



Dr. Charles K. Bockelman, Deputy Provost for the Sciences, Yale University, and Chairman of the Board of Trustees, presented a 20 year service award to Gerald F. Tape, President of AUI.



Board member Milton G. White, Eugene Higgins Professor in Physics, Princeton University - 10 years.

Awards At Socorro

The first half of the two-day January meeting of the AUI Board of Trustees was held at the site of the Very Large Array now under construction by the National Radio Astronomy Observatory, 90 miles west of Socorro, New Mexico. Later, at a dinner in the town of Socorro, service awards were presented to those pictured here, as well as to Lois Chew for 10 years as Administrative Assistant at AUI. The meeting reconvened the next day at the New Mexico Institute of Mining and Technology. —photos courtesy of AUI



LaRoy B. Thompson, Senior Vice President and Treasurer of the University of Rochester and a member of the Board - 25 years.



N. Peter Rathvon, Corporate Secretary and Legal Counsel for AUI - 20 years.

Mapping Out Pollution

High-sulfur content coal and other fossil fuels now considered environmental hazards may not be so bad after all . . . if the weather is right. At least that is what meteorologists tell us as they embark on a long-range study of how weather conditions affect air pollution.

The Multi-state Atmospheric Power Production Pollution Study (MAP3S) begins its first year of regular funding with \$3.4 million from ERDA to operate research efforts at seven major government laboratories. BNL, which has received \$1.15 million of the first-year grant, serves as the leading laboratory for the study.

The research team's goal is to be able to predict air pollution across the northeastern U.S. from different types and levels of emissions under varying weather conditions. Since some weather conditions help reduce the hazard of certain air pollutants, they hope to apply this knowledge towards using more of the high-polluting fuels at the "safest" times.

"By looking at actual concentrations of air pollutants, both in the air and in precipitation, we are studying how the electric power plant emissions are affected by meteorological conditions," said Paul Michael, chairman of the MAP3S inter-lab coordinating committee and head of the Atmospheric Sciences Division, DAS.

Ron Meyers of DAS, chairman of the MAP3S mathematical modeling committee, added: "We have an energy crisis that requires us to best utilize our most prevalent fuel . . . coal. That's specifically high-sulfur coal, which is a potential threat to health and the environment. So, we want to know how to use it safely."

Researchers on the project will follow emissions from power plants using a small plane. According to Bob Garber, DAS, head of aircraft operations at BNL for MAP3S, a specially equipped research plane is being custom outfitted and will be in the air this spring.

The MAP3S group will have scientific boundaries rather than political ones. Their research planes will fly "the greater northeast" going west, to just beyond a line from St. Louis to Chicago, and extending north into parts of Canada.

Brookhaven's aircraft will be based on Long Island and will fly throughout the northeast from Washington to Boston and as far west as central Pennsylvania. Pacific Northwest Laboratory and other sub-contractors will also fly ERDA research planes for MAP3S.

Michael said, "The planes will primarily measure pollutants like sulfur dioxide, sulfates, oxides of nitrogen, ozone, and meteorological variables such as wind speed, direction, temperature, relative humidity and solar radiation."

All the aircraft data will be correlated with data from ground-based monitoring stations at utilities. This cooperative study is being done as part of the Sulfur Regional

Experiment sponsored by the Electric Power Research Institute.

The central archives for dissemination of all MAP3S results will be at BNL. Carmen Benkovitz, DAS, coordinates incoming information from participating laboratories and prepares it in a computer-compatible form.

"One of the exciting things about this program has been the high level of inter-lab cooperation and the way we are bringing together BNL's interdisciplinary team of meteorologists, chemists, mathematicians, physicists and engineers," said Michael.

Leonard Newman, chairman of the MAP3S chemical observation committee and head of the Analytical Chemistry Group, DAS, will lead efforts on chemical perspective analysis. This group will focus on chemical reactions taking place in the plume - a column of smoke emitted from the stack of the power plant - under varying weather conditions.

Model Building

When all the air and ground based field data have been compiled and correlated with experimental studies at the laboratories, computer programmers will go to work with a mathematical model that can reproduce these observations. Then, they will use it for predictions by feeding in new emission data under the anticipated weather conditions.

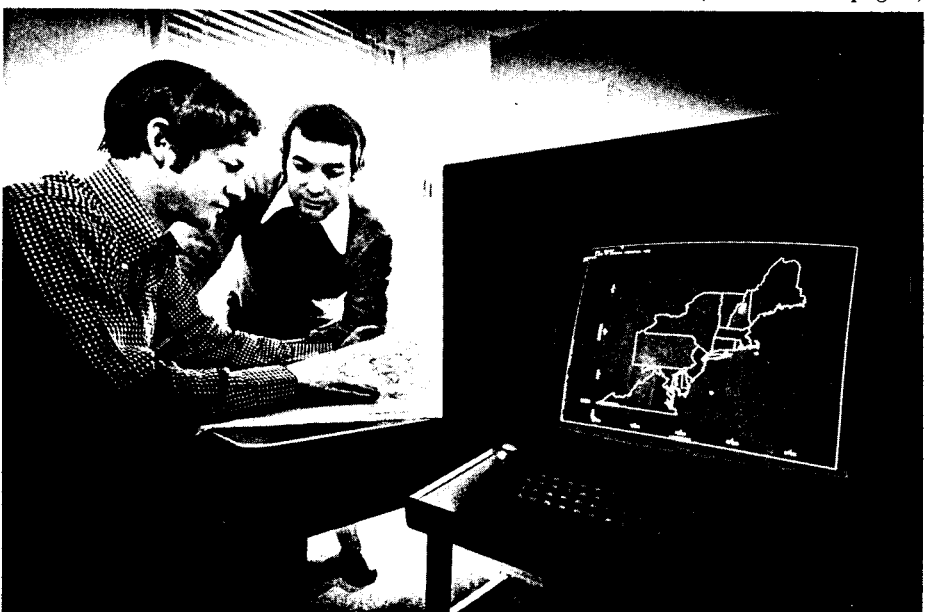
The optimal use of fuel which will produce the new emission data is dependent upon predictable environmental results. And the predictions are made by the mathematical computer model based on physical and chemical equations in conjunction with observed results.

"For the first time we have a model which predicts the transport and ultimate fate of pollutants through the atmosphere on a regional and national scale," asserts Meyers, who compiled the computer program now being refined in MAP3S. "The model is generally successful when employed over the temperate globe, but I'm not sure I would want to use it in the arctic, as it stands now," he adds.

This computer model makes it possible for energy strategists to develop management plans for the use of high-pollutant emission fossil fuels and the necessity of costly emission control devices. The obvious question is: "Why have we waited until now?"

"The reason that no one has done this before," Meyers explains, "is that data to operate such a model is difficult to get and difficult to work with. It takes such a tremendous amount of data and such an incredible amount of work to utilize it. We were able to do it because we could set long-range goals for ourselves, and had the persistence and support to work towards them."

With the help of Ric Cederwall, DAS,
(Continued on page 2)



Ric Cederwall (left) and Ron Meyers, spend many hours converting physical and chemical laws into computer language. These mathematical models are then refined by data from field observations.

Fuel Conservation

This winter the severe cold that is engulfing the country is placing additional demands on our already short supply of heating fuels. In view of the current shortage of fuels, President Carter has directed that, during this heating season, the maximum temperature in buildings owned or leased by Government agencies shall be 65°F during working hours and 55°F during non-working hours.

All Laboratory employees are requested to help by not exceeding these temperatures within their areas. Where applicable, make sure that storm windows are in place. Employees are advised to wear a sweater or suit jacket if chilly.

The Brookhaven International Cricket Club

presents

The First Annual Winter Cricket Ball

Saturday, March 12
The Brookhaven Center



Brian Gallagher (Chemistry) speaking at Syosset High School on February 7.

Speak Out

You needn't be a William Jennings Bryan to participate in the Laboratory's expanded speakers bureau program. Any and all are welcome . . . and desperately needed to fill the increasing number of requests received by the Laboratory from professional societies, public interest groups, educational institutions, and civic and service organizations. Topic requests cover a broad range, so speakers from every discipline are needed.

Such a bureau is a community resource. Speakers are often sent out on the service club circuit to such organizations as the Lions, Kiwanis, League of Women Voters, as well as to Long Island schools.

Taking part in Syosset High School's substitute enrichment program, Brian Gallagher of BNL's Chemistry Department explained the use of radioisotopes in biology and medicine to three chemistry classes. Said Brian about his experience: "Not only did I have the opportunity to tell the students about some of Brookhaven's research, but also to give them a learning situation outside their curriculum. They were quite enthusiastic and even asked many career-oriented questions."

Another area of demand is information on energy issues. And it is hoped that there will be quite a few volunteers willing to

discuss such topics as BNL's energy research, its relation to regional and national energy outlooks, as well as details on the safety, economic and environmental impacts of various energy alternatives.

BNL's bureau will work closely with ERDA's Speakers Bureau in building a library of materials, particularly relating to energy. ERDA-prepared speeches, such as the one on the National RD&D (Research Development and Demonstration) Plan, often with accompanying slides, will be available for excerption and adaptation to include BNL's energy research. The Laboratory's bureau is intended to be as complete a service to speakers as possible: helping them with speeches, coaching, audio-visual materials; furnishing brochures, introductory biographies, and press releases when appropriate.

All popular level requests for offsite speakers should be coordinated by BNL's Speakers Bureau. Besides providing a central point of contact for organizations, this ensures reimbursement of travel expenses incurred by speakers in the Long Island vicinity, matching of speakers who live nearby, and proper recognition of speakers. Each speaker is asked to complete a response card for bureau records and to supply a copy of his or her speech, if available.

Bureau coordinator Beverly Goldstein (Ext. 2347) would like to know your interest in participating in BNL's speakers program and the subjects upon which you can speak. Also, training in public speaking

may be available in the future if enough members of BNL's professional and scientific staff are interested. Taking a brief speaking seminar, however, is not a prerequisite to volunteering for the Speakers Bureau. But the advantages of such training would be twofold: to enhance your speaking talents at technical conferences and to polish your skills before the public, thus contributing to the Laboratory's public relations effort.

Speaking Locally In February

Feb. 14 - Meyer Steinberg (DAS), at League of Women Voters of the Five Towns, on *Solid Wastes Into Energy*.

Feb. 16 - Meyer Steinberg (DAS), American Chemical Society, East Nassau Section, on *Nuclear Power - A Practical Energy Source*.

Feb. 21 - Richard Skelton, (Med.) Coram Fire Dept., on *Radiation Hazards: EMT*.

Feb. 25 - Gary Cottingham (Accel.), Stony Brook, Eng. Dept. Faculty & Students, on *Problems of Solar Energy*.

Feb. 25 - William Wilhelm (Accel.), Elks Lodge in Riverhead, on *Solar Energy*.

MAP3S

(Continued)

the present model was built with experimental evidence designed to test new hypotheses at Brookhaven on sulfur evolution in the atmosphere. The first step in its verification came in ERDA's Regional Energy Studies Program with a comparison to calculations based on observations of the Environmental Protection Agency (EPA), the Interstate Sanitation Commission and others.

But now, the model awaits the final verification with MAP3S data, since researchers at BNL found the test of EPA calculations insufficient. The accuracy of the MAP3S data to be collected at Brookhaven should allow for some fine tuning.

"In a program developed by Leonard Newman, BNL has become the recognized leader in the accurate measurements of sulfate pollutants," said Meyers. "Therefore, we believe the measurements that we'll be making in the field experiments of MAP3S will be more accurate and give us more information to test the models than have existed through the EPA program."

Ultimately, Meyers predicts that the model will be available to the public. The computer program has been given to some of the other laboratories in MAP3S as part of the group cooperative effort. Participating MAP3S labs include: Pacific Northwest Laboratory, Argonne National Laboratory, Lawrence Livermore Laboratory, National Health and Safety Laboratory,

National Air Resources Laboratory and the Illinois State Water Survey Laboratory.

By the time the MAP3S program is completed, which may be three or more years, this technique for developing predictive power plant emission capabilities should be adaptable to any region of the United States. According to Michael, the only requirement will be "adequate data."

—Cliff Cockerham

TUNE IN!

Recently the on-site Bankers Trust was, I believe, taken over by their New York City division. Since that time the favorable loan rate, previously established, have disappeared. "What's the story?"

Are these rates lost forever. Can BNL employees seek favorable rates from other banks? Is a credit union more feasible? Should we (BNL) bring in a competitor bank?

I am sure there are many banks around that would be willing to come on site and offer favorable interest rates and services.

In response to your first question, yes, the bank recently revised their interest rates schedule on installment loans. The favorable loan rates that you mentioned had been in effect for many years without adjustment, and viewed in today's economy were not considered representative of the competitive interest market. In fairness, the rates were increased to a level that was equitable for the bank, and at the same time extended a preferred position to Brookhaven National Laboratory employees. On personal loans of one to three years, the discount ranges from 9 to 15%, as compared to all other Bankers Trust Company branches, and most other commercial banks.

The question of a credit union being more feasible than a commercial bank is periodically evaluated. On balance, it still appears that BNL employees and management are better serviced by a commercial bank. On personal loans of one to three years, most credit unions (Grumman & Suffolk County) are charging an annual rate of 12%, the Bankers Trust Company's current rate ranges from 10.57% to 12.11%. This method of borrowing is most popular with BNL employees and consequently, deserves and receives serious consideration in the evaluation process. It's true that the interest rate paid by credit unions on deposits is 6% compared to the current 5% paid by Bankers Trust Company, and this certainly has to be considered a factor in their favor. Other considerations that make the commercial bank more attractive are:

A. The broad range of services provided by a full service commercial bank are greater than a credit union, for example:

1. Establishing checking accounts. Many employees have taken advantage of this method of banking and would be disappointed to lose it.
2. Depositing of cash, cashing checks, obtaining certified checks.
3. Conversion of foreign currency.
4. The advance checking system recently made available to BNL employees on the filing of an application and subsequent credit approval. Under this system overdrafts on checking accounts, up to certain limits, are treated as automatic loans.

B. The New York State Department of Labor requires that employees have easy access to cashing their payroll checks. This service is provided by the on-site bank. Normally, credit unions do not have large balances of cash on hand to provide this service.

C. Provides a convenient method for depositing Brookhaven National Laboratory collections in the bank. This service would not be available if a credit union were established, but would require an off-site trip to another bank.

D. The establishment of a credit union requires a considerable amount of administrative detail to start, separate chartering, specialized staffing, and the additional expense of operating a facility.

We feel that the present banking services provided BNL employees are competitive with other banks. Certainly the most recent improvements, when fully integrated, will do much to overcome previous deficiencies. I'm referring to the recent change of increasing statement savings interest from 4½ to 5%, adoption of the "Advance Checking" system, "Free Checking" with \$500 in a saving account and the "Pyramid Service" statement. The "Pyramid Service" statement, while not fully operational, will within a short while provide (at your request) a complete history of your banking transactions.

—B. McAlary



Results from the multi-lab MAP3S effort flow to Carmen Benkovitz who prepares them for coordinated computer storage and return to the researchers in the field.



Bob Garber and Dan Leahy (foreground) are key members of the MAP3S airborne data collection research team. One of their most important instruments, as they range the skies for BNL, is their Britten-Norman Islander 300. The research plane, which is being leased from the Mid Island Air Service in Mastic Beach, will be ready shortly.

BROOKHAVEN BULLETIN

Published weekly for the employees of BROOKHAVEN NATIONAL LABORATORY

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Feed The Birds

Tens of thousands of survival biscuits were removed from Laboratory air raid shelters last week. The biscuits, a type of unsalted saltine, are being fed to the birds, ducks and other waterfowl at distribution points in Brookhaven Town.

A crew of twenty men and ten trucks from the Brookhaven Parks Department retrieved the biscuits at the request of the Civil Defense Office which authorized their release. The crackers had been stored since 1962 in the warehouse area, the basement of the Safety and Environmental Protection Division and in the Medical Department.

There are still lots of biscuits on site and the other shelter areas will be tapped if the cold spell continues, and the birds are still in need of food.

According to Richard Block, Director of the Town of Brookhaven Department of Emergency Preparedness, over 100,000 pounds of biscuits have been distributed through the Brookhaven Town program. He also said that the Harbormaster has noticed marked improvement in the health of the birds since the start of the program. Anyone who wishes to help out with the distribution program should contact Block's office at 475-4440.

Sport News

Bowling

Pink League

The Gutter Getters are still holding their first place lead by two points followed by the Med Squad. High games were K. Conkling 193, L. Boyd 180, M. Brenner 177, R. Rosati 170/170, N. Netusil 169, A. Glynn 162. H. Keeley had a 474 scratch 606 gross series.

Green League

1/25/77: The Charlie Browns still hold first place as they took eight points from the Sandbaggers. J. Scott had a nice 223 game. The Blue Jays took eight from the Bubble Boys with M. Iarocci making the 6-7-10 split. The Pinball Wizards tied for second with the Blue Jays. F. Green had a 220 game and also made the 6-7-10 split. The Super Cools dropped to fourth as the Trouble Shooters took seven. A. White rolled a 222. The Spark took eight from the Freon Loaders and the Got-A-Hit-Ums took eight from the Anachems.

Black & Blue League

The Pinsplitters got off to a fast start in the second half and lead the league. High games were E. Sperry 213/207, F. Bugala 202, J. Sells 187, C. Tyler 160. High gross pots were won by J. Sells 247 and F. Bugala 235.

Red League

Most of the bowling this week was done by the Freon Loaders. They knocked down 3076 pins and had a great single game of 1130. F. Powers had a good series (671 gross) and just missed his club award. R. Marlow bowled 209 and F. Stahman helped out with a 200. For the 76'ers R. Larsen (214) had a series of 593 scratch and J. Dioguardo a 218. The only other 200 game of the night was R. Jones 209. This is the second week in a row the Red League has just about shown up. Let's go get-em next week guys!

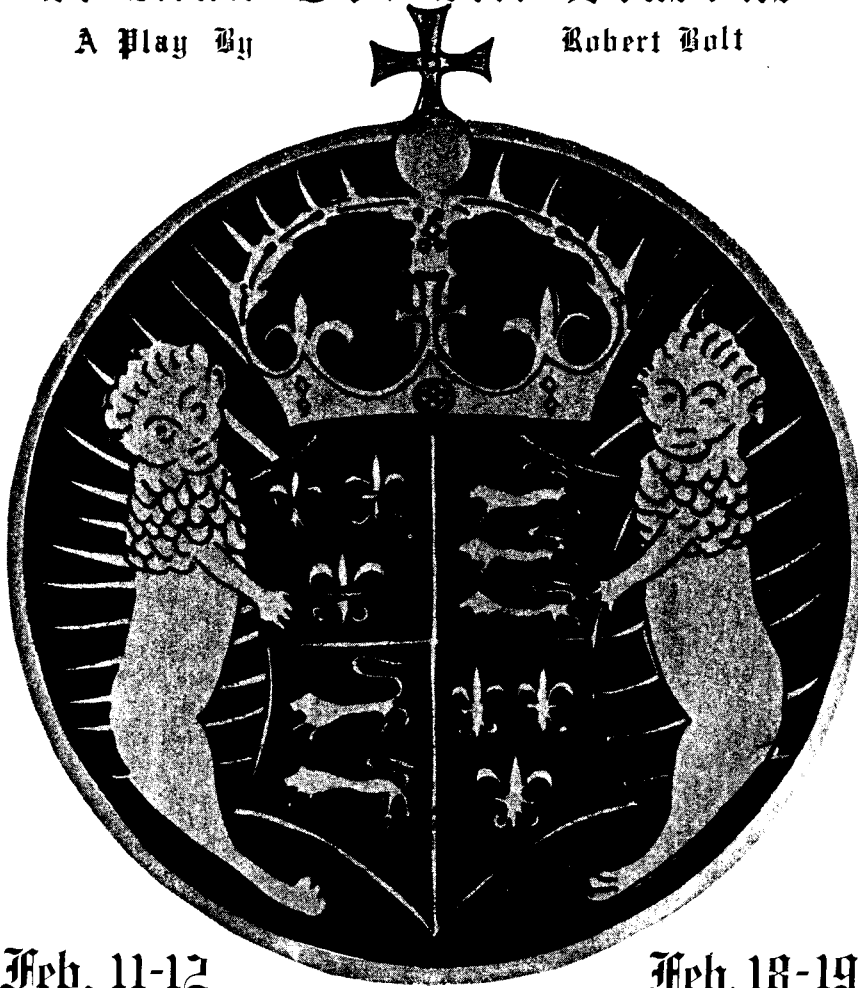
Anyone having a free Saturday night in March is invited to cheer the bowlers representing BNL in the L.I. Industrial Bowling Tournament being held in Hempstead March 5 through March 26.

Opening Tonight

A Man For All Seasons

A Play By

Robert Bolt



Feb. 11-12

Feb. 18-19

Stage II 8:00p.m.

Adults 3.00
200 student and senior citizens
theatre group --- brookhaven national laboratory

Doug Smith, a sign painter in Plant Engineering, created this poster for the Theater Group. The Royal Arms of England, depicted on the poster, were in use during the reign of Henry VIII.

Volleyball

Employees' League

Phoenix Wins First Half Championship

Phoenix wound up the first half of the Employees' League by defeating the Road Runners (21-13, 21-10, 21-17). Close behind were the Cool Tools, with three wins over Chemistry (21-6, 21-4, 21-12). The Spikers ended by taking three from the Circuits (21-18, 21-10, 21-13).

First half standings

	Won	Lost	Pct.
Phoenix	16	2	.889
Cool Tools	15	3	.833
Spikers	13	5	.722
Atom Spikers	9	9	.500
Road Runners	7	11	.389
Chemistry	2	16	.111
Circuits	1	17	.056

Mixed League (results as of 1/31)

Division A

- Trolls - Spikers (13-15, 15-8, 15-6)
- Pushovers - Parton Propellers (10-15, 15-6, 18-16)
- Oceanography - Upstarts (15-8, 15-5, 11-15)

	Won	Lost	Pct.
Trolls	22	2	.917
Spikers	12	12	.500
Oceanography	12	12	.500
Parton Props	11	13	.458
Upstarts	8	16	.333
Pushovers	7	17	.292

Division B

- Nuts & Bolts - Terabits (15-4, 15-11, 7-15)
- Nuke Powers - Flashers (15-7, 14-16, 15-10)
- Diamonds - Center Crew (15-11, 16-14, 15-8)

	Won	Lost	Pct.
Nuts & Bolts	20	1	.952
Diamonds	13	8	.619
Terabits	12	9	.571
Nuke Powers	10	11	.476
Lookin Good	7	11	.389
Center Crew	7	14	.333
Flashers	3	18	.143

Employees' League Results (February 2)

Phoenix opened the second half of the season tromping their arch-rivals the Cool

Tools in a three game massacre led by super placement shots of Steve Howe. Tom Owens and Phil Bowles put on a hitting demonstration for Phoenix, and the Phoenix defense closed off the Spikers from big Lou Sneed.

In the other games Chemistry won an upset victory against the Road Runners (21-13, 21-21, 19-21). The Spikers and Atom Spikers fought to a split with the Spikers coming out ahead (21-12, 19-21, 21-18).

Several new players have joined the league at the half including our second female player, Cheryl Beckwith now of the Cool Tools. We are considering spicing up the end of the season with several All-Star games; for example, an all female team from Division A of the Mixed League to play another from Division B. Another idea would be to select 16 players from the Employees' League, break them into two teams and play an All-Star game at the annual volleyball party. Other ideas would be very welcome. Call Greg Donaldson at extension 3722.

Bicycling

On January 20, a meeting was held in Massapequa with representatives from each club in the "Bicycle clubs of L.I." to arrange a joint schedule for the coming season. The schedule agreed upon has about two tours each month; about half of these are in Suffolk and of interest to Brookhaven riders, the rest are in Nassau. BNL's contribution is to open the Beginner's Tour to the outside clubs - it will be held April 24. In addition, BNL will co-sponsor the Riverhead Run on July 10, and will open one of the two BNL races to the outside clubs. The complete list of Suffolk rides is as follows:

Date	Ride	Dist. (Mile)	Organizer
4/3	April Fool's	25	MP/AYH
4/24	Beginner's Tour	25	BNL
5/14-15	TOES (2 day)	100	BCLI
6/5	BNL Spring Race	17	BNL
7/10	Riverhead Run	65	AYH/BNL
8/28	Metric Century	62.1	AYH
9/11	BNL Fall Race	17	BNL
10/9	Riverhead Run	65	AYH

For further information contact Gerry Morgan.

A Winter Bonus

Brookhaven Lab now has its own ice skating pond. It is located on the south side of the Fire Department, and is open to everyone at the Lab.

Joel Brainard of DAS thought it would be nice to be able to skate here on site. So, he contacted the Fire Department to see if they could arrange something. Chief Newham did, and the Fire Department has been flowing water into a small depression area to create a skating rink.

Trip To New York City

The Hospitality Committee is planning a group railroad trip to the city on Wednesday, March 2. Departure will be at 8:32 a.m. from the Patchogue LIRR Station. The round trip fare for adults is \$2.45, 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, no later than February 24. Make checks payable to "Cash." Refunds will be made only if cancellations are received before noon on Friday, February 25.

Arrivals & Departures

Arrivals

Arne Bengtsson	Plant Engrg.
Christopher D. Gentile	Reactor
Young L. Nam	App. Science
Malry L. Tardd, Jr.	Accelerator

Departures

Mary E. Gress	Chemistry
Veronica G. Miko	Staff Services

Cafeteria Menu

Week Ending February 18, 1977

Monday, February 14

Tomato Bouillon Soup	
Franks & baked Beans	1.05
Barbequed Fresh Ham & 1 veg.	1.30
Hot Deli - Pastrami	

Tuesday, February 15

Cream of Chicken Soup	
Chopped Steak & 1 veg.	1.10
Chinese Pepper Steak on Rice	1.25
Hot Deli - Knockwurst	

Wednesday, February 16

Split Pea Soup	
Shrimp Chow Mein on Rice	1.10
Hot Deli - Italian Sausage & Peppers	

Special

- Cup of Soup
- Corned Beef & Cabbage
- boiled potato or mashed turnip
- choice of pie, small beverage
- \$1.87 plus tax

Thursday, February 17

Puree of Mongol Soup	
Spanish Omelet, fr. fr.	1.10
Short Ribs of Beef & 1 veg.	1.30
Hot Deli - Roast Beef	

Friday, February 18

Clam & Celery Soup	
Seafood Cakes & Spaghetti	1.05
Pot Roast & 1 veg.	1.30
Hot Deli - Smoked Tongue	

Avoid The Long Line

Currently, about 950 employees are having their weekly or monthly pay checks deposited by the Laboratory directly to the bank of their choice. If you are not yet taking advantage of this system, here are some of the reasons it's a good idea:

- it eliminates the necessity of standing in line to cash your check
- it's an energy saver - one less trip in your car
- if you're using the on-site bank, you're guaranteed that the deposit will be credited to your account on payday, thus avoiding the vagaries of mail delivery
- if you are ill or away on vacation, you need not be concerned about your paycheck, since it will be forwarded to your bank

This convenient system is easy to put into operation. Simply fill out the required form at Payroll advising them to send your check to the bank where you have an account.

Classified Advertisements

Placement Notices

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

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

For further information regarding a placement listing, contact the Personnel Placement Supervisor, Ext. 2874 or 2882.

LABORATORY RECRUITMENT: Opportunity for present Laboratory employees.

64. TECHNICAL SPECIALIST - AAS or equivalent in computer science or related field having familiarity with the programming and operation of CDC 6600 systems, Applied Mathematics Department.

65. MESSENGER - Staff Services Division.

66. LABORATORY CUSTODIAN - Four positions. Plant Engineering Division.

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

67. DEVELOPMENT ENGINEER - BS or equivalent in engineering or architecture with demonstrated proficiency in residual project management. Department of Applied Science.

68. SECRETARY - Part-time position. AAS degree or equivalent in secretarial science. Knowledge of technical manuscript typing and shorthand desirable. Physics Department.

69. CLERK TYPIST - Supply & Material Division.

Autos & Auto Supplies

74 AUDI 100LS - 4 dr sedan, tan w/brown leather upholstery, am/fm stereo, standard shift, great gas mi, excel cond in & out, extra set new snow tires. Ext. 2882, 473-9121.

67 PLYMOUTH STATION WAGON - Ps/pb, good cond. \$350 or best offer. Pat, 924-4496.

STUDDER SNOW TIRES - 695-14 mounted on 5-hole GM wheels. \$30. Austin, Ext. 4278.

70 SAAB 99 - Trans may be sick. Make offer. Bill, Ext. 2603.

75 YAMAHA - RD 250 B, bought new in June '76, 55 mpg, 1600 mi, luggage rack, cond like new. Ext. 4019.

74 MAZDA - 42,000 mi, 808 eng, A-1 cond. \$1500. Howard, 567-3928 after 5.

76 VW RABBIT - Perfect cond, radial tires, fm radio, white. \$3600. 286-0703.

64 CHEVY IMPALA - Convertible 283, auto trans, ps, excel running cond, must sell. \$225. Phil, 399-2070.

74 CAMARO - Immaculate, 350, low mi, ac, full power, am/fm, steel radials, new battery, new snows. \$3195. 288-1569.

74 DODGE - 3/4 ton truck, 8', 6 cyl, std, 18-20 mpg, CB radio, am radio, new battery & snows, excel cond. Asking \$2300. 475-8724.

66 BUICK LESABRE - Good cond. \$300. Rick or Leslie, 325-0446 after 5.

75 CHEVY VAN - Beauville model, 37 options, low mi. Ext. 3120, 286-0626.

72 JEEP WAGONEER - 46,000 mi, ps/pb/ac, auto trans, other extras. \$3200 firm. 472-2750.

69 VW BUG - Automatic, new engine, paint, tires, carb, also balance of 6 mos, 6000 mi guarantee. \$1125. Ext. 4153, 363-2130.

66 PLYMOUTH VALIANT - 6 cyl, 2 dr, r&h, automatic, avail end of Feb. Asking \$450. Thornber, Ext. 3382, 286-2788.

HEADERS - For VW 1600 cc eng, suitable for dune buggy, no mufflers. \$15. Lee, Ext. 4279, 286-0436.

CHEVY SHORT BLOCK - '57 283 CID, .060 over, 12.5 to 1 pistons, balanced, crank needs turning. \$75. Lee, Ext. 4279, 286-0436.

AUTO TRANS - Chevy turbo 400 w/converter. \$100. Lee, Ext. 4279, 286-0436.

69 CHEVY NOVA - 6 cyl, standard, \$650; 6 tires 700-18, 8-lug dual wheels for Chevy, \$10. 589-9103.

HOLLY CARB - & manifold for VW 1600 cc eng w/oval port heads. \$50. Lee, Ext. 4279, 286-0436.

71 DATSUN - Pick up truck, good cond. 653-5989.

62 MERCEDES-BENZ - 220B, orig 58,000 mi, excel cond, ps/pb, standard, radial tires, dark blue w/red interior. \$1800. 928-1075.

VW ENGINE - 1697, 12 V, complete except for muffler, good for parts. \$25. Frank, Ext. 2022.

2 14" CHROME REVERSED STEEL RIMS - H60-14 tires. \$25. Frank, Ext. 2022.

2 DEEP DISH WHEELS - Chrome reverse, fits AMC, Ford or Chrysler, brand new cond. Asking \$40. Al, Ext. 2301.

VW TUNE UP KIT - 64-67, \$2; fuse kit, 604/kit. Ext. 3609.

66 VW - Rebuilt eng, new tires, lumpy body, but no rust. \$225, negotiable. Ext. 4799, 286-1520.

74 GREMLIN - 23,000 mi, auto trans, ps/pb, x pkg, radio & roof rack. Dick, 286-8906.

70 FORD BRONCO - 4 wheel dr, V8 302, standard shift, good cond. \$1750. 929-6139.

67 VW BUG - 6000 mi on new eng, new brakes, front end, am/fm radio, body very good cond. 734-7584 or Richie, Ext. 4254.

67 PLYMOUTH WAGON - Belvedere II, V8, new valve job, good running cond, just inspected. \$300. Ext. 3649.

71 VEGA HATCHBACK - 4 spd trans, radio, ac, options, extremely good cond. Asking \$875. 549-6041, days; 269-6344, eves.

RIMS - 14x60 JK, 5-hole; 14x5 1/2, 5-hole. Koene, Ext. 3027.

74 PONTIAC - Tempest Lemans, ps/pb, am/fm stereo, 8 cyl, 921-7130.

70 CHEVY NOVA - 307 eng, r&h, ps&at, very good cond. 475-0364 after 6.

2 VW RIMS - 15" holes, \$3; (2) 13" 5-hole, \$2. 727-5912.

WHEEL RIMS - 15" from Merc, had H78-15 on them, \$4 each or 2/\$7. John, Ext. 3292.

70 HONDA MOTORCYCLE - 350. \$450. 286-1251 after 5.

Boats & Marine Supplies

LIFE VESTS - 2 children's. \$3 each. Philip, Ext. 3382.

15' SHARPE - Good for clamming, good cond. \$175. 286-0761.

PLYWOOD DINGHY - Good cond, needs coat of paint, now is the time to get ready for spring. \$75. Ext. 3593.

26' OWENS - W/185 hp, good cond. Asking \$2000. 727-6280 after 6.

8' ALUMINUM JON BOAT - Flat bottom, square ends, \$50. David, Ext. 3501, 286-8097 eves.

Miscellaneous

SUN LAMP - \$2; kitchen light fixture, \$6; dining rm pull down light fixture, \$10. Steve, Ext. 3469, 281-4371.

SKATES - Men's leather figure, size 10, \$10; drapes, kelly green for 13' wall, make offer. Steve, Ext. 3469, 281-4371.

FURN - 8' contemp sectional, \$150; bench couch w/end table, \$100; driftwood lamps & coffee table, \$75 ea. Ext. 3121, 744-5261.

BATHRM VANITY - W/sink & medicine cabinet. Ext. 2980, 289-0532 after 6.

PAINT - 2 gal latex flat interior, pale green. \$5/gal. Ext. 3489.

2 BADMINTON RAQUETS - Carleton, used but in good cond. \$10 ea. Ext. 3489.

LOVESEAT - Antique Victorian, needs minor repair & upholstery, best offer over \$150. Ext. 3489.

GE STOVE - Oven/range, 30", 11 yrs old, very good cond, highest bidder. 473-2473.

EARTH SHOES - Never used, high boot, size 10 1/2, 1 yr old, light tan. \$30. 928-1127 after 6.

CHRISTMAS WEDDING GIFTS - Never used, wok, elec, red, 12", \$30; fondue elec, red, 1 1/2 qt, \$20. Ext. 2948, 928-1127 after 6.

WEDDING GIFTS - New dinnerware, 45 pc. Kensington ironstove, olive green, service for 8, \$40; 32-pc semi-vitreous, white w/floral pattern, service for 6, \$35. 928-1126 after 6.

ARCHITECTS - Paoli Soleri's ARCOLOGY book, lg format. \$20. 928-1127.

SHIP BUMPERS - Macrame covered, great for nautical motif wall decor, ideal for home, restaurant, or antique store. \$100 each. Must see. 928-1127 after 6.

CAMERA - 8 mm movie Keystone, excel cond, leather case. Best offer. 751-6431.

CAMERA - Kodak trimlite instamatic 18, uses 8-shot flip flash, new \$17. 751-6431.

STEREO AMP - Marantz 240, similar to Marantz 250, less meters, absolutely mint cond. Azzara, Ext. 4599.

BAR W/STOOLS - Heavy all wood w/2 stools, excel, \$30; white doors w/windows, excel cond. \$75. Joyce, 281-0322.

CONTEMP LIVING RM FURN - Sofa, love seat, 2 bucket chairs & chrome & wood finish end tables, excel cond. \$250 takes all or will sell separately. 732-8877.

MAYTAG - Coppertone mini clothes dryer, needs felt washer, otherwise excel cond., 115 V. \$45. 732-8877.

MOVING - Solid maple headboard, \$25; French provincial headboard, \$25; drapes, over sliding glass door, copper color, 2 pair, \$25. 744-2268 after 5.

BEDRM SET - King/queen headboard, triple dresser, 2 mirrors, 2 night stands, armoire, 3 yrs old, moving, paid \$1330, sell \$500. 744-2268 after 5.

ZOOM LENS - 45-135 mm F3.5, Nikon mount. \$95. Irv Meyer, Ext. 3038.

TWIN BED - Maple w/box spring & mattress, \$25. Irv Meyer, Ext. 3038.

GIUITAR - 1956 Les Paul Jr, all orig, good shape. Asking \$350, but will talk. Ed, 727-3608.

IRISH SETTER PUPS - AKC, 6 weeks old, parents on premises. 698-5071.

WOMAN'S COAT - Size 12, heavy, \$15; women's ice skates, size 8, \$5; 2 sleds, \$3 each. All avail end Feb. Thornber, 286-2788.

KENMORE GAS RANGE - Eye level & lower ovens, like new. \$250. Ext. 4597, 981-3371.

16" BICYCLE - Boy's good shape. \$16. John, Ext. 3292.

20" BIKE - 3 spd, fair cond, boy's model. \$15. John, Ext. 3292.

24" BIKE - Girl's Schwinn, old but good. \$18. John, Ext. 3292.

SKI BOOTS - Koflach men's buckle, size 8 M, \$10; ski pants, girl's size 10, \$5. T. Morris, 744-5069. \$5. T. Morris, 744-5069.

DRAPERIES - 4 pairs Shantung fully lined, 80" long, 69" wide, 1 single 82" long, 69" wide, avocado green, used 3 months. \$75. 286-8945.

ATTIC REINSULATION - Leftover, 120 sq ft. \$10. Jerry, Ext. 3334.

SPRING/FALL COAT - Size 12 melon, \$8; blue blazer, size 12, \$4; rabbit fur coat, \$30. Ext. 3609.

GUINEA PIG - Free. 929-4318.

LIGHT FIXTURE - Ceiling type, brand new. \$2. 744-9498.

ELEC GUITAR & AMP - Carlo Robelli guitar, fenders amp, like new cond. \$120 for both. 589-4327 after 6.

PEDESTAL TABLE - Solid black pine, round 42", 2 capt & 2 mate chairs, 14" glass top, orig price. \$900. Will sell for \$400. 722-4784.

SKI BOOTS - Lace type, size 3-4, \$3; buckle boots, size 4-5, \$5. 286-8256 after 5.

ARTLEY FLUTE - Symphonic model, Sterling silver head, closed holes. \$100. 286-8256 after 5.

CAMERA - Kodak Instamatic 18, perfect cond. \$17.50. 751-6431.

ICE SKATES - Children sizes 1 & 4. \$5/pair. Ext. 2011, 929-4446.

TRAVERSE RODS - 2 each, 36" - 48" opening. \$2.50 each. 286-8256 after 5.

CHAIR - Hickory; mahogany queen size head board, \$100, 40 red bricks & 10 cinder blocks. 924-7262.

A PUP FOR VALENTINE'S - Males & females, avail 2/1/77. Free. C. Kerr, Ext. 3362/3604.

ELEC GUITAR - Gibson semi-hollow, 35 yrs old, mint cond, fine tone, quality. \$600. Joe, 744-4086.

TUNER/AMP - Technics, \$200; Sony turntable \$100; priv label speakers, \$50. Kupferman, Ext. 4158.

SILVER TEA SET - 5-piece, never used. 727-0082.

GREAT DANE PUPS - AKC registered w/papers, good blood line, 3 black female, 1 (rare) blue female. 924-4789 after 4.

CANVASES - New, 6 x 8, 7 x 9; men's slacks, excel cond, some wool, mostly cotton, 34-30, \$5-7. Ext. 3609.

DRUM SET - 5-piece, very good cond. \$150. 286-0761.

TELEPHONE ANSWER RECORDER - Sanyo, excel cond. \$100. Arnie, Ext. 2291.

BICYCLES - 1 boy's, 1 girl's w/training wheels. \$10 each. 821-0761.

STEREO - Telefunken receiver, turntable, speakers, 2x15 w, very good cond. \$200. Ming, Ext. 3535.

DINING RM SET - Ethan Allen, solid maple, w/leaf & 4 captain chairs, show rm cond. \$125. 325-0563.

SKI BOOTS - Size 9M. \$20. Roger, 286-9197.

SEWING MACHINE - Singer treadle, oak. 281-4080.

DOLL BANKS - 12" high, \$5; old antique stand up coin weight scale, \$50. Sharon, Ext. 3312, 878-2591 after 6.

REFRIG - 14 cu ft, 4 yrs old, white, Philco. \$150. 585-9315 after 5.

ANTIQUE ROCKER - Lg. Asking \$125. Chris, Ext. 2540, 727-9277.

ANTIQUE FURN - Very good cond, glassware. 472-0509.

MINK COAT - Natural wild mink, size 12-14, full length, very good cond. 472-0509.

TABLE - Marble topped foyer, 15"x40". \$15. Ext. 2910, 286-0866.

BABY CARRIAGE - Bilt-rite. \$25. Ext. 4688, 924-8213 after 5.

GOLF CLUBS - Spalding tournament, 4 woods w/ covers, 8 irons, 1 putter, 1 sand wedge. \$75. Winter, Ext. 3354.

COMMUNICATIONS RECEIVER - Radio Shack, model DX 160, excel cond. \$130. 751-3943.

FILM CUTTER - Viewmaster for personal stereo camera, old Viewmaster viewer or stereo projector for Viewmaster reels. Rich, Ext. 4172.

REFRIGERATOR - 15 cu ft, frost free Westinghouse, 2 dr, freezer on top. Mort, 286-8448.

BED - Full size frame, spring mattress, excel cond, good price. Ext. 3929, 924-3761, after 5.

SCARF - Natural stone Marten, 4 skins. \$150. 286-1214 after 5.

BEDRM SET - 10-piece, solid mahogany, 50 yrs old, excel cond. \$225. Ruth, 589-2128.

SKIS - Rossignol Olympia 180 cm, head binding, excel cond, \$45; wooden ski, 180 cm cubco binding, \$12. Joe, Ext. 4069.

KITCHEN CABINETS - Birch wall & base cabinets & formica counter tops. \$15/linear foot. Ext. 4599, 473-6859 eves.

SKI BOOTS - Leather lace, about size 5. \$2.95. Bob, Ext. 4637.

Ads left out of this issue because of lack of space need not be re-submitted in order to run in next week's issue.

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

ROCKY POINT - The Tides, 3 bedrm ranch, 2 baths, den w/fp, basement, garage, priv beach, 1/2 acre. Ext. 4784, 744-6767.

CLEARWATER BEACH - 100x140 bldg plot, E Hampton, priv beach, marina rights. Asking \$13,500. Steve Marino, Ext. 3469, 281-4371.

BELLPORT - Raised ranch, 5 bedrm, 2 bath, dr, deck, garage, 1/2 acre, \$43,500. 286-8195.

PORT JEFF - SD #3, 4 bedrm ranch, fam rm w/fp, garage, pool w/deck, low taxes. 473-4495.

PATCHOGUE - 3 bedrm ranch, deep plot, wood shingles, basement, garage, deck. \$43,000. 331-1718.

RIDGE - Strathmore Tudor townhouse, 3 bedrm duplex, 1 1/2 baths, w/w carpet, beautifully decorated, the price is right. 298-8926, 298-5187.

MIDDLE ISLAND - Townhouse, 4 bedrms, 2 baths, appl, ac, w/w carpeting, many extras, clubhouse, pool, tennis, quiet, 1 yr old. 924-5457.

CENTER MORICHES - 3 bedrm country kitchen, fam rm, fp, hardwood floors, appl, s&s, basement, garage, beach/boat rights. \$38,500. 878-2513.

For Rent

BROOKHAVEN HAMLET - Apt in older country home. 286-0129.

WADING RIVER - Furn small 2 bedrm house, walk to beach, sublet until Aug, lease possible thereafter. \$190/mo + util. 929-4014, after 6.

BELLPORT - 5 bedrm raised ranch, 2 bath, dr, eat-in kitchen, 1/2 acre. \$350/mo. 286-8195.

VERMONT VACATION - 3 bedrm mobile home w/fp, on 10 acres, near ski areas, weekly, weekends. 473-9186 after 6.

MASTIC BEACH - 2 bedrm, 1 1/2 baths, living rm, dining, French drs to patio, must see. \$250/mo + util. 281-6551 weekends.

SUBLET - 3 weeks in March, comfortable furn apt w/fp, Shoreham. \$100. Ext. 3535, 744-1942.

Wanted

COUPLE WHO BOUGHT FISH TANK - From Rocky Point, & stand & equip for son's birthday, please call Fred Merritt, Ext. 4261.

STEREO 3D CAMERAS - Viewers, projectors or any equip for 3D photography, working or broken. Rich, Ext. 4172.

OLYMPUS - 1/2 frame camera, working or not, esp F or FT model. Rich, Ext. 4172.

INFO - \$5 reward for 1st person supplying info leading to the purchase of a film cutter for a Viewmaster personal stereo camera. Rich, Ext. 4172.

USED VW TIRES - Good, cheap, 5.60x15. Ext. 4463.

METRANOME - Electric or battery operated pref. K. Mohring, Ext. 3564.

CAMPBELL SOUP LABELS - To purchase overhead reader for school children. P. McHugh, Ext. 3297.

WOODEN INDIAN - To borrow or rent for Lab tea. Ginny, 744-2069.

PART TIME JOB - Late nights for Mon, Tues, Wed, from 9 pm to morning hrs. 588-4703 after 5:30.

Car Pools

DRIVER - For existing car pool, Sayville/W Sayville/Bohemia area. Ext. 2311.

MASTIC BEACH - Need ride, 8:30-5:00 shift. 281-1149. Don, Ext. 2898.

NORTHPORT/E NORTHPORT - Will share driving w/1 other person. 757-3178.

Lost & Found

LOST - Hinged antique gold bracelet w/design. Bev Goldstein, Ext. 2347.

FOUND - Red scarf, man's, left in conference room bldg 480