BROOKHAVEN BULLETIN

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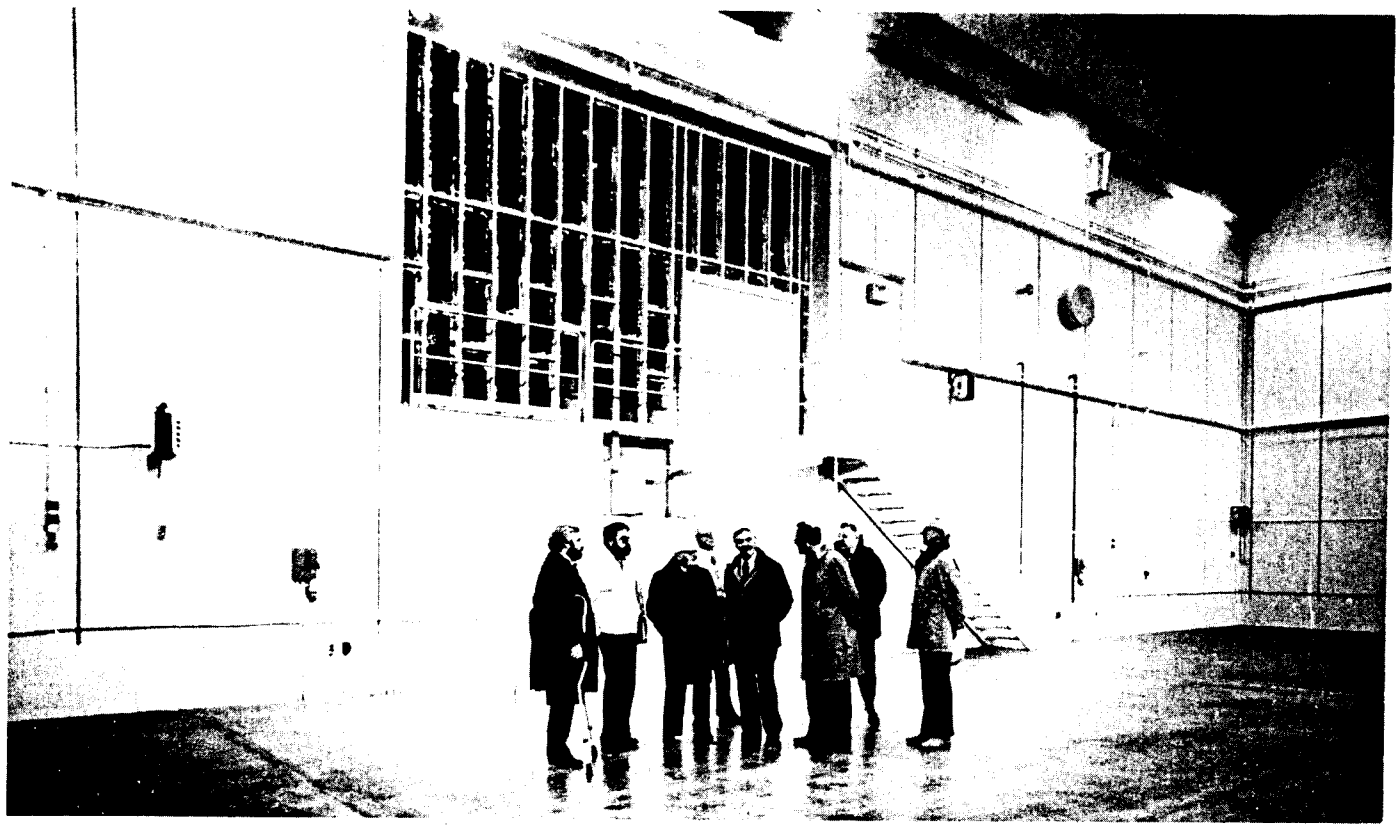
BROOKHAVEN NATIONAL LABORATORY



Doug Humphrey

The interested parties who participated in the beneficial occupancy inspection of the Wide Angle Hall were (from left) Sander Goldman, President of the contracting firm, Lasker-Goldman, Inc. of New York City; Vern Witherill, ISABELLE Project Head for DOE; Max Goldman, Chairman, Lasker-Goldman, Inc.; Parke Rohrer, Head of BNL's ISABELLE Construction Division; Hywel White, Head of Experimental Facilities Division of ISABELLE; James Sanford, BNL ISABELLE Project Head; Herbert McLeod, Deputy Construction Manager, Amman & Whitney, Inc./Safeguard Construction Corporation; and Peter Wood, Construction Manager, Amman & Whitney.

BNL Gets 3 Keys To ISABELLE

During February, the Laboratory took beneficial occupancy of three ISABELLE structures: the Wide Angle Hall, located at the 6 o'clock position; the Open Area at 4 o'clock; and sextants at 9 and 11 of the magnet enclosure.

Beneficial occupancy occurs when a structure is complete enough to allow it to be used for interim purposes. This follows an inspection by all interested parties, including the user and the contractor, to see what must be done to make the structure 100% complete.

The Wide Angle Hall is the first major ISABELLE facility of which the Lab has received beneficial occupancy. Under construction since February 1980, the hall is now about 88% complete, despite some delay caused by the extreme cold this winter. Completion is expected in May.

Now that the Lab has beneficial occupancy of the Wide Angle Hall, the structure can be used for meetings, storage and/or manufacture until ISABELLE is completed and it can assume its true role as an experimental area for the Intersecting Storage Accelerator. Beneficial occupancy will also allow the Lab to provide access to another contractor, who must enter the Wide Angle Hall to complete work on the beam ejection tunnel which will be adjacent to the hall.

As an experimental area, the Wide Angle Hall will be used to detect particles as they come out of the proton beam at an angle of roughly 90° relative to the beamline — hence the name Wide Angle Hall. Sam Aronson, a physicist in ISABELLE's Experimental Facilities Division, explained that "this has been a fruitful area of research at the ISR [Intersecting Storage Ring] at CERN, where the particles of large traverse momentum have provided interesting data."

In designing the hall, Aronson said, hypothetical experiments were created to answer such questions as "How long a detector do we need?" and to arrive at conclusions regarding the hall's final dimensions. The result of these exercises is a structure which measures 53 feet along the beamline and — to create the wide angle — 105 feet perpendicular to the beamline. The distance from the floor to the beamline is 15 feet; and from the beamline to the overhead crane measures 18.5 feet. The crane has a 20-ton capacity, but can be increased to 40 tons should the need arise. Though plans exist for a contiguous assembly area, initially, assembly will take place either in the experimental hall itself or at the AGS. If assembly is at the AGS, equipment will be brought to the Wide Angle Hall in pieces, then reassembled.

The design of the Wide Angle Hall made the 6 o'clock position on the ISABELLE clock the most logical location for the facility. The beam ejection tunnels on either side of that area limited the length of any facility that might be built there. Since that position could best be exploited by experiments perpendicular to beam, rather than along it, it was deemed the perfect location for the Wide Angle Hall.

The Open Area at 4 o'clock is also an experimental area. Essentially, it is a base on which to build an experiment. Instead of a permanent structure, movable concrete shielding blocks and waterproof coverings will be used to provide flexibility in experimental setups in accordance with future needs. This area is now about 75% complete. Beneficial occupancy will allow the contractor working on sextants 1 and 3 of the magnet enclosure to enter the 4 o'clock area and finish the 1% of work that remains on this section of the tunnel. And, with the beneficial occupancy of sextants 9 and 11 of the magnet enclosure, surveyors can now monitor the floor settlement that takes place after the radiation shielding is completed.

—Anita Cohen

Budget Briefing

In January, President Carter announced his budget for FY 1982 (the period from October 1, 1981 to September 30, 1982). The total operating funds earmarked for Brookhaven by the DOE under this budget, while modestly increased compared with this year's budget, nevertheless were insufficient in a number of programs to cover the combined effects of inflation and dramatic increases in the cost of energy. During the past several weeks, the Laboratory Administration has been assessing the effects of the Carter budget on the Laboratory's individual programs, and working out plans, where necessary, to reduce costs for next year's operations.

Soon after taking office President Reagan announced general plans to make major cuts in Federal spending for FY 1982. Furthermore, in this past week it was announced that the President intends to make further reductions in spending, both in the current fiscal year and in FY 1982, over and above the cuts previously planned. Government officials at DOE, and elsewhere, state that they cannot release any information on the Reagan budget reductions until some time after March 10. It is probable, however, that the Laboratory will receive further cuts and will be faced with some significant difficulties. Because of this, the Director has frozen all personnel requisitions until information becomes available on the new budget and its specific impact on Brookhaven's programs.

It will probably be a number of weeks before the Laboratory has enough information to develop specific plans and courses of action. The Laboratory will, of course, make all possible efforts to minimize the impact of budget reductions on our staff. You will be kept informed as the situation develops.

House Watch

Temperatures in February were above normal, resulting in lower heating energy use by the Brookhaven House. Listed below are degree-days (DD) for the past three months and the estimated heating oil use if the house had been heated by oil (instead of an electric furnace), and occupied by a family of four, with the inside temperature kept at 68°F.

December	1114DD	49 gal.
January	1409DD	64 gal.
February	906DD	39 gal.

Taking A Chance On Life

Americans live the best protected lives the world has known. Life expectancy is double that before the Industrial Revolution. Yet we are afraid of the air we breathe, the water we drink, the food we eat, and the energy we use.

Artificial sweeteners, traffic accidents, pesticide licensing, occupational and public exposure to benzene — all have been dealt with by risk assessors. Risk assessment has become an increasingly important part of public decisions, and many laws now mandate its use. If the fledgling automobile had to go through the same scrutiny the supersonic transport did, it might have suffered the same fate.

"In many ways, Chicken Little is alive and well and agitating for risk assessment," says Samuel Morris, Scientist in the Biomedical and Environmental Assessment Division in the Department of Energy and Environment. Morris will speak about health risk assessment in the next BNL Lecture on Wednesday, March 18, at 8 p.m. in Berkner Hall. His talk is entitled, "Taking A Chance On Life."

(Continued on page 2)

Doug Humphrey

Sam Morris

The Rogeri Trio

In Concert At Berkner

A youthful ensemble which has met with critical and public acclaim at campuses and in major cities throughout the United States will present the next BERA concert at Berkner Hall on Thursday, March 19, at 8:30 p.m. Formed in 1976, the Rogeri Trio consists of pianist Barbara Weintraub, violinist Richard Young and cellist Carter Brey.

Their program at BNL will include Mozart's Trio in G Major, K. 496; Shostakovich's Trio in E Minor, Op. 67; and Beethoven's Trio in B-flat Major, Op. 97 ("Archduke").

The trio has been resident Wardwell Fellowship Ensemble at Yale University, where they presented the complete Brahms chamber music cycle with the Tokyo Quartet. It was also during their Yale residency that members of the Trio won top prize at the prestigious 27th International Munich Competition.

Admission is $6 for adults, $4 for students and senior citizens, and $3 for those under 18. Tickets will be available at the door.

Inside Information

Two new appointments were announced recently by Physics Department chairman, Arthur Schwarzschild:

T. Laurence Trueman, head of the High Energy Theory Group since 1974, has been named deputy chairman. In this capacity, he will be involved with all areas of the department, with particular emphasis on the high energy physics program. Trueman joined the staff in 1962 as a Research Associate, rose rapidly to the rank of physicist in 1969 and following his year as a Guggenheim Fellow became senior physicist in 1974. Trueman has worked on a wide variety of problems in strong interaction physics, including especially the constraints implied by symmetry principles and estimates of the rates for various processes such as W production at ISABELLE. He has also done work on more formal problems in field theory.

Victor J. Emery, Solid State Theory group leader, was selected as associate chairman of the department, and head of Solid State Physics. With the beginning of experiments at the National Synchrotron Light Source, Emery will be involved with the development of the physics department solid state program at that facility. He came to Brookhaven in 1964 from Birmingham, England following a fellowship year at the University of California, Berkeley. His early work at BNL resulted in a series of important papers on quantum mechanical many-body problems. Emery was appointed Low Temperature group leader and senior physicist in 1972. As head of the Solid State Theory Group since 1975, he has been involved with theory relating to the experimental physics program at the HFBR.

Coming Up

A Laboratory colloquium on the Brookhaven House will be held on Tuesday, March 17 at 3:30 p.m. in Berkner Hall. Staff and public are welcome.

Women In Science

Ling Lie Wang, chairman of the Brookhaven Council, will speak about the Council's activities at the Women In Science luncheon meeting on Thursday, March 19, 1981, at noon in Berkner Hall, Room C. Attendees should bring their own lunch.

Retiree

Mort Rosen

Clifton P. Hulse retired February 27 from his position as Stores Clerk in the Supply & Materiel Division. He joined the Lab in 1951, and now plans to "take it easy for a while." Although he will do a little traveling, he primarily intends to relax and enjoy the time off.

Call For Computer Ideas To Aid Handicapped

The Johns Hopkins University will conduct a national competition for ideas, devices, methods, and computer programs to help handicapped people overcome difficulties in learning, working, and successfully adapting to home and community settings. Categories include computer-based aids for the blind, deaf and mentally retarded; for individuals with learning disabilities, neurological or neuromuscular conditions; and the orthopedically handicapped.

One hundred awards will be made, including a $10,000 grand prize, personal computer equipment, other cash prizes, computer training, and certificates of merit. Computer specialists, full-time high school and college students, and interested people generally, including those with handicaps, may enter. June 30, 1981 is the deadline for entries.

For additional information, including a descriptive flyer and contest application, write to Personal Computing to Aid the Handicapped, Johns Hopkins University, P.O. Box 670, Laurel, Maryland 20810.

Selected Reading

New Scientist 89 (1241) February 19, 1981
Top quark may be in DESY's energy range. 474.

National Review 33 (1) January 23, 1981
Lech Walesa: Man of the Year. Christian Jelen and Jacques Bernard. 32-37.

New Yorker 57 (1) February 23, 1981
Reporter at Large: Small Scale Hydroelectric Power. John McPhee. 44-87.

Science 211 (4485) February 27, 1981
Saga of Boy Clone Ruled a Hoax. William Broad. 902.

Risk

(Continued)

Why are people so concerned about avoiding and preventing risks? In the past, says Morris, hazards like yellow fever and diptheria were unavoidable. "Although a lot of effort was put into solving those problems," says Morris, "they were natural hazards, and no one blamed society for causing them. Today, the risks we face are more often the result of our own actions. For example, DDT and PCBs are here because we put them here. We know there are risks involved, but because we are responsible for them and can control them, we agonize over just how risky they are."

Making risk assessments are even more complex now because our actions affect many more people than ever before. High speed transportation allows diseases to spread across the continent in hours. Our system for distribution of goods and mass communication allows hundreds of millions to sample new foods and drugs before their long term effects are fully known. Even global damage is within our capability — trace amounts of pesticides and radionuclides from bomb testings have accumulated in everyone's tissues.

How do we evaluate the risks of all these actions? Which are most dangerous? And how do we balance risk versus benefit?

Morris says there are no easy solutions to many of these complex, scientific and technologically based risk problems. The solutions themselves may lead to problems. Risk assessment is an attempt at a rational way to identify risks that need attending to without running amuck every time Chicken Little rears his head.

As Morris says, in making public decisions, a risk assessor must be aware of value judgments that must be made in evaluating acceptability. These involve attitudes on risk avoidance and uncertainty, and philosophies of sharing risks among the population where some gain and some lose. Says Morris, "There is no question that life is valuable. The real question is how valuable."

Sam Morris came to the Laboratory in 1973. He holds a Sc.D. in Environmental Health from the University of Pittsburgh, where he was principal investigator of a Ford Foundation sponsored project to assess health risks of energy systems.

He is an Adjunct Associate Professor in the Department of Engineering and Public Policy, Carnegie-Mellon University, and occasionally teaches a statistics course at SUNY, Stony Brook. He is also a consultant in health and environmental risks for various state, federal and international organizations.

A buffet supper is served at 6:30 p.m. at the Brookhaven Center before the lecture. Many find it convenient and it is a pleasant way to meet members of other departments. Reservations for the buffet should be made in advance by calling Ext. 3541 before 5 p.m. on the day of the lecture.

How do you evaluate risk? If you're addicted to cigarettes, you might perceive smoking as less risky than, say, taking a jet flight across the country. Most people are biased about the dangers of various activities, depending on their personal experiences. Here is a list of actions which, according to statistics, each result in a one in a million chance of death. This level of risk may seem trivial, but the point of the chart is that all the actions listed are *equally* risky.

			Uncertainty factor
1.4(UK)3(US)	cigarettes	cancer, heart disease	3
2 months	of living with cigarette smoker	cancer, heart disease	10
.5 litre	wine	cirrhosis of the liver	3
40 tablespoons	peanut butter	liver and other cancer caused by aflotoxin	3
1 year of drinking	Miami drinking water	caused by chloroform	5
30 cans	diet soda	cancer caused by saccharin	10
2 months	in stone or brick building	cancer caused by radioactivity	3
2 months	visit to Denver	cancer caused by cosmic rays	3
6,000 miles	jet flying	cancer caused by cosmic rays	3
1/12	yearly diagnostic x-ray dose	cancer	3
10 years	living near PVC plant	cancer caused by vinyl chloride	10
2 days	in NY or Boston	air pollution	5
3 hours	in coal mine	accident	2
1 hour	in coal mine	black lung disease	4
1,000 miles	jet flying	accident	2

Reprinted from The Yale Journal of Biology and Medicine, 51 (1978), 37-51, "Risks Caused by Low Levels of Pollution," Richard Wilson.

These numbers are not exact because of confounding factors and a certain amount of statistical uncertainty in deriving them. To calculate the range of uncertainty, divide and multiply by the factor. For example, taking uncertainty into account, you run the risk of a one in a million chance of dying if you smoke from one to nine U.S. cigarettes.

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CARL R. THIEN, Public Relations Officer

Letters To The Editor

To the Editor:

I would like to thank the many people who volunteered their time to help make last Friday's BERA Dance a success. The cast of the show, the ticket takers, the ticket sellers, the crew that rearranged the tables and chairs, the people that stayed after the dance to put them back, the people who kept the glasses circulating and many others.

—Don David
Dance Committee Chairman

Phone Facts

A Lab-wide training program and lots of reference material will help ensure a smooth start for the new computerized telephone system on April 6.

Training classes are scheduled to commence March 9 and continue to March 30, if necessary. Published schedules will advise employees about when and where their training classes will meet.

For training purposes, phone users have been divided into three groups. **Group coordinators** will receive the most extensive training, qualifying them to be their groups' resident experts. **Lead personnel** will receive enough training to back up the group coordinators. **Station users** are the many other BNL employees who use a phone. Every station user may receive training appropriate to the way he or she normally uses the phone.

After April 6, there will be three places where the information presented in the training session can easily be found. First, employees will receive a "Station User's Guide" which will outline the features of the system and how to use them. Second, a transparent overlay on the face of each telephone will briefly summarize the steps involved in the most commonly-used features. Finally, revised yellow pages for the BNL directory will be distributed before the cutover.

Out with the old; in with the new!
On April 6th, we're 282!

To inform your callers of this fact, use one of the preprinted postcards which will be distributed on or about March 10 to all Laboratory personnel through the intra-lab bulk mail distribution system.

The postcards will note the fact that over the weekend of April 4 and 5, the Laboratory exchange will change from 345 to 282. All you do is address the card, fill in your extension, sign your name, and drop the postcard in the intra-lab mail. The BNL mail room will affix postage and mail the card.

Additional supplies of postcards can be obtained from Howard Fales, Staff Services Division, Ext. 2000.

Non-Smoker's Rights

The Occupational Medicine Division and the Director's Office have been asked to make a statement regarding non-smoker's rights. In question is Laboratory policy regarding the protection of non-smokers from the smoke of coworkers, especially in confined spaces on a regular basis.

At this time, the Laboratory is not in a position to prohibit this behavior. However, since there is medical evidence that measurable airway abnormalities do occur in non-smokers chronically exposed to tobacco smoke, we feel that smokers should at least observe common social courtesies. Many non-smokers, previous smokers themselves, have gone through much soul-searching and great personal discomfort to break this habit. It is often difficult for these people to endure continued exposure to the smoke of others.

Rather than issuing an edict prohibiting smoking, we urge you to consider your coworkers by curtailing smoking when necessary to achieve this end.

—Laura Sbarra, M.D.

Arrivals & Departures

Arrivals

Diane E. Cabelli	Chemistry
Robin H. Cantor	Physics
Nancy L. Johnson	Tech. Info.
Judith F. Katsin	Medical
Leonard F. Mausner	Medical

Departures

Marie L. Canner	Nuclear Energy
Fernando Galdos	Energy & Env.
Joseph P. Gatto	Energy & Env.
David H. Hettrick	Safety & Env. Prot.
Clifton P. Hulse	Supply & Materiel
Henryk Piekarz	Physics
Steven A. Spencer	Biology
Johnson L. Tseng	Energy & Env.
Francis A. Vadola	Nuclear Energy
Ralph D. Wilson	Safety & Env. Prot.

Cafeteria Menu

Week Ending March 13, 1981

Monday, March 9		
Beef barley soup	(cup)	.55
	(bowl)	.65
American chop suey		1.50
Western omlet & 1 veg.		1.50
Hot Deli — Pastrami	(on bread)	1.65
	(on roll)	1.75
Tuesday, March 10		
Cream of tomato soup	(cup)	.55
	(bowl)	.65
Sauteed chicken breast on rice		1.65
Beef liver & onions w/1 veg.		1.50
Hot Deli — Barbequed beef	(on bread)	1.65
	(on roll)	1.75
Wednesday, March 11		
Split pea & ham soup	(cup)	.55
	(bowl)	.65
Fillet of fish Duglere w/1 veg.		1.55
Braised short rib á la mode w/1 veg.		1.65
Hot Deli — Grilled Reuben		1.60
Thursday, March 12		
Chicken noodle soup	(cup)	.55
	(bowl)	.65
Batter fried steak w/1 veg.		1.65
Spaghetti & sausage		1.55
Hot Deli — Baked ham	(on bread)	1.60
	(on roll)	1.70
Friday, March 13		
New England clam chowder	(cup)	.60
	(bowl)	.70
Tuna noodle casserole & 1 veg.		1.60
Sauerbraten & potato pancakes		1.65
Hot Deli — Clam boat		1.70

Degree Days

Feb. 23	24	25	26	27	28	Mar. 1
21.0	19.0	23.5	25.0	25.0	33.0	24.2

A foot is a device for finding furniture in the dark.

A pedestrian is a man who has two cars, a wife, and one or more teenage children.

Cooking Exchange

Come and celebrate Mardi Gras, New Orleans style, on March 11 with the Cooking Exchange. Meetings are open to BNL employees and their families, male and female.

The meetings are on the second and fourth Wednesdays of each month, at 12:30 to 2:30 in the Recreation Building. Admission is $1.00 and babysitting is provided at 25¢/child.

If you have any questions, please call Adrienne Usher, 289-7658.

NYC Train Trip

The Hospitality Committee is planning a group railroad trip to the city on Wednesday, March 18. 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, March 12. 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.

French Club

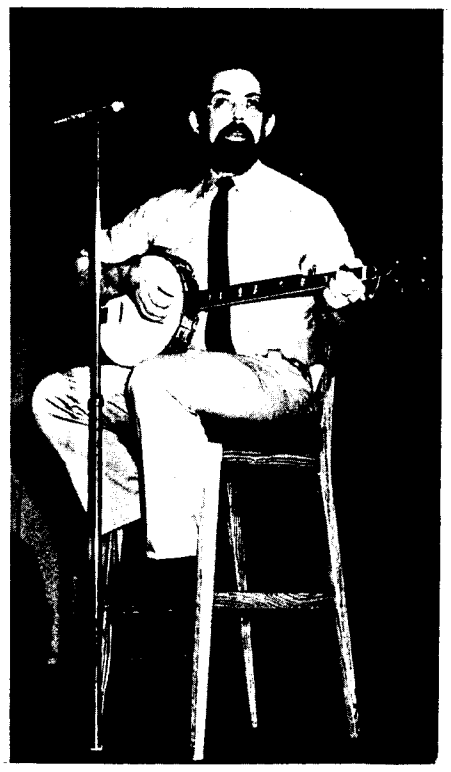
Le Cercle Francais de BNL will present Alida White, soprano, in a program of French art songs on Wednesday, March 11, at 8 p.m. in Berkner Hall. Accompanied by pianist Thomas Webb, she will interpret songs by Debussy, Faure, Lully, Poulenc, and Satie, set to texts by Villon, Ronsard, and Verlaine.

Alida White, a native of New York City, began her musical studies in Germany at any early age, and continued in Paris and New York with teachers Nadia Boulanger, Elsie Arden, Florence Kimball, and Winnefred Cecil. She has often worked with composers, and has performed on the opera and concert stage in the United States and Europe. She now makes her home in St. James, where she teaches voice.

A contribution of $4.50 ($3 for students) will be requested of those who attend who are not members of the French Club. Refreshments will be served during the intermission.

Motorcycle Club

Anyone for some left over sauerkraut? The monthly meeting is Monday, March 9, at 5:15 p.m. in the Recreation Building.



BERA Bash

Over 500 Lab employees and guests danced the night away in Berkner Hall last Friday evening. Music for the BERA-sponsored event was provided by the Newports, led by BNL's Charlie Zein. Joe Indusi hosted an entertaining vaudeville show which featured the talents of Janet Sillas, Mona Rowe, Karl Swyler, Sandi Lane, Bill Love, Jane Love, Gus Basile, Richard Perry, Frank Castellano, and Ken Czyscinski.

Camera club member Ripp Bowman captured some highlights of the evening.

Volleyball

Standings as of 3/2/81

A Division	
No Names	11-1
Mixed Ups	11-1
High Society	7-5
Las Bolas	5-7
Nuts & Bolts	3-9
Kings Court	0-12
B Division	
Puff & Stuff	8-4
TNT	8-4
Leftovers	8-4
Lemufs	6-6
Oh Nos	5-7
Semi-Tough	1-11

No Names over Las Bolas, 15-10, 15-9, 15-12. Mixed Ups over Nuts & Bolts, 15-13, 15-9, 15-7. High Society over Kings Court 15-3, 15-4, 15-11.

Puff & Stuff over TNT, 15-11, 16-14, 3-15. Leftovers over Semi-Tough, 15-12, 15-4, 15-3. Lemufs over Oh Nos, 15-13, 15-8, 15-6.

Bowling

Green League

The Light Source took 11 from the Sandbaggers with D. Wiseman bowling 220/224/633 scratch, 756 gross. The Old Timers II took 6½ from the Designers with B. Galen rolling a 220. The Blue Jays took 3 from the Freon Loaders and the Pinball Wizards took 3 from the Strangers. The Trouble Shooters lost 11 to the 76'ers, the Sparks lost 11 to Isa Team, and the Phoubars lost 11 to the Old Timers.

Pink League

High games were bowled by Denise Miesell 189, Mary-Grace Meier 178/170, Fran Briening 173, Karen Alberico 173, Renie Rosati 165/162, Ellie Kristiansen 161/150, Audrey Blake 159, Millie Connelly 154, Fran Scesny 151. The Pinsplitters are still in first place.

Purple & White League

The Flounders increased their first place lead by 5 points. Bill Sells' 228 was high for the men and Sharon Smith's 207 was high for the women. Other good games were bowled by Larry Musso 223, Ken Riker 213, Bob Brown 212, Bob Jones 212, Dave Penoyar 208, Ken Asselta 201, Gerrie Riker 196, Lynn Boyd 192, Mary Austin 191, Millie Connelly 190, Mary-Grace Meier 184, Jeanne Penoyar 182, Joyce Pinelli 180.

Red League

The 76'ers won 11 from the Trouble Shooters. J. Petro rolled a 208/662 gross, J. Connelly 209, M. McKenna 606 gross. The Old Timers shut out the Phoubars for 11. R. Adams had games of 214/200 for a 607/664 series, J. Roesler grossed 612. Isa Team also took 11 from the Sparks. W. Kollmer bowled a 221, E. Sperry IV grossed 616. The Strangers won 8 from the Pinball Wizards. The Freon Loaders won 8 from the Blue Jays with T. Rudolf rolling a 222/680 gross, L. Schairer 221/660 gross. The Designers split 4½-6½ with the Old Timers II. J. Ferrante grossed 614, E. Sperry 612. Dick Wiseman's 633/756 series shut out the Sandbaggers for 11. K. Riker grossed 602.

Entry forms are still available at the BERA Sales and Services Office in the cafeteria for the annual Scotch Doubles Bowling Tournament being held Sunday, March 15, at 2 p.m. at the Port Jeff Bowl.

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 listing 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.

SCIENTIFIC POSITIONS OPEN: The following staff positions are open. Candidates may apply directly to the department representative named, or through the Office of Scientific Personnel, Ext. 3338.

CELL BIOLOGIST - Seek applicants for staff position who have interests relevant to lung biology and pathology, and one or more years postdoctoral experience and demonstrated research ability. Apply: Elliott N. Shaw, Biology Department.

Autos & Auto Supplies

72 CHEVY - Van, 6 cyl, 3 spd, new clutch, brakes, tires, am/fm cassette, mech. excel. 588-0424.

69 MOTORCYCLE - Triumph, 650cc, excel cond, $1,400; 1979 Motorcycle Yamaha 400cc, mint cond, low mi., $1,500. Ext. 4100 or 589-8691 ask for Rick G.

72 CHRYSLER - Sta. wgn, Town & Country, 9 pass, new brakes, good cond. Asking $700. Ext. 3509.

72 VW - Bus, sunroof, good shape, $1,500; one new 350 Chevy head complete 286-1886 after 5:30.

70 OLDS - Vista Cruisa, p/s, p/b, a/c, runs well. Bob, Ext. 4672 or 929-4753.

78 BUICK - Skylark, 6 cyl, 2 dr, landau roof, tan, excel cond. $3,900. 732-4821.

70 FORD - Cleveland heads, excel cond, Cleveland intake & carburetor (4 barrel). 744-9802 after 6 p.m.

73 HONDA - XL70, needs work. Asking $80. John, 265-0117 eves. or Ext. 4024.

MOTORCYCLE BUMPER - carrying racks, carry up to 225 lbs., $20. Victor, Ext. 7154.

80 HONDA - Twin Star, brand new, luggage rack, shoe bags, many extras. $1,500. Ext. 2482.

POSI REAR AXLE - for 1969 Cougar, good cond., $75. Phil, 286-0913 before 5 p.m.

70 FORD - LTD wgn, top mechanical shape, some body rot. Asking $500. 277-1284.

73 VOLVO - 2 dr, 4 cyl, 25 MPG, fuel injection. Nihal, Ext. 3420 or 345-3177 after Sat.

76 COYOTE TRAVEL TRAILER - 24' sleeps 6, excel cond. Asking $3,700. Cheryl, Ext. 7716 or 654-2041 eves.

STEREO - in dash, am/fm 8 trk, 2 new speakers. $65. Stan, 475-0532.

76 LINCOLN - Town car, 4 dr, fully automatic, am/fm cassette CB, leather interior, Ext. 4863 or 298-4117.

73 CHRYSLER — Newport, 2 dr. hardtop, high mi., body good cond., mechanically fair. Make offer. 929-8772.

WORK BINS - for pickup truck, two four footers w/mounting brackets, $150; Chiltons Datsun repair tune-up guide, 1973 thru 1975 Models 510, 1200, 610, 710 B210. $5.00. Ext. 3284.

77 PONTIAC - Grand Safari wgn. V8, a/t, p/s, a/c, reasonable mi., very good cond. $4,200. Available March 26. 744-5375.

74 BMW - Bavaria. 589-3608.

TIRES - (2) 7.75x14 (2) E78x14 (1) F78x14. $5. ea. John, Ext. 4153.

65 PLYMOUTH - Valiant, runs good, work car. $250. Jack, Ext. 4100.

TIRES ON RIMS - (2) J78x14, 4 ply, 5 lug, only 500 mi. $20. ea. Gene, Ext. 4261.

72 OLDS 98 - no rust, excel running cond. $750. Ext. 3541 or 399-1920.

74 CADILLAC - loaded Coupe de Villa, good tires, good cond, must sell. $1,000. 878-0917.

79 FORD - 4 WD, many extras, excel cond, asking $6,300. Jimmy, Ext. 2350 or 878-4506.

68 CHEVELLE - track car, excel cond, 331 Pro motor, Ford top loader trans, motor set back, alum fire walls, 5.38:1-12 bolt rear, E.T. 11.5 sec. $3,000. Fred, Ext. 4407/35 or 499-1214 after 6 p.m.

73 CHEVY - Malibu wgn, very dependable. $500. Firm. Ext. 2926 or 281-0268.

68 CHEVY - Wgn, good for parts, V8, engine runs, transmission good. $125. Joe, Ext. 4661.

78 FORD - F150, 4x4 Pickup, V8, auto w/cap, 22,000 mi. $5,400. Bill, Ext. 4988 or 286-0639.

SHOP MANUAL - Chrysler products 1975 (also applies to close by Model years) $5. Ext. 2610 or 744-5709.

TIRES - like new H78x15, glass belted Jetzon on Olds rims (2) $60. Don, Ext. 3284.

POCKET PAGER - automobile burglar alarm, 4W range 2 mi., group purchase. $115. Ext. 4805 or Ext. 7184.

77 T-BIRD - Landau top, a/t, a/c, p/s, p/b, p/w, extra wheels w/snows, am/fm stereo, 40 ch. CB, orig. owner, 33,915 mi. $3,800. 728-1037 after 6 p.m.

75 HONDA CIVIC - CVCC, perfect cond., 73,000 mi, new parts, have proof. Joe, Ext. 2898 or 744-4086.

68 VW - Square back, rebuilt engine, several new parts, spare tires. $300. Maggie, 744-4787.

72 FORD - Sta. wgn, p/s, p/b, excel. mechanically, but some body dents. Arnie, Ext. 2606.

TIRE - Firestone radial GR70x15, $10; 1966 Olds am radio & windshield wiper motor. Ron, 281-3149.

77 HONDA - wgn, CVCC, 4 spd. $2,950. Ext. 4434 Bob.

69 CHRYSLER - Town & Country wgn, good cond, reg. gas, snows, p/w, p/s, stereo FM, $350. or best offer. Russ, Ext. 3059 or 744-7242.

70 CHEVY - Impala, 350 engine, 55,000 mi, new tires, muffler, rear body damage. $250. Jack, Ext. 7942.

69 SQUARE BACK - auto, paint, tires, battery, upholstery, many mechanical parts all new, engine needs attention. 281-9412 eves.

Boats & Marine Supplies

15' FIBERGLASS BOAT - 35HP Merc. & control, also w/trailer. $600. 929-4064 after 6 p.m.

8 HP MARINER - outboard & long shaft, less than 10 hrs. under Warranty. $595. Ext. 4638.

318 CU. CHRYSLER MARINE ENGINE - fresh water cooled. heat exchanger included, runs very well. Don M. Ext. 2022 or 878-2215 after 6 p.m.

23' FIBERGLASS FLARE - cuddy cabin w/head, less than 20 hrs. on 225 Chrysler I.O. needs minor work. $2,500. Firm. Ext. 3284.

1978 30' CATALINA - wheel Dodget VHF, R. depth F. holding tank, 3 sails, mint cond. Dinos, Ext. 4666.

Miscellaneous

MIRROR - gold framed, 2'x3', $40; gold rocker chair, material, $30; 5 pc bed, oak twin beds, triple dresser, Amoire, 2 nite tables, double mirrors. $450. 878-1630.

CUSTOM - all wood console stereo, excel quality components. 369-2151 after 6 p.m.

AMPEG GUITAR AMP - 120 WRMS (2) 12" speakers, excel, $350; Morley phase shifter, excel, $80. Charlie, Ext. 3950.

OPERA TICKETS - (2) Salome, March 27. Dress circle boxes, $15 ea. Dave, Ext. 4394 or 2533.

VIP HOLIDAY SPA MEMBERSHIP - $29 renewal per yr valued over $600. Asking $25. George, 288-5697.

GOLF CLUBS - Epic 2000 by Spalding w/bag. $100. 234-1186 eves between 6-7 p.m.

SEWING MACHINE - Sears Kenmore w/case, excel cond. Best offer. Peggy, Ext. 3887.

WOODBURNING STOVE - "Old Mill" w/blower and screen, like new. $425. 331-1572 after 7:30.

WALL OVEN - $100; counter top stove, $75; kitchen cabinets, $20 ea; counter top, $25. Ext. 7785.

BABY BOUNCER - $3; golf clubs, used #9, $2 ea. Sue, Ext. 4267.

CRIB & MATTRESS - excel cond, $75; toddler's carrier bicycle seat, $10; big wheel, like new, $15. Bill, Ext. 3369 or 929-6442 after 5 p.m.

HOME MADE - Easter chocolates. Call Gene for price list, Ext. 4033.

ALADDIN BLUE FLAME HEATER - kerosene, extra wick and cleaner, used only 3 hrs, 6,000 -9,000 BTU. $85. 878-0717.

NEW HIKING BOOTS - all leather, Ronni men's size 7. $75/pr. Frank, Ext. 3898.

BILLING BOAT - Danmark wood model, requires rigging kit. $75. John, Ext. 4153.

OIL FURNACE - flue heat reclaimer. Best offer. George, 821-9086.

DRYER - gas, Maytag, good cond, $60; motorcycle carrier, bumper type, $10. Walter, Ext. 3397 or 567-9025 after 6 p.m.

DOUBLE BED - mattress and box spring w/steel frame, very good cond. $100. 331-9349.

RECORDER - GE am/fm radio cassette, Sanyo cassette recorder, Sanyo am/fm receiver. All portable, like new; toaster-oven-broiler, GE (T26) used once, $35; stereo phono system Lafayette, $50. Nihal, Ext. 3420 or 345-3177.

SURE MAGNETIC - stereo cartridge and stylus N44E elliptical. $8. Pete, Ext. 4782 or 289-7218.

CUPOLA - Stephenson, 28"x28"x30"h, redwood w/copper flashing and roof, new, never used, painted. $225. Pat, Ext. 2452.

INDIAN HEAD PENNIES - pre-1900. $22 per roll and up. Greg, Ext. 7960.

TYPEWRITER - portable Smith Corona w/case, excel cond, $15; table - dining Italian Prov, 4 chairs, 2 arm, 2 straight, 2 leafs. 265-1072 or Ext. 3514.

MISS CLAIROL - Kindness deluxe hairsetter w/lighted mirror. $25. Ext. 3499.

LENSES - Nikkor: 43-88mm AI zoom, $145; 200mm F4 telephoto, $135 or both for $270. 981-9314 after 7 p.m.

CRAFTSMAN - 12 drawer tool box w/3 drawer chest, 1 mo old. $375. Ext. 4024.

CHAIN SAW - elec 14" Craftsman. $30. Ext. 2610 or 744-5709.

REFRIG/FREEZER - GE, 17 cu ft brown, $150; baby carriage w/new mattress, $10. Ext. 3105.

RANGE - GE elec, excel cond, 30". $85. 744-3744.

FIGURE SKATES - boy's size 4, excel cond. $10 or best offer. Ext. 2914 or 286-3742 eves/wkends.

FENDER RHODES PIANO - 73 key, stage model, very good cond, excel action and tone. Ext. 3698 or 325-0363.

ROCK CLIMBERS - Summit Magazine, July 63-June 72. Dennis, Ext. 4259 or 736-2534 after 6 p.m.

ELECTROLUX - recond Model Super J/Deluxe w/two yr guar plus parts and power nozzle. $325. Joe, 475-8456.

REFRIG - office size, 5 cu ft, 21"x24"x32"h, excel. $45. 281-7844.

STEREO EQUIPMENT - Technics SA7300 40 w/channel amp ST7300 tuner, Garrard turntable. $450 takes all. Dan, 924-8644.

SKATES - ladies figure size 5N, white. $10. Ext. 4763.

POODLE PUPPIES - standard size, snow white, males, $50; females, $25. E. Edwards, Ext. 4027 or 286-1121.

CAMERA - Keystone 126X, $12; Zenith 21" screen TV channel 4, needs work. $55. Ron, 281-3149.

VACUUM CLEANER - new Hoover Celebrity III, for rugs and bare floors, with orig bag and guarantee. $90. Tom, Ext. 4084.

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

CENTEREACH - 4 bdrm, 2 bath, up and down split, large eik, l/r, d/r, central a/c, in-ground pool and sprinkler system, gas heat, w/b fireplace, appliances, w/w carpet, many extras, mid 40's, avail immed. Claire, Ext. 3356 or 286-8234.

WESTHAMPTON AREA - mobile home 12'x60', 2 bdrms, eik, laundry rm, stove, washer/dryer, porch, patio, stove, 2 tool sheds, wooded landscaped area. $10,500. 698-2501 after 5 p.m.

BELLPORT VILLAGE - 3 bdrm hi-ranch, l/r, f/r, den, large eik, att garage, deck, 1½ baths, short walk to Kreamer St Schools. $42,000. Financing available. 286-8166.

REMSENBURG - large ranch, 1200 sq ft, 3 bdrm, 2 baths, 14x14 deck, formal d/r, bsmt, ½ acre, garage, many extras, school. $69,500 by appt only. 325-0761.

For Rent

BELLPORT - large furnished rm. in quiet neighborhood. Some privileges, 15 min. from Lab. 286-8356.

RIDGE - 3 bdrm ranch on approx. ½ acre, fenced yard, appliances, a/c, available March 1, 1981. Don M. Ext. 2022 or 878-2215 after 6 p.m.

BROOKHAVEN - furnished studio, complete kitchen, f/p, w/w carpet, garage, single occupancy. $300. includes all. 286-0608.

YAPHANK - Townhouse 5 min. from Lab, l/r, kit, dinette, 3 bdrm, 1½ bath, basement & garage. All appliances. Available April 1. Ext. 3389 or 765-2102.

ROCKY POINT - immac. small house, 2 bdrm, l/r, eik, full bath, patio, shed, secluded Cul-de-sac, fully carpeted. $290/mo. plus util. for info call neighbor Mrs. Zimmer at 744-3157.

SHIRLEY - 3 large rooms, apt. w/full bath, priv. entr, available April 1. 375/mo. incl. heating & util. 281-2561 eves.

Wanted

CAMPING EQUIPMENT - tent, sleeping bags, air mattresses, etc. Ext. 3106.

ENGINE - for 1973 Dodge Dart. 369-2151 after 6 p.m.

SERVICE OR SHOP MANUAL - for 1967 Pontiac Catalina; apartment sz. washer and/or dryer, good working cond. 744-8063 days.

LANGUAGE TAPES - to borrow, copy & return. French & German needed. Anne, Ext. 2345.

RIM - 16", 6 lugs, for Chevy pickup. Ext. 3679 or 727-3869 after 6 p.m.

FRENCH LANGUAGE TUTOR - for 7th grade student. Goodzeit, 286-0271.

FOUNTAIN PENS - collector wants to buy pens for collection. Jerry, Ext. 2934.

BABYSITTER - occassional daytime sitter for 2 yr. old, Bayport area. Debby, 472-4196.

TEN SPEED MENS BIKE - good cond, reasonably priced. 744-3234.

PIANO - Ext. 3443.

RIDING MOWER - forward, reverse speeds in running cond., reasonable. 281-8612.

2 BARREL - Rochester carburetor for Chevy V8, 283 engine in good cond. Frank, Ext. 3898.

APARTMENT - 1 bdrm. in Commack, Kings Park, Smithtown Area, reasonable, util. incl. Frank, Ext. 3898.

BADMINTON RACQUET - used. John, Ext. 2070.

APARTMENT - 1 or 2 bdrm. wanted from April 1 to Sept. 1. Ext. 7664.

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

TWIN BEDS - headboard & frame, also mattress & boxspring if in v.g./excel cond. Ext. 3139 or 585-5256.

TABLE SAW - good cond, reasonable price. Sam, Ext. 4665.

MAST AND BOOM - for small sail boat, like sunfish. Jerry, Ext. 2924.

PEOPLE - interested in Solar Co-op hot water system, final mtg. additional details - cost/procedures 3/11/81 at 8 p.m. Setauket School. Ext. 3575.

SKI POLE - one half of pair, basket not necessary; luggage carrier, molded plastic for auto roof. Dennis, Ext. 4259 or 736-2534 after 6 p.m.

GM TODDLER CAR SEAT - crib; high chair; clean, reasonable, for visiting grandchild. Ext. 2634 or 286-1290 eves.

WATER SAFETY INSTRUCTOR - for weekends in boys' camp in Wading River. Call Art Noble, PI 6-8282.

Car Pools

CENTER MORICHES - Wish to start carpool, 1 or 2 others, Redbridge Ocean area. Ext. 2969.

WEST SAYVILLE - Cherry Ave. To start or join existing car pool. Barbara, Ext. 4956 or LT 9-0277.

CALVERTON - to BNL, 8:30 to 5:00. 369-2151 after 6 p.m.

HUNTINGTON - want to start 2 member car pool, 8:30 to 5:00, accept paying rider. Medaris, Ext. 7676.

HUNTINGTON/COMMACK - to start or join existing car pool, 8:30 to 5:00. Mark, Ext. 3258.

MILLER PLACE/ROCKY POINT - to BNL, Vanpool w/one vacancy available. Don, Ext. 3284.

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

Services

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

MOTORCYCLE ACCESSORIES - for street & dirt. Best prices, lab discounts. Ext. 2311.

PIANO TUNING - and repair, reasonable rates, and conscientious service. 751-4985.

BABYSITTER - 16 yrs. old, available wkdays after 5, sometimes earlier, anytime on wkends. Wading River. 929-4741.

TAXES - prepared by Tax consultant, your home or mine, reasonable. John, 732-2472.

FIRESIDE CHIMNEY SWEEPS - fireplaces, wood, coal & oil flues. Dustless removal, insured, lab discount. Bill, 584-6425.

SANDBLASTING - boat trailers chassis, any kind equipment w/wo primer coat, reasonable rates. 744-3968.

KITCHEN CABINETS - home improvement, free estimates, in any area. 864-6264 after 6 p.m.

Classified Ad Policy Deadline is 4:30 p.m. Friday for publication Friday of the next week.