees by 1980, will have a projected \$1,000,000,000 a year in spin-off industries by 1990.

According to latest reports, the Laboratory site is the location preferred by the Long Island consortium of businessmen, educators and others for the proposed solar institute. Several sites on Long Island have been considered but because of Brookhaven's existing facilities and scientific expertise, the Laboratory is the front runner. Support for the Lab site, as the first choice of New York State, is being sought from state officials. It is expected that site proposals will be requested by ERDA next month.

Senator Buckley will obtain briefings from scientific, technical, industrial, business and labor leaders during his visit to the county, starting at 8:30 a.m. at the Polytechnic Institute of New York.

Besides Laboratory Director George Vineyard, the participants are expected to include Dr. George Bugliarello, President, Polytechnic Institute of New York; Peter Brennan, former Secretary of Labor, and President of the Building and Construction Trades Council of Greater New York; Dr. T. Alexander Pond, Acting President, SUNY at Stony Brook; Arthur Hug, Jr., Chairman of the Board, Long Island Trust Co.; John Mockovciak, Jr., Deputy Director of Energy Programs, Grumman Aerospace Corp.; Arthur Rosoff, Assistant to the President for Industry Liaison, Polytechnic Institute of New York; Dr. John E. Mock, Senior Technical Advisor to the Assistant Administrator for Solar Geothermal and Advanced Energy Systems, ERDA and Arthur Bergman, Deputy County Executive, Suffolk County.



Senator James L. Buckley

After a tour of the Lab site the group will be guests of the Laboratory for lunch, and at 12:45 p.m. Senator Buckley will hold a press conference in Berkner Hall.

Holiday Food Service

The Vended Food Service in Building 912 will be open at all times, and will be serviced regularly throughout the Christmas and New Year's Holidays.

The Center Club Snack and Beverage Bar will be closed on Wednesday, Thursday and Friday for two weeks, December 24, 25, 26, 31, January 1 and 2.

The Cafeteria will close at 2 p.m. December 24 and will be closed all day on December 25 and January 1.

Next Bulletin January 9

Due to the Christmas and New Year holidays, the *Brookhaven Bulletin* will not be published on December 26 and January 2. Happy Holidays to one and all.

Coffee Truck Service

The Coffee Truck will not make its rounds on Wednesday, December 24, due to the holiday.

Baroque Music Featured In Third BERA Concert

The third BERA concert of the season will feature flutist Samuel Baron, oboist Ronald Roseman and harpsichordist Peter Wolf in a program of music by Bach, Telemann, Couperin and other baroque composers at Berkner Hall, 8:30 p.m. on January 7. The soloists are currently on the faculty of the State University of New York at Stony Brook.

Samuel Baron is one of the foremost American flutists now appearing before the public. He was one of the founding members of the New York Woodwind Quintet. Since 1965 he has been the flute soloist with the world renowned Bach Aria Group. He has recorded a wide range of flute repertoire from the baroque to the modern.

Ronald Roseman was appointed co-principal oboist of the New York Philharmonic Orchestra for the 1973-74 season and again played first oboe with them on their recent European tour. A member of the New York Woodwind Quintet since 1961, he has toured the U.S.A., South America, Europe, the USSR and Asia. Roseman has toured the Far East as soloist for the State Department and has played with such groups as the Casals Festival Orchestra, the Symphony of the Air and Gunther Schuller's Twentieth Century Innovations.

After beginning as a physics major, Peter Wolf received his A.B. *magna cum laude* in music from Harvard College in 1965. He then spent a year in the Netherlands studying harpsichord on a Fulbright-Hays Fellowship under the Dutch performer and scholar Gustav Leonhardt. He continued his study of the harpsichord under the American harpsichordist-musicologist Ralph Kirkpatrick while enrolled in a doctoral program in music history at Yale University. He received the M.Phil. degree from Yale in 1969 and is in the final stages of preparing a dissertation on a late opera of Jean-Philippe Rameau to qualify for the Ph.D. He has spent two summers working as an apprentice harpsichord maker in the Cambridge, Massachusetts shop of William Dowd.

Admission for adults is \$3.50; for students with identification, and persons over 65, \$1.75; and \$1.00 for persons under 18.

Medical Benefits Improve

Effective January 1, 1976, various present exclusions and maximum payment limitations for basic hospital, surgical and other medical expenses, relating to normal pregnancy and maternity, will be discontinued. As of that date, maternity-related expenses for hospital room and board, hospital services and supplies, in-hospital doctor visits and diagnostic x-ray and laboratory tests will be paid for under the AUI Medical Insurance plan on the same basis as other illness or injury. The basic surgical payment benefits for maternity cases will be made comparable to the rates paid under our present surgical schedule (normal child delivery increased from \$112.50 to \$245 and Caesarean Section delivery from \$225 to \$350.).

In addition, AUI medical insurance for dependent newborn children will provide basic hospital and surgical benefits, in addition to the present Major Medical coverage, from the time of birth, rather than from 14 days of age.

Any questions regarding these benefit changes should be referred to Personnel Services, Ext. 2877.

Arrivals & Departures

Arrivals

James E. Bullis, Jr. Medical
Jadranka Delcet App. Science
James G. Guppy App. Science
Nikola Kovac App. Science
Joan A. Lemaire Plant Engr.

Departures

Richard E. Giovanelli Plant Engr.

New Year's Eve Party

Anyone who would like to attend the New Year's Eve celebration in the apartment area should contact Rosemary Jewett, Ext. 3089, or Ruth Dimmler, 751-6342, to make reservations.



Samuel Baron



Ronald Roseman



Peter Wolf

Glass Pipe

(Cont'd)

ufacture of the Glass Polymer Composite. The 12-inch pipe is competitive in price, running just a little less than reinforced concrete and is cheaper than vitrified clay which the city of Newark is now using in some of its sewers.

Newark hopes to build a glass recycling plant and may make its own glass sewer pipe. The pipe just installed will be inspected every couple of months to see how it stands the test. It is not necessary to dig up the pipe again to determine this. A TV camera is sent along the sewer lines and thus any problems in the area can be detected.

If additional funding is forthcoming to continue the development of the pipe, Fontana says they intend to try using centrifugal molding procedures, rather than the static mold now in use. Also, pipes of reduced wall thickness will be developed to reduce the cost and make the pipes even more economically desirable.

Another idea crackling around in this creative group is to make pipe out of glass, or possibly polymer concrete, for geothermal applications. In Boise, Idaho, geothermal wells have been used to heat homes with hot water since about 1895. The wooden pipes which conduct the water are now disintegrating. The Brookhaven group expects that some version of their pipe will next be lodged in this western city.

Holiday Energy Saving

With the advent of the holiday season and two long weekends coming up, employees are reminded that thermostats should be turned down to 60 degrees and all unessential power and lights should be turned off when leaving the Laboratory.

Buying new Christmas tree lights? You will save electricity by selecting the miniature or midget bulbs which use only 18 watts per set.

Memories

(Cont'd)

knee-length white or black ones specially chosen by me to hold the most surprises.

It was unthinkable to borrow a stocking from someone else for this occasion. That would be cheating, and might result in a lump of coal for a gift.

The stocking always contained a few standard things as well as a few surprises. There was always an orange either in the toe or the heel. Oranges in winter were expensive and rare, and to have one all to myself was a real treat. The tangerine was always a pleasant taste treat, as were the apple and the walnuts. The little wooden toys or the whistle or hard candy or pen knife was the surprise that was eagerly sought after.

Under the tree would always be the new socks and underwear as well as the shirt and knickers or short pants. It was hard at times to be properly appreciative of these gifts while my mind was on the search for a toy, a game, or that special BIG present that I had tried so hard to deserve.

At one point all action would stop while Sister sat at the piano and we all stood around and sang Silent Night, Oh Tannenbaum, and Jingle Bells. I never have been able to recall much about what other members of the family got for gifts, for I was always too busy with my own presents to care.

It was a strain on my religious conviction to have to leave all of this splendor to join the family in going to church on Christmas morning. I had already gotten my candy and a gift from my Sunday School teacher, and to sit in a pew for an hour without fidgeting was a terrible task.

The day that my mother would announce that the tree would have to be taken down was always a bad one. Sometimes she would give in and leave it a while longer, but always it was too soon for me. The only compensation was the privilege of burning it in the road in front of the house.

If all of us kids were lucky, we would be able to save a few trees and burn them all in one grand bonfire. If you could stand the tree up in the snow it made a spectacular show. If you timed it just right, you could grab the butt of the tree just as the flames were dying out and revolve it in such a way as to get all of the unburned parts to flare up again.

Eventually my mother would insist that I empty the remnants of the candy and nuts out of my now sticky and dirty stocking, so that it could be washed and placed back in service. That was generally the end of the Christmas season, and the start of the winter doldrums that would end with the anticipation of a birthday or of vacation.

For a small boy, Christmas is a real joy, unmarred by thoughts of overdrawn accounts and wrong choices of gifts. When he grows up, the spirit of past Christmases will always be in the back of his mind as he sits and watches his own children go through the wonderful, mystical magic of Christmas.

— Carl Thien

December Service Awards

The following employees will receive service awards during the month of December, 1975.

Twenty-Five Years

John M. Dioguardo Accelerator
David A. Kassner Mechanical Engr.

Twenty Years

William F. Eberspacher Plant Engr.
Nandor Enlund Plant Engr.
Michael Figluizzi Plant Engr.
Raymond S. Gawlowski Plant Engr.
Richard E. Hildenbrand Accelerator
Richard C. Larsen Physics

Ten Years

Walter E. Jahnig Applied Science
Robert Kowalski Accelerator
Chester B. Reed Plant Engr.
John P. Shanley Medical
Kenneth C. Ward Plant Engr.

CREF Values

1975			
January	\$30.67	February	\$32.80
March	33.77	April	36.12
May	38.07	June	39.88
July	36.81	August	35.86
September	34.31	October	35.89

November \$36.31



Francis G. Painter

Susanna R. Solovey



Harriot L. Barry

Salvatore J. Modesto



Benjamin A. Guidone

Charles P. Baker



James A. Hallock

John J. Floyd

December 31 Retirees

Francis G. Painter, a Firefighter in the Health Physics & Safety Division and a Lab employee since March 21, 1947, is retiring.

Susanna R. Solovey, an Executive Secretary in the Physics Department and a Lab employee since October 8, 1960, is retiring.

Harriot L. Barry, a Secretary in Biology and a Lab employee since March 31, 1964, is retiring.

Salvatore J. Modesto, a Painter in the Plant Engineering Division and a Lab employee since June 20, 1960, is retiring.

Benjamin A. Guidone, a Stores Clerk in Supply and Materiel and a Lab employee since March 24, 1947, is retiring.

Charles P. Baker, a Physicist in the Physics Department and a Lab employee since August 19, 1949, is retiring.

James A. Hallock, a Technical Specialist in Instrumentation and a Lab employee since July 19, 1948, is retiring.

John J. Floyd, a Physicist in the Reactor Division and a Lab employee since March 1, 1947, is retiring.

ERDA Retiree



Sydney Saxon, Assistant to the Manager of ERDA's Brookhaven Area Office, is retiring after 30 years of federal government service. Mr. Saxon came to the Brookhaven Area Office in 1970.

BROOKHAVEN BULLETIN

Published Weekly for the Employees of Brookhaven National Laboratory

Bernice Petersen, Editor

Doug Humphrey, Photo-Journalist

Carol Goldstein, Copy Preparation

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

Carl R. Thien, Public Relations Officer

A Delectable Display

If you walk into the lobby of the Medical Department, you will be reminded of an old-fashioned Christmas.

The dietary department has created a child's dream-come-true gingerbread house surrounded by a fanciful Christmas scene made of edible materials.

A horn of plenty spills out the fruits of the cookie sheet, while two smiling chefs made of hard rolls look on. Three cookie cats cuddle up nearby. They represent the feline friends of Norma Gillespie, the dietician who got the idea of making an all-food display. An elegant looking tree, inside a candy cane pot and crowned with dried flowers, is constructed of wooden branches filled with jolly santas and decorated cookies. Two wreaths, one of straw and the other of bread, hang amid an array of spicy gingerbread men.

Norma talked her idea over with Mary Cox, an assistant dietician, and together with the dietary staff, they spent a week pouring over back issues of magazines, clipping out pictures and instructions and coming up with unusual ideas.

Walter Bernatzky, a cook, along with the two women and the staff spent four days executing the design after cookie cutters had been scrounged up and the ingredients purchased.

There have been many requests for parts of the display after it is taken down, but its creators have a different idea. They plan to crumble it up and give it to the birds on an especially cold, winter day.

— Carol Goldstein

BERA Election Candidates

The BERA Nominating Committee has selected the following slate of candidates for the 1976 BERA Executive Board election.

Robert A. Brown - Technical Specialist, Medical Department.

BERA activities: Softball, volleyball, bowling, basketball and football.

John A. Elmore - Assistant Scientist, Medical Department.

BERA activities: Tennis, badminton, softball, volleyball and cycling.

Helen M. Keeley - Secretary, Accelerator Department.

BERA activities: Bowling and judo. Helen has also been very active in selling tickets for various BERA functions.

C. Lewis Sneed - Associate Physicist, Department of Applied Science.

BERA activities: Past Chairman of the Basketball and Volleyball Leagues. Also participated in football, soccer and golf.

The election is scheduled to begin on Monday, January 19 and extend through Friday, January 23. Voting will be done in person at designated on-site buildings. A complete list of voting stations will be published in the *Brookhaven Bulletin* on January 9 and January 16.

The next **Weekly Calendar** will cover the week of January 5, 1976. Notices for the Calendar should be in the Bulletin office by 9 a.m. on Monday, December 22.

Public Sale Of Motor Vehicles

Fourteen (14) vehicles, located at Warehouse T-87, will be available for Public Sale.

Inspection will be permitted from December 22 through January 5, during the hours of 9 a.m. to 4 p.m., except Saturday and Sunday.

Bids will be opened on January 7, 1976, at General Services Administration, Business Service Center Bid Room, 26 Federal Plaza, New York, N.Y.

This will be an informal competitive bidding. Bid forms may be obtained at Buildings 87 and 211. For further details, please call Ext. 2302 or 2977.

To Make Glad The Heart Of Childhood



Children who attend the on-site nursery school are entranced by Vicky Diamond, a children's entertainer, at their Christmas party last Sunday in the Recreation Building - and are themselves entrancing. — photos by Bussiere

Film Service Specials

What better way to preserve those precious moments of Christmas than to have pictures?

On December 23 and 31, the BERA Sales & Service Office will be selling at cost film you will need for all your holiday picture taking.

Specials:

C126.12	\$1.06
C126.20	\$1.33
K135.20	\$1.53
K135.36	\$2.17

The Sales Office is open from 7:30 a.m. to 2:30 p.m. and the telephone extension 3347. Come in and take advantage of this sales offer.

United Way Report 1 — Pledges Increased 105%

An increase of 105% was the good news received from Barney McAlary, campaign chairman - an increase accomplished by December 12, just seven working days since beginning this year's United Way drive.

"Last year, with a slightly lower employee population," says McAlary, "participation totaled only 4½%; this year thus far we've reached 10%." He reports that over two-thirds of the Laboratory's regular contributors have already responded, with an average pledge increase of 7%, giving \$8,756. The 140 new contributors have added \$6,414 for a total pledge to date of \$15,170. And one very generous new contributor, the payroll supervisor reports, has set a record - a check for \$1,000!

For those employees who've misplaced or didn't receive pledge cards, the one ap-

Pool & Gym Schedule

Week beginning 12/22/75
12/22 and 12/23 - Normal schedule
12/24 Open 11:30 - 1:30
" Closed Evening hours
12/25 Closed
12/26 Closed
12/27 and 12/28 - Normal schedule

Week beginning 12/29/75
12/29 and 12/30 - Normal schedule
12/31 Open 11:30 - 1:30
" Closed Evening hours
1/1/76 Closed
1/2 Closed
1/3 and 1/4 - Normal schedule

Week beginning 1/5/76
Resume normal schedule

pearing in today's *Bulletin* may be clipped and sent to Olga Vario, Fiscal Division (Bldg. 134 J). Payroll deduction - which, incidentally, can cover any number of months specified by the employee - is a convenient way to give. But a single sum, even a dollar, is just as welcome. And of each dollar given, because 15,000 volunteers work for United Way, almost 90¢ goes for agency services. Employees who wish to pledge their total contribution to a particular agency or agencies can so indicate on their pledge cards or checks.

"Rather than having a set *dollar* goal," says McAlary, "this year we're emphasizing a *people* goal. The size of the contribution is secondary to the giving. We're very hopeful that Report 2 will considerably increase our current 10% participation."

Participate in the United Way ... it'll add a little extra warm glow to your holiday spirit.

**ASSOCIATED UNIVERSITIES, INC.
BROOKHAVEN NATIONAL LABORATORY**

*** * UNITED WAY PLEDGE DRIVE FOR 1976 * ***

In consideration of the many health, welfare and character building services supported by the United Way of Nassau-Suffolk, I authorize the following deduction from my pay each pay period.

TO BE DEDUCTED PER PAY PERIOD								
PER	WEEK	<input type="checkbox"/>	.25¢	.50¢	\$1.00	\$1.50	\$2.50	\$5.00
	MONTH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER.....								
DATE DEDUCTION TO BEGIN				DATE TO END				
Date				LIFE NO.				
Signature								

* * Please return in enclosed envelope to Payroll Supervisor, 37 Brookhaven Avenue * *

Bowling News

Cathy Van Noy

Pink League

The Pinsplitters are still holding first place with the Spares a close second. High games were bowled by M. Stoekel 187 and 232 gross for the pot. S. Vanderkolk 177 and L. Boyd 188-519 scratch.

Red League

The Red League is starting to close the gap on first place. Position night should prove interesting 200 games for the evening were R. Nelson 212 and K. Riker 200.

Green League

The Blue Jays moved into first place by taking 11 from the Anachems. Bill Crockett had a nice night with a 232-599 scratch and a 704 gross series.

The Got-A-Hit-Ums dropped to second by losing 11 to the Old Timers. The Soc-Et-Tuums moved into third by taking 11 from the Charley Browns. 200 games were W. Crockett 232 and R. Lopez 209.

Black N Blue League

High games for December 3rd were Nate Carter 209, Diane Schug 182 and Audrey Bangel 161. Pots were by Nate Carter 242 and Diane Schug 242 gross games. High for December 10 was Dick Murgatroyd 219, R. Taylor 216, Pat Lebetshi 191, Debbie Antonio 184, Wilma Erickson 176. Pots were won by Dick Murgatroyd 249 and Pat Lebitshi 245.

Purple and White League

The Sea Gulls were flying high and caught the Flounders tying 23-12. The Brown Bulls are thundering ahead with a 22-13 record and the Streakers are within striking distance with 19-16. High games were Art Lipman 200-550 series and Betty Roche 170-463 series.

Please remember there will be no bowling until the week of January 6, 1976. The BERA Bowling Board wishes all a Happy Holiday and a Healthy and Prosperous New Year.

Volleyball

Mixed League Results - Week of 12/8

Setups	3	Spikers	0
Diamonds	3	Highballs	0
Nuts & Bolts	2	Medicine Ballers	1
Terabits	2	Trolls	1

Mixed League Standings

	W	L
Terabits	10	2
Trolls	9	3
Nuts & Bolts	7	5
Diamonds	7	5
Setups	7	5
Spikers	3	9
Highballs	2	10
Medicine Ballers	3	9

Men's League Results - Week of 12/8

Cool Tools	3	Easy Aces	0
Atom Spikers	3	Circuits	0
Spikers	3	Busters	0

Men's League Standings

	W	L
Spikers	13	2
Cool Tools	12	3
Atom Spikers	8	7
Easy Aces	6	9
Busters	5	10
Circuits	1	14

Soccer

The end of the calendar year finds AGS at the top by two points over Phy-AMD-Inst. The return of Murtagh on December 12 and the usual steady play of Emery, Levine, and Wu combined with the newly acquired striker D. Strongin (two goals) to beat AGS (3-1). In spite of this strong showing, Phy-AMD-Inst were hard pressed and lucky to obtain a tie (1-1) against DAS-Chem-Med. Another defensive error by the latter allowed AGS a win (2-1).

Next games are January 9.
Happy Holidays!

Soccer League Results

	W	L	T	Pts.
AGS	8	3	1	17
Phy-AMD-Inst	5	2	5	15
DAS-Chem-Med	0	8	4	4

Hospitality News

The monthly coffee will be held on Tuesday, January 6, from 9:30 to 11:30 a.m., at the Center. Babysitting will be available. No formal program will be presented.

Classified Advertisements

Placement Notices

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

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

306. TECHNICAL SPECIALIST - BS degree or equivalent in chemistry and experience working with nucleic acids desirable. Medical Department.

307. SCIENCE ASSOCIATE - Interdisciplinary Bachelor's degree or equivalent in economics/mathematics with emphasis in regional planning and environmental studies. Experience in data compilation and analysis desirable. Policy Analysis Group. Department of Applied Science.

308. SYSTEMS ENGINEER - Minimum BS degree or equivalent in civil engineering with experience in energy analyses and public policy. Regional energy studies program. Department of Applied Science.

309. OFFICE SERVICES ASSISTANT - Seeking experience on Redactron and IBM word processing unit. Night shift. Photography and Graphic Arts Division.

310. SECRETARY - Personnel Division.

311. OFFICE SERVICES ASSISTANT - Part-time position. Health Physics & Safety Division.

312. SECRETARY - Medical Department.

313. OFFICE SERVICES ASSISTANT - Medical Department.

314. OFFICE SERVICES ASSISTANT - Proficiency in use of calculating machines and experience with job order cost systems, general ledgers, voucher systems, stock inventories, and procurement activities. Familiarity with preparation of cost information for ADP reporting desirable. Plant Engineering Division.

315. HOSPITAL SERVICES ASSISTANT - Patient care services. Night shift. Medical Department.

316. RESEARCH SERVICES ASSISTANT - Temporary part-time position. Accelerator Department.

Autos & Auto Supplies

74 PINTO - Auto, sb radials, 2300cc, decor group, excel cond, must sell. 298-4089.

67 CADILLAC - Sedan De Ville, ac/ps/pb, auto, stereo, snow tires, very good cond, 70,000 mi. Asking \$850. Ext. 3078.

67 VOLVO - 2 dr, r&h. \$200. Tom, Ext. 3525.

ASSORTED RIMS - O. Booker, Ext. 4719.

2 SNOW TIRES - F78-14, used one season. \$35/pr. Mike Fisher, Ext. 2040, 928-9533 after 6.

74 CHEVY NOVA - Hatchback, auto, excel cond. \$2500. Peter, Ext. 4069, 345-3134 after 6.

65 CHEVY - 1/2 ton pick-up, 70 engine, new trans, battery, shocks, good running cond. Bob, 698-9765.

72 CAPRI - 29,000 mi, radials, 4 spd, good cond. \$1500. Ext. 4173, 472-0739.

72 VW ENGINE - Spanking new, brakes, etc in 68 VW beetle. \$1200. 751-0226.

65 SAAB 96 - Very good running cond, bad body rust, 56,000 mi on eng. 929-4522 after 5.

71 MAVERICK - 6 cyl, 4 dr, auto, r&h, extra rims & snows, one owner, excel cond. \$1250. Lou, Ext. 4605. CAMSHAFT - For 6 cyl Chevy, new, still in carton. \$10. 289-0243.

TIRES - (3) 15"-685; (3) 13"-645, come have a look. 475-0144 after 6.

73 JEEP WAGONEER - V8, 4 dr, pb/ps/ac, tinted glass, luggage rack, deluxe interior & exterior, excel cond, 20,000 mi. Paul, 654-0863 after 6.

2 TIRES - H-78, w/w, good cond. \$15/pr. Bob, Ext. 4551, 289-2159.

66 CHECKER MARATHON - Jumper seats, new tires, just tuned. \$525. Ext. 3688.

74 VEGA GT - Hatchback, A-1 cond, ac, deluxe interior, low mi, 4 spd, radial tires. \$2500, must sell. 588-4703.

2 RIMS - For Amer motors or Fords, 14", new. \$20; 4 hub caps, Amer motors, A-1 cond. \$15. 588-4703.

50 PACKARD - 4 dr sedan, ultramatic, 56,000 mi, orig interior, silver grey, very good running cond. \$1200. 475-1317, 4-6 weekdays.

64 VW BUG - New clutch, brakes, tune-up & more. \$350. 286-1510.

RADIAL SNOW TIRES - 175x14, w/w, mounted on Mercedes rims. \$50/pr. 325-0233.

71 FORD - Station wagon, 10 pass, ps/ac, priced to sell. Ext. 2022, 878-2215.

70 OPEL KADETT - 2 dr sedan, 59,000 mi, 2 new snows, new clutch, radio, good econ trans. Ext. 2942.

74 HONDA 750CC - 5000 mi, 2 helmets, excel cond. \$1950. 475-4903.

68 VW FASTBACK - New muffler & front tires. \$650. E. Gill, Ext. 4725, 473-8716.

TIRES - New, used & recaps, most sizes, extra rims available. Ken, 289-8212, no Lab calls!

73 DUSTER - V8, ps/pb/ac, tinted glass, space saver pack, very good cond. Ext. 2042, 878-0130.

63 DODGE DART - Slant 6, good trans. \$150. Joe Bush, Ext. 4241.

64 DODGE DART - Golden edition, 225 slant 6, excel trans. \$300. Joe Bush, Ext. 4241.

2 SNOW TIRES - Kelly-Springfield radials ER 70-14, like new. \$50. 751-1588.

Boats & Marine Supplies

OUTBOARD MOTOR - 50 hp Mercury, '74, less than 20 hours. 472-1082.

Miscellaneous

STAIR WELL GLIDE - Accommodates 16' of stair, elec chair operated. \$300. Neilson, 688-2048.

FREE GERBILS - 8 weeks old, ideal Christmas present for children. Commerford, Ext. 3618, 281-7547.

DRESSING TABLE - White, hardwood, mirror top, add skirt & stand up mirror & your daughter will love it. \$12. 286-0932.

SKIS - Downhill, poles, boots, size 10. \$50. 286-1510.

ELEC MOTOR - 1/2 hp Westinghouse, 6.2 amps, 1725 rpm, 115 volts. \$50. 286-1510.

SECTIONAL SOFA - 3 piece, comfortable & sturdy but worn, any reasonable offer. 698-6760.

GE ELEC STOVE - 24" white, good cond. \$40. J Barry, Ext. 4421, 286-0204.

COUNTER TOP - Excel cond, white, 1 piece 6 1/2' wide w/std sink cutout, 1 piece 2' wide, 4" back splash. \$20. Dick, Ext. 3860.

WOK - Used twice, best for gas range, cost \$20, sell \$10 including utensils. Rowley, 286-0975.

TICKETS - 4 orchestra seats for "The Royal Family" Brooklyn Academy of Music, Dec 27. \$5 (40% off). Ext. 2032.

POLAROID CAMERA - Color Pack III & carry case. \$20, like new. Frank, Ext. 3357.

POLAROID CAMERA - Square Shooter/timer, like new. \$15. Frank, Ext. 3357.

POLAROID CAMERA - Big Shot, portrait land, new. \$15. Frank, Ext. 3357.

BOY'S CLOTHING - Shirts, size 12-14; bathrobe, winter jacket, at nominal cost. Rowley, 286-0975.

BOY'S BLAZER JACKET - Size 14, grey double knit, cost \$25, sell \$7, perfect cond. Rowley, 286-0975.

ICE SKATES - Men's black figure skates, size 10. \$7. 744-5096 after 4.

SKI CLOTHING - Girl's pants, 10, \$4; jacket, men's White Stag med, \$12; warmups, women's small/med, \$6. 744-5096 after 4.

SKI BOOTS - Reichle plastic, women's 8 1/2, \$15; ski boots, Koflach, men's leather, size 8M, \$10. 744-5096 after 4.

TENNIS DRESS - Lady's size 5, \$4; junior coat, warm, navy wool, size 9, \$10. 744-5096 after 4.

VOLT/OHM MULTIMETER - EICO model 565, new, in carton, list \$49.95, sell \$30. D. Vail, Ext. 2046.

OSCILLOSCOPE - EICO model 460, 5", wideband, list \$189.95, Heathkit EF-2 test chassis & all instruction manuals, all new in cartons. \$140 takes all. D. Vail, Ext. 2046.

SKIS - 150 cm wood, Tyrolia Jr. bindings, \$10; poles, 40", \$3; Kuofold ski undershirt, girl's 14. \$1.50. 744-5096 after 4.

ENCYC BRITANNICA - 1961 ed, 26 vol, like new, incl book case. \$100. Ext. 2887, 286-3815.

2 TENNIS RACKETS - Slazenger 2/presses. \$8 each. Ext. 3078.

COLEMAN CAMP STOVE - 1 burner. \$7. Ext. 3078.

DINING RM SET - 6 chairs, table w/pad, incl leaf, glass top server, 6' long, med color. \$100. 363-6845.

CUT GLASS - Chairs, tables, bric-a-brac, mink coat, natural. 472-0509.

CAMERA - NikonF w/F 1.4 lens, '74 model, like new. \$400. Mike, 878-2486.

ARTIFICIAL FIREPLACE - Unique, bright red & black, andiron & legs. \$50. 289-1647.

KITCHEN SET - Drop leaf table, formica top w/5 chairs, metal legs. \$25. Ext. 2977.

ELEC STOVE - Frigidaire, 40" white, oven timer, deep well, storage drawers, \$30. 286-0880.

ALL WEATHER COAT - Misty Harbor, women's size 10, poppy color, full length rain coat, zip-out lining, worn once, cost \$75, will take \$40. Linda, 698-9121.

HAND SAWS - 2 8-point, 2 10-point, \$1.25; single bit axe, 30" handle. \$2.50. 298-8601.

POTTED ORCHIDS - Ready to bloom. \$8 & up. L. Stuart, 475-9088.

ELEC GUITAR - Univox, 2 pickups, excel w/case. \$75. 475-6708.

AIR COND - A-1 cond, big enough for dining & living rm & kitchen, 33,000 btu, \$75; b&w tv, console, 25", works fine, \$50. 588-4703.

10 SPEED BIKE - Men's Gitane interclub, excel features, A-1 cond. Asking \$185. Josh, 286-8724 after 5.

BOOKS - Boy/girl series, Tom Swift, Nancy Drew, etc, etc. Daniel, 286-8724 after 4.

OLD ENGLISH SHEEPDOG - Puppies, AKC, champion sired, beautifully marked, just in time for Christmas. \$250. 286-8295.

SUCKLING PIGS - Ready for the oven, \$50; baby pigs, \$35. Charlie, Ext. 3935, 325-0968.

HO TRAINS - 5'x9' layout, 7 locos, 35 cars, 11 switches, triple power pack, much more. \$250. 744-3312.

KITCHEN TABLE - & 6 chairs, \$30; (2) F78-15 tires, \$30; (2) 69 Caddy rims, \$0. Ext. 2238.

TENNIS RACKET - Davis Hi-Point, 1L (4 1/8), used one season, "new" grip. \$20. G. Irving, Ext. 2318.

GRAVELY TRACTOR - 36" mower attachment, reasonable. Ext. 3688.

POOL TABLE - Playable, 4'x7', w/cues, balls & rack. \$25. 727-4515.

SKI PANTS - Girl's 10, \$4; ski jacket, men's White Stage medium, \$12; warmups, women's sm/med, \$6; duofold ski underwear, girl's 14, \$1.50. 744-5096 after 4.

REICHLE SKI BOOTS - Plastic, women's 8 1/2, \$15; ski boots, Koflach, men's leather, size 8M, \$10. 744-5096 after 4.

SKIS - Metal, Head masters 185 cm w/bindings, \$30; ski boots, buckle, women's 7, \$10. Ron, Ext. 4449.

FOR XMAS - Sears electric football game, 31"x17", 2 sets of teams, score board, etc, \$7; ice skates, black leather, size 2, \$7. Olness, Ext. 4581.

BICYCLES - 20" boy's/girl's, \$15; 20" girl's, \$30, Royce Union. Ext. 3912 before 5, 698-0576 after 7.

BOY'S FIGURE SKATES - Black, size 7, new, \$7; ski boots, size 3, lace type, almost new. \$5. 928-0297.

DRUM SET - Excel cond, bass, changeable tone snare, tom-tom, Ludwig shins, slug-line pedal, 20" crash cymbal, \$75. 473-6815.

30" GAS RANGE - Bottle gas, caloric, almost new, cost \$325, asking \$200. 585-7094 after 5.

TYPEWRITER - Standard office type, Remington. \$15. Bob, Ext. 4652, 289-0357.

SPRING COAT - Green checked, size 14, good cond. \$12. Angela, 744-5871.

BLUE BLAZER - Good cond, \$5; size 12 melon spring coat, \$12, good cond. Susan, Ext. 3609.

BEDRM CHESTS - 1 men's 5 drawer, light walnut, \$45; 1 women's dark mahogany 4 drawer, \$30. 727-4515.

ATLAS ACCORDIAN - Like new, 3 octaves w/case. \$250. 878-0904.

APPROX 1 CORD - Oak blocks, \$50 and take it away. 289-0243.

HO TRACK - 28 piece w/4 working cars, manual & other extras. \$10. David Merritt, 589-5126.

CRIB - Full size w/mattress, very good cond. \$20. Jim Hallock, 878-0222.

DIE SET - Pipe, 1/4" - 1", also pipe vise, both made by Reed. \$15 for both. Jim Hallock, 878-0222.

DRAPES - Pinch pleated, 5 pairs, brown w/orange thread, 54" long. \$3/pair. 281-7844.

HO TRAIN SET - 4'x8' perm setup, 3 locs, 4 pass, 7 freight, new cond, fully landscaped. 924-4063, 281-3299.

GIRL'S SKATES - Sizes 4 & 11, buckle ski boots, 4x5 & 3 1/2, lace ski boots 5 1/2 & 8. Lloyd, Ext. 3381, 286-1024.

ROTOTILLER - Reel lawn mower, dozer blade for Simplicity garden tractor, needs 3 hp B & S horizontal shaft engine. \$75. Lloyd, Ext. 3381, 286-1024.

REGENCY SCANNER - 8 channel hi-lo, \$125; w/8 crystals, \$95; w/out crystals, 110V or 12V DC, excel cond. Carl Nagle, Ext. 4680, 281-7627 after 5.

PLAY PEN - W/matching mattress, mesh sides, 40"x40", good cond; automatic swing w/music box, like new. S. Spark, Ext. 4111.

MOVIE CAMERA - GAF Super 8 ST602, used twice, like new, am switching to sound, orig \$225, sell \$125. Naomi, Ext. 3699.

ELEC WALL OVEN - Yellow, 24"x27", very good cond. \$15. Ext. 4240, 286-0295.

AIR CONDITIONER - 22,500 btu Builtwell, runs well, \$125. Ext. 2022, 878-2215.

25" COLOR TV - Sylvania, needs picture tube, make offer. Ext. 2022, 878-2215.

XMAS TREE - 7' aluminum w/stand. \$10. Ken, Ext. 4003.

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

NORTH SHORE - 3 bedrm, 1 1/2 baths, partially finished cellar, knotty pine interior, fireplace, 20'x30', garage w/pit, 23,000 btu ac, appl, 15 min to Lab, low, low taxes. \$30,000. 744-3312.

CENTEREACH HEIGHTS - Mother & daughter, 2-6 rm apts, laundry rm, garage, 2 full kitchens, 3 entrances over 1/2 acre. \$49,500. 732-2869.

SHOREHAM - Cape cod frame & brick, living rm w/fireplace, dining, den, 3 bedrms, kitchen, 2 baths, center hall, 2 car garage, 1/2 acre, beach rights, many extras. \$60,000. 744-8949.

WADING RIVER - 3 bedrm ranch, living rm w/fireplace, w/w carpeting, kitchen, dining, full appl, lg 2-car garage, full basement, lovely 1/2 acre wooded lot, private beach, established residential area. \$49,500. 345-3535, 878-4878.

EAST NORTHPORT - Mid 40's, 3 bedrm ranch, large eat-in-kitchen, 1 1/2 baths, formal dining rm, finished basement, bar, 2-car garage, all appliances, many extras. 864-1632.

COOPERSTOWN VICINITY - 160 acres, 1/2 tillable, 40 acres timber, good town road frontage, sell or part. Ext. 3688, 363-7032.

MASTIC ACRES - 3 bedrm ranch, hugh kitchen & dining area, fenced rear, patio & bbq, pool. \$27,000. 281-5064.

CENTRAL FLORIDA - 80'x120' land in Citrus Springs, Florida. 878-0674.

For Rent

BROOKHAVEN - Jan 1 - June/July 1976, 2-3 bedrm. 286-3851 after 4:30.

YAPHANK - 4 1/2 rm apt, 5 mi from Lab, all util, adults preferred. \$275/mo. 924-3461.

E. PATCHOGUE - Private 2 1/2 rm apt, all util. \$200/month. 475-4730.

PATCHOGUE - 4 1/2 rm apt, near village, private ent, adults preferred. \$270/mo, util incl. 289-9321.

VERMONT VACATION - 3 bedrm mobile home w/ fireplace on 10 acres, 10 min from Okemo Mt, close to 7 major ski areas, weekends or weekly. Bob, 473-8186.

TO SHARE - House in Medford, furnished bedrm, share remainder of house, incl appliances. \$30/week plus 1/2 util. Jack, Ext. 4255, 289-6708.

6 ROOM HOUSE - 3 bedrms. \$250/mo. 475-5807/475-9716.

Wanted

PORTABLE SEWING MACH - Ken, Ext. 3564, 929-6744.

PORTABLE TYPEWRITER - Elec desired, but not essential. Ken. Ext. 3564, 929-6744.

RUG - 12'x9', A-1 cond, either for sale or giving away. 588-4703.

PHONO RECORDS - 1950's & early 1960's, rhythm & blues, rock 'n' roll, 45's, 78's or albums, any cond. D. Vail, Ext. 2046.

FLEXIBLE FLYER SLED - Small, George, Ext. 4691.

CAMPBELL'S LABELS - Soup & bean, sent to F. Chandler, Bldg. T-87.

LEAD GUITARIST - To play in hard rock band. Ray, 878-2486.

MANUAL PLYMOUTH 318 - Engine, to buy or borrow briefly. Bookless, Ext. 4510.

BASEBALL CARDS - Will purchase in small or large quantities. Keith Thompson, Ext. 3385, 286-9047.

OVERHEAD GARAGE DOOR - 8'x8'. Ext. 3719, 475-1997.

BABYSITTER - In Setauket or E. Setauket area near 25A. 751-5868.

SM HOUSE/APT - Inexpensive, needed immediately by single female, prefer Smithtown/Stony Brook area. Anne, Ext. 3412, 286-3764 eves.

HIGH CHAIR - Baby's. 363-6596.

MUSIC STAND - Folding metal. Fred, Ext. 4613.

62 CHEVY BODY PARTS - Left front. Gordon, Ext. 4613.

ORIENTAL RUGS & CARPETS - Persian, Turkish, Caucasian, Chinese, etc, all sizes. Borg, Ext. 3623, 286-0428.

NEW MEMBERS - For Coram chapter of Women's Amer ORT, general meetings on third Thurs every month. 928-3624, 698-8608.

ON SITE BABYSITTER - Daytime for 2 weeks in Jan, friendly warm person to care for 20 month old. Ext. 2414.

TO RENT - 2-3 bedrm house, unfurn, mid-Jan occupancy, Ext. 4301.

BABYSITTING - At my house, Miller Place/Sound Beach area. 744-4615.

Car Pools

CORAM - Would like to join car pool from Coram to Lab. Ming-Shih, Ext. 2455.

PATCHOGUE - Driver wanted for already existing 3-person car pool. Ext. 2977.

Services

PLUMBING REPAIRS - Alterations & new work, reasonable rates. 732-1913.

RELIABLE TEENAGER - Will babysit in your home or mine, Shirley & the Mastics area. Jackie,