

Forbes's Open Letter: Lab, Tritium Leak

U.S. Congressman Michael Forbes, who represents New York's First Congressional District in the House of Representatives, asked the Brookhaven Bulletin to publish the following open letter to BNL employees. BNL lies within Forbes's district.

An Open Letter to the Employees of Brookhaven National Lab:

As a world-class research facility, Brookhaven National Laboratory and its dedicated employees have few equals. The medical discoveries and scientific breakthroughs produced by Brookhaven Lab's researchers have saved countless lives, eased the suffering of many others and earned the praise and recognition of their peers. That is why there is no bigger supporter than I — both here and on Long Island and in our Nation's Capitol — of Brookhaven National Lab.

The renowned and Nobel prize winning scientists at BNL have brought tremendous prestige to Long Island. Their breakthrough discoveries, such as the boron neutron capture therapy (BNCT), L-dopa for treatment of Parkinson's disease, polymer concrete for road repair and construction, and free-air CO₂ enrichment system, have been hailed across the globe. The employees of Brookhaven Lab have contributed so much to our society and I look forward to the day when that will once again be the focus of our attention.

Sadly, the good work of Brookhaven Lab's employees has been overshadowed by events surrounding the discovery of radioactive tritium in the on-site groundwater. Because Long Islanders draw their drinking water from a sole source aquifer, the existence of this or any other contaminant in the groundwater is a very serious matter. Our top priority must be to correct the contamination problem and then take steps to make certain that it never happens again. The health of our families and neighbors depends on that.

So that there is no doubt, be assured that I am committed to supporting Brookhaven National Laboratory and every one of the 3,200 talented employees there. This Federally-funded facility is the pride of Long Island, producing scientific breakthroughs that save countless lives while pumping millions of dollars into the local economy. In 1996 alone, Brookhaven Lab generated \$240 million in employees' salary and benefits, and the Lab spent \$29 million on goods and services from Long Island companies. It would be devastating to lose such a tremendous asset, and I will work to see that Brookhaven Lab remains on Long Island as a preeminent research facility.

But, just as in all things, there must be a balance. I firmly believe that Brookhaven National Lab can retain its position as a world-class research facility while conducting its operations in an environmentally-friendly manner. It must be clear to everyone that for Brookhaven Lab to survive, its environmental practices must be above reproach, so that it always remains a good neighbor to the Long Island community.

There is a problem at the Laboratory that must be fixed. It is the Department of Energy's (DOE) responsibility to operate the Laboratory in the safest manner possible, to protect the

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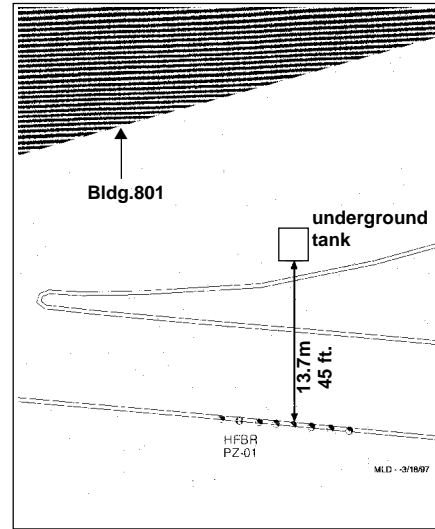
Radioactive Elements Found in Water In Underground Collection Tank on Site

Last Tuesday, March 11, some 750 gallons of standing water containing radioactive strontium-90 and tritium were pumped out of an underground collection tank located directly south of Bldg. 801, 60 Rutherford Drive. This Tuesday, March 18, pumping of the sludge on the tank's bottom was begun, a process expected to be completed before the end of the week.

Pumping the contents out of the underground tank was prompted by water-test results received March 7, showing the presence in the tank's standing water of the two radioactive elements.

Built in the 1940s, the tank is 4-foot-wide by 6-foot-long by 10-foot-deep and topped by a manhole cover that was not watertight. The tank was designed to receive drainage from three locations: storm water and condensation from the stack of the High Flux Beam Reactor (HFBR), one of BNL's existing research reactors; water from four floor drains located in Bldg. 704, the fan house for the Brookhaven Graphite Research Reactor (BGRR), which ceased operating in 1968; and condensate from acid off-gas generated in the radioisotope research laboratories located in Bldg. 801.

The water-sample analysis revealed the presence of strontium-90 at 2,270



A map of the on-site location of the underground collection tank (square) that held standing water containing strontium and tritium, and of the location of a permanent groundwater monitoring well (second circle from left) and the seven temporary groundwater monitoring wells (remaining circles) installed south of the tank.

picocuries per liter of the tank water. The concentration of tritium was 340,000 picocuries per liter.

A radioactive isotope of the metallic element strontium, strontium-90 is generally derived from fission products. The strontium in the

tank water is believed to have originated from the operation of the BGRR.

Tritium is a radioactive isotope of hydrogen, and its presence in the tank is most likely due to the condensation of water vapor from the operation of the HFBR. The HFBR has been shut down since December, prior to the discovery of a long and narrow plume of tritium in the groundwater directly south of the HFBR. It is thought that the tritium within the underground tank and the tritium plume do not have the same source.

A temporary groundwater monitoring well installed immediately south of the tank in December so far shows no elevated concentration of strontium or tritium in the groundwater. To find out if the tank has ever leaked, seven additional temporary wells were installed downstream of the tank as of last Friday, March 14.

Groundwater monitoring data from those temporary wells are expected soon. When the results are available, they will be reported in the Bulletin.

According to an investigation carried out by BNL's Office of Environmental Restoration (OER), the water in this tank was last sampled in 1991 by BNL's Safety & Environmental Protection (SEP) Division, and its analysis revealed the presence of strontium-90 at 1,380 picocuries per liter.

"Given the presence of this radionuclide, the tank at least should have

(continued on page 2)

'Pump & Treat' Updates

The "pump and treat" technique, one of the most common and effective methods of removing volatile organic compounds from groundwater, is now cleaning up contamination in BNL's Operable Unit I. Soon, with the help of the people and pipes shown below, this technique will also be used in Operable Unit III. Stories about both projects appear on page 2 of this issue.



Roger Stoutenburg

Water piping for the pump-and-treat system in Operable Unit III, which was installed in December 1996, is seen here soon after its delivery, with (from front) Vinnie Racaniello, Office of Environmental Remediation (OER); Bob Holzmacher of P.W. Grosser; Tom Nehring, Plant Engineering (PE) Division; Abass Wessen, PE; Carlee Beecher, OER; Mohammad Ali, U.S. Department of Energy, Brookhaven Group; Hamid Talai, PE; Mary Dernbach, OER; Greg Flett, PE; Dennis Danseglio, PE; Bill Gunther, OER; and Bill Dorsch, OER.

Medaris Assists Bebon, Murphy Manages PE

To help plan the Lab's infrastructure and facilities needs and to devise new strategies for meeting them, J. Bruce Medaris became Senior Advisor for Facilities Management, effective January 2. In this role, he is working for Mike Bebon, BNL's Assistant Director for Management & Physical Plant.

As a result, Ed Murphy, who had served as Deputy Manager of the Plant Engineering (PE) Division since 1991, stepped up to the job of PE Manager, the position that Medaris had vacated.

"Since joining Plant Engineering over 16 years ago, Bruce Medaris has overseen many improvements within the division in several positions and has met the increasing needs of our Laboratory customers using reduced resources," comments Bebon. "The sound platform that he has established is key to the Division's future success and is the foundation on which he is planning the Lab's long-range approach to its physical plant."

Continues Bebon, "With over 17 years in Plant Engineering, Ed Murphy brings strong qualifications and experience to his new position. Most recently, he has been instrumental in implementing new processes for construction contracting and in improving our contractors' performance. In 1995, Ed received a Brookhaven Award, recognizing his leadership and accomplishments in project planning and management during a stint in the Office of Environmental Restoration [OER]."

Former Duties Extended

"What I've taken on is an extension of my former duties," explains Medaris. Specifically, he is working in four areas:

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Bruce Medaris



Ed Murphy

Underground Tank (cont'd.)

been monitored over these years, if not drained and its contents processed via BNL's usual hazardous-waste handling procedures," says Sue Davis, BNL Associate Director for Reactor, Safety & Security. "Why this was not done is being investigated by a three-person committee chaired by Mike Brooks," who is Davis' deputy.

While an answer is being sought, "We are investigating whether or not the contents of this tank have been a source of environmental contamination and making sure that it will not be one in the future," comments OER Manager Bill Gunther.

In addition, SEP is monitoring the tank, pumping out any newly accumulated rainwater as it appears for processing as hazardous waste.

BNL & Superfund

The underground tank was rediscovered by OER in November 1996, while OER staffers were reviewing drawings of the area surrounding the BGRR, as part of their investigation of environmental contamination associated with this reactor's operation from 1950 to 1968, and in preparation for the BGRR's decontamination and dismantling under the Lab's Superfund cleanup.

In 1989, the Laboratory was added to the National Priorities List of the Comprehensive Environmental Response, Compensation & Liability Act, which is also known as the Superfund. This federal law provides for the extensive and long-term clean up of hazardous-waste sites nationwide, and sites are added to the list once their contamination is found to pose a threat to public health or the environment.

As of June 1996, BNL was one of 1,227 Superfund sites nationwide, of which 154 are federally owned and 20 are on Long Island. Since the Lab is a U.S. Department of Energy (DOE) facility, DOE is responsible for the Superfund cleanup costs at BNL.

BNL's Superfund cleanup is managed by the OER. The cleanup of the six areas, known as operable units, on site that have been identified to be contaminated with radioactive, chemical and mixed waste due to past disposal practices has been proceeding since 1991, under an interagency agreement among DOE, the U.S. Environmental Protection Agency and the New York State Department of Environmental Conservation.

Results of Analysis

With its investigation of the area surrounding the BGRR completed on November 27 of last year, OER submitted a plan to DOE's on-site Brookhaven Group for analyzing samples of the soil, surface water and groundwater within the area — and the standing water within the tank.

With the plan approved by the Brookhaven Group this past December 11, OER began sampling soil and water the next day; water from the tank in question was obtained December 19 and sent to an independent testing laboratory for analysis. In addition, a groundwater sample from the temporary well immediately south of the tank was sent out for analysis.

Received by fax this March 7, the independent testing showed the elevated levels of strontium-90 and tritium in the tank water, but the results from the groundwater south showed nothing appreciable above usual background-radiation levels.

It has been pointed out in the press that, in the tank's standing water, the concentration of strontium-90 was about 280 times the EPA's drinking water standard of 8 picocuries per liter and that the concentration of tritium was more than 17 times the

EPA's standard of 20,000 picocuries per liter. This comparison, however, can be misleading.

"It is certainly true that this tank was holding a high concentration of radionuclides and that the water at least should have been continuously monitored, if not removed for processing," comments Gunther. "By design, however, the tank collects rad-waste water, so that water would never be released into the environment without the necessary processing to bring its contents to below drinking-water standards."

Waste Removed for Processing

This March 11, OER initiated groundwater sampling at five loca-

tions, about five feet apart and 45 feet south of the tank. By March 14, two more temporary wells were added.

Also that day, SEP pumped the standing water into a single 1,000-gallon, single-walled plastic container, taking all necessary radiological-safety steps. The container was moved to Bldg. 811, the Waste Concentration Facility, where its contents were pumped into permanent tanks for processing as hazardous waste. Similarly on March 18, removal of the sludge was initiated, and it too will be properly processed as hazardous waste.

A sample of the standing water was retained for further analysis. The sludge at the bottom of the tank was also sampled for the presence of radio-

nuclides. Results are expected shortly and will be discussed in the Bulletin.

Discharge into the tank has been halted, the manhole cover has been sealed, and, if rainwater collects, SEP promptly pumps it out and processes it as hazardous waste. In addition, SEP is evaluating the role of this tank in the Lab's waste-collection operations.

If, based on the groundwater sampling data, the tank is found to have been leaking, then it will be removed and all the appropriate environmental remediation steps will begin. If it is determined that the tank has not leaked, then, "We will work with our regulators to develop a satisfactory long-term solution," concludes Gunther. — Marsha Belford

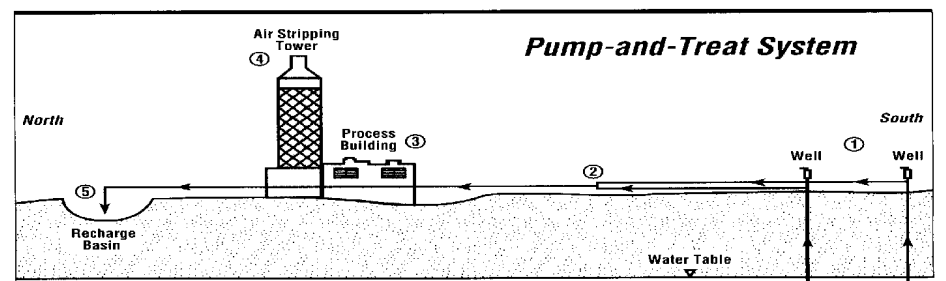
'Pump & Treat' for Operable Unit I: System Near Southeast Boundary Completed

Another milestone in BNL's ongoing effort to remediate contaminated areas of the 5,300-acre site was reached when a groundwater cleanup system near the southeastern boundary in an area called Operable Unit I was completed last December.

In the system, contaminated groundwater on Lab property near the site boundary is pumped up, treated and returned to the aquifer. This "pump and treat" technique is used to remove chemical contaminants — primarily, chloroethane and 1,1 dichloroethane (DCA), which are breakdown products of 1,1,1 trichloroethane (TCA) — from the groundwater and prevent their traveling off site.

The sources of the contamination are an inactive landfill, which BNL's Office of Environmental Restoration (OER), which oversees the Lab's cleanup effort, had capped in 1995, and the Lab's hazardous waste management facility, where both chemical and low-level radioactive wastes are prepared for shipment off site.

Three companies — LaFramboise of Thompson, Connecticut; Miller En-



- 1) A well (or wells) is installed in the ground near the contamination.
- 2) The well pumps water out of the ground and directs it to the process building.
- 3) In the process building, the extracted groundwater is sent to the top of the air stripper. As the water flows downward, fresh air is injected upward from the bottom of the stripper at very high pressure.
- 4) As the air and water mix, the chemical is separated from the water, turned into vapor, and released into the air via the stack, at concentrations below the standards set by New York State and the U.S. Environmental Protection Agency.
- 5) The water, stripped of its contaminants, is "recharged" (absorbed) into the ground.

vironmental Group of Calverton, Long Island; and Philip Ross of Wyandanch, Long Island — constructed the system, which, with start-up testing completed, is operating full-time.

Neither the plume of contaminants nor the pump-and-treat remediation will affect drinking water supplies on

or off site. The Lab's drinking water comes from a regularly monitored area in the northeast area of the BNL site. Approximately 800 residences south of the Lab in North Shirley were offered public water hookups by the U.S. Department of Energy and BNL in January 1996. — Liz Seubert

'Pump & Treat' for Operable Unit III: OER Selects PE Team for Speedy Remediation

The Office of Environmental Restoration (OER) has selected BNL's Plant Engineering (PE) Division to provide services for and construction oversight of a second pump-and-treat system at BNL.

The system will clean groundwater contaminated by volatile organic compounds near the south boundary of the Lab. The contamination is believed to have resulted from past disposal practices involving these compounds, which were used as degreasing agents at BNL and elsewhere until the early 1980s.

"Using in-house expertise makes sense," said Bill Gunther, OER Manager. "With OER's environmental engineers and scientists and PE's technical capabilities and specialized knowledge of the BNL site, we can approach the problem cooperatively, using on-site personnel and equipment to address an on-site problem."

OER participants include project manager Vincent Racaniello, hydrogeologist Bill Dorsch and engineers Tom Doyle and Carlee Beecher. The PE team, led by Tom Nehring as project manager, includes engineers Alan Raphael, Greg Flett, Dennis Danseglio and Abass Wessen, along with consultant Bob Holzmacher of P.W. Grosser. Construction activities are being coordinated and inspected by staff from both OER and PE, including Beecher; and Dan Ahearn, Joe Aukstikalnis, Pete Boyle, Tony Sturcken, Joe Torre and Michael Vis-

cus, PE. Later, PE will assist OER in maintenance operations with the Water Shop under Tony Ross's direction.

This pump-and-treat system is located within Operable Unit III, about 3,000 feet west of another pump-and-treat system on the southeast border (see story above).

Racaniello explained that, last spring, OER determined the extent of the contaminated groundwater plume by taking samples from 45 vertical profile borings, each reaching 200 to 300 feet below the land's surface, and groundwater samples were taken every 10 feet to give OER a three-dimensional "picture" of the plume.

"We're also working on determining the location of the source of this groundwater contamination," said Racaniello. "We now know that the main source area of the contamination is located west of Grove Street and south of Bell Avenue, in a currently inactive storage area."

To meet the goal of a June 1997 start-up for the project, "We developed several construction packages and ordered materials that we knew were needed," Nehring said. "In September, we started clearing for the pipeline and the access road; then in December, we started installing the electric distribution system and water piping. This warm winter has been helpful in allowing us to fast track the job."

Building the treatment system and well installations is expected to be completed in spring, Nehring said.

PE's strong support for OER's work was expressed by Edward Murphy, PE Division Manager, who said, "Our engineering and construction capabilities complement OER's environmental expertise. We form the perfect team. Plant Engineering is committed to helping OER in its cleanup mission whenever possible."

Gunther emphasized that, just as with all subcontractors, all work done by PE for OER is subject to the review, inspection and approval of the outside regulatory institutions for Superfund sites, New York State Department of Environmental Conservation, the U.S. Environmental Protection Agency and the U.S. Department of Energy. — Liz Seubert

Pick a Student

Today is the last day to review summer-student applications at the Office of Educational Programs (OEP), in the Science Education Center, Bldg. 438. All requests for students must be submitted to department coordinators by Monday, March 24.

This year's program runs from June 2 to August 8. OEP will pay seven weeks of the students' stipends, as well as each student's round-trip transportation. Sponsors must pay the remaining three weeks of stipends and housing expense for each student.

For more information, call OEP, Ext. 4503.

Letter From Forbes (cont'd.)

health and safety of employees and local residents, and keep the public informed about any environmental problems.

I have taken an active role in seeking a solution to the problems facing the Lab and have personally called on the Secretary of the Department of Energy and the Administrator of the Environmental Protection Agency (EPA) to clean up and monitor BNL. The immediate priority is to locate the source of the tritium contamination, fix the problem and then mitigate the environmental damages. DOE and EPA should use the most effective clean-up practices to protect the quality of the aquifer.

Once all of the appropriate steps have been taken, a safety assessment of the reactor should be done and decisions made about when it should be turned back on. In addition, Senator Alfonse D'Amato and I asked the DOE and EPA to do a top-to-bottom evaluation of all possible contamination sources on the site. This should ensure there are no more "unexpected surprises" that have undermined the public's confidence in the Lab.

But even more important than their confidence is the public's health and safety, and that of all Lab employees. My goal is to ensure that the environmental problems that are plaguing the Lab are corrected, and to set in place appropriate safeguards that will ensure that they never occur again. Then, the world-class scientific research at Brookhaven National Laboratory can proceed without impediment and Long Islanders — indeed, all Americans — will once again be able to look at the Lab with pride.

Sincerely,
Michael P. Forbes
Member of Congress

Medaris & Murphy (cont'd.)

- to find construction and maintenance funding alternatives;
- to develop the next generation maintenance-management system, in order to match the Lab's needs with its resources better;
- to identify new sources of electric power and keep BNL's power costs down;
- to optimize performance-based management, to encourage and reward excellent performance in the maintenance, repair and construction of BNL's facilities and infrastructure by the Lab's employees and contractors.

Bruce Medaris earned a B.S. in engineering from the U.S. Military Academy at West Point in 1959 and, 20 years later, retired from the U.S. Army as a Lieutenant Colonel. A certified Plant Engineer, he also holds an M.S. in mechanical engineering from New Mexico State University and a Juris Doctor from the University of Baltimore School of Law.

After joining PE in 1980, Medaris served as Manager of the then newly created Maintenance Management Di-

BNL's 50th Anniversary Celebration

Watch the Lunar Eclipse & Hale-Bopp Comet

You may never catch a falling star, but, if you accept the BNL Astronomical Society's cordial invitation to a sky-gazing party on this Sunday, March 23, then you'll stand to catch the performances of two universal "stars" — first, the Hale-Bopp Comet, which will make a dramatic cameo appearance, and, second, the full moon, which will play a lead role in a partial lunar eclipse.

As part of BERA's celebration of the Lab's 50th anniversary, society members will set up telescopes near the Brookhaven Center, Bldg. 30, so viewers can get a good glimpse of the Hale-Bopp, which will be low in the sky soon after sundown, and then settle in for a longer view of the moon's partial eclipse, starting at about 9:57 p.m.

An estimated 20 miles across, the Hale-Bopp Comet was discovered less than two years ago, when, on July 23, 1995, Alan Hale in New Mexico and Thomas Bopp in Arizona spotted it almost simultaneously.

Comets are basically chunks of ice and frozen gases surrounded by dust



The Hale-Bopp Comet, as photographed by Rick Jackimowicz, Astronomical Society vice president.

that have stayed on the periphery of the solar system. Theorists believe they may be the only remaining ob-

jects still unaltered since the system was born, some 4.5 billion years ago.

Although the impact of a comet's falling to the Earth is thought to be a possible cause of the death of the dinosaurs, the watchers at the Brookhaven Center need not worry — the Hale-Bopp will be at least 120 million miles away. Much nearer home will be the familiar face of the moon, which will be gradually veiled in a 92 percent eclipse as the moon moves into the Earth's shadow from the sun.

All are welcome to the sky show, especially children, at any time after 7 p.m. Keith Power, Astronomical Society president, will bring a to-scale Earth-moon model to demonstrate. If possible, bring your own telescope to set up on the spot. Hot drinks and refreshments will be on sale until 9 p.m. at the Center Club, which will remain open until the party's over. For more information, call Ext. 5355.

Heavy clouds or rain will cancel the event, but you can still see the Hale-Bopp without a telescope until well into April. — Liz Seubert

Talk on 50 Years of Research at Luch, Russia

This year, while BNL celebrates its 50th anniversary as a research institution in the U.S., Luch, Russia's State Research Institute Scientific Industrial Association, is also celebrating 50 years of research. Located in Podolsk, 15 miles south of Moscow, Luch's staff of scientists, engineers, technicians and others numbers 1,500.

Luch is participating in a program of U.S.-Russia cooperation in upgrades to nuclear safeguards. Because BNL is

the lead laboratory within the U.S. Department of Energy for U.S. interaction with Luch, a delegation from that institution will be visiting BNL for the week of March 24-28.

The delegation will include Luch Director Ivan Fedik, who will give a seminar on "Fifty Years of Scientific Research at Luch" on Wednesday, March 26, in the Hamilton Seminar Room in the Chemistry Department, Bldg. 555, at 3:30 p.m. Coffee will be

served beforehand.

In his talk, Fedik will describe some of the highlights of Luch's 50 years of scientific and technological discoveries and developments, including nuclear research, metal optics for lasers, high-temperature equipment for electronics, ceramics for machine building, and controlling and measuring devices.

Fedik, who joined Luch as a senior engineer in 1962 and rose through the years to his present position as Director, also heads the Faculty Branch at the Institute. Among other topics, his over-250 published research papers describe his more than 50 inventions.

vision, 1981-86. In 1987, he was named Manager of the newly established Operations & Maintenance Division. In 1989, he was named PE's Deputy Manager and, in 1991, its Manager.

Meet Ed Murphy

A licensed Professional Engineer, Edward Murphy holds a B.S. in mechanical engineering and a master's degree in energy management.

Murphy came to BNL in July 1979, as a facilities engineer within PE's Energy-Conservation Group. In 1980, he became BNL's Energy Manager, and, as such, he established a U.S. Department of Energy record for obtaining funding for proposed projects.

Concurrently, he became Project Manager for the construction of the Lab's Central Chilled Water Facility. By bringing the project to completion on time, Murphy enabled the Lab to collect a \$400,000 rebate from LILCO. In 1989, Murphy was named Manager of the Project Coordination Group, overseeing \$40-million worth of on-site construction.

After becoming PE's Deputy Manager in 1991, he served for ten months, 1993-94, as Acting Manager for OER, significantly increasing DOE's satisfaction with BNL's efforts in this area by meeting all milestones and improv-

ing project management.

From his years in project management, "What I've learned is that the most successful results come from team efforts, so I fully intend to keep Plant Engineering as a team effort," says Murphy. "Everyone has a contribution to make, so it is my job to help them make it."

Among Murphy's objectives for his division are:

- to be more cost conscious;
- to improve communication with PE's customers (see box at right) and staff;
- to continue to build upon the capabilities of both the engineering and trades staff by providing appropriate technical and environment, safety and health training, and purchasing the best tools for a particular job;
- to continue teaming with OER, to expand PE's role in that office's site cleanup effort.
- to continue to provide PE services in support of the Relativistic Heavy Ion Collider.

— Marsha Belford

Correction

The BNL 50th Anniversary Distinguished Lecture to be given by Robert Richardson on "Quantum Fluids and Solids" will be delivered on July 1, not on July 11 as previously announced.

50 YEARS AGO THIS WEEK

This series, which recounts the earliest days of Associated Universities, Inc. (AUI), and BNL, will run as appropriate throughout 1996 and 1997, the 50th anniversary years of AUI and BNL, respectively.

• **March 19, 1947** - The Atomic Energy Commission (AEC) notifies AUI by letter that henceforth, Associated Universities, Inc., will be expected to assume responsibility for planning, designing and constructing Brookhaven National Laboratory — with the exception of "Pile No. 1," which will become the Brookhaven Graphite Research Reactor and for which the AEC

continues to carry responsibility.

• **March 21, 1947** - AUI formally accepts responsibility for the BNL site, and 298 custodial and maintenance personnel who were working at Camp Upton are transferred to the BNL payroll.

• **March 25, 1947** - Total BNL staff numbers 525 people, including 486 full-time employees and 39 consultants.

PE Joins the Web

To give its sitewide customers another forum for communication, BNL's Plant Engineering (PE) Division can now be found on the World Wide Web, located at <http://epweb.pe.bnl.gov/index.htm>.

In addition to meeting the new Division Manager (see accompanying article), PE Web-page browsers may obtain plans of all the buildings on site, log work requests with the Maintenance Management Center, and find out about other services that PE has to offer.

"We tried to include the pertinent information about our Division that will help our customers contact the right resource for whatever job needs to be done," says Maintenance Management Superintendent Peter Eterno. "Please surf our site and feel free to comment on how we may improve it to serve you better."

Concert on Sunday

Seats are still available for the next BERA concert featuring the Festetics Quartet and fortepianist Maria Rose, to be held this Sunday, March 23, at 2 p.m. in Berkner Hall. Tickets cost \$14 for general admission, \$9 for seniors, and \$5 for students and youths under 18. Purchase them at the BERA Sales Office today, until 1:30 p.m., or at the door Sunday afternoon.

For further information about the concert, including any cancellation due to inclement weather, call 344-3550 for a recorded message.

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Healthline Lecture Breast Cancer, Breast Disease

Though it is not the most deadly cancer, it is the most common cancer in women — and among the most feared. It is breast cancer, and, along with fibrocystic breast disease, it will be discussed during the next Healthline lecture.

Sponsored by the Health Promotion Program (HPP) of the Occupational Medicine Clinic, "Breast Cancer and Breast Disease — A Medical Update" will be presented by surgeon Anthony Cahan at noon on Tuesday, March 25, in Berkner Hall. A video cassette of the talk will be available afterward at the Research Library.

Board-certified in surgery, Anthony Cahan, M.D., is in charge of Comprehensive Breast Services at Beth Israel Medical Center North in New York City, and he is in private practice in New York City and White Plains.

To register for this lecture, return the Health-line flyer recently sent to all employees to Mary Wood, Bldg. 490, by Monday, March 24. For more information about HPP, call Ext. 5923.

Note to Employees:

Attendance at lectures, meetings and other special programs held during normal working hours is subject to supervisory concurrence.

Fidelity Counseling

A Fidelity Investments representative will be at the Lab on Thursday, April 17, to hold individual sessions with employees interested in learning more about their retirement-savings and investment options.

To schedule one of the 30-minute appointments, call Paul Downey, 1 (800) 642-5679, Ext. 5202.

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position. Consideration is given to candidates in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action plan, selections are made without regard to age, race, color, religion, national origin, sex, handicap or veteran status.

Each week, the Human Resources Division lists new placement notices, first, to give employees an opportunity to request consideration for themselves through Human Resources, and second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (344-7744), for a complete listing of all openings.

Current job openings can also be accessed via the BNL Home Page on the World Wide Web. Outside users should open "http://www.bnl.gov/bnl.html", then, under "Information," select "Jobs." For scientific staff openings, select "Scientific Personnel Openings"; for all other vacancies, select "General Personnel Openings."

SCIENTIFIC RECRUITMENT - Doctorate usually required. Candidates may apply directly to the department representative named.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in experimental particle physics, with experience in designing and building detectors, and in computer programming for large-detector data acquisition or event reconstruction. The Laboratory is involved in the D0 experiment at Fermilab. Will participate in BNL's major responsibilities for the next run of the experiment, including the forward preshower detector, the on-line and off-line software. Contact: Howard Gordon, Physics Department.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

NS 4036, RIGGING SUPERVISOR - Requires a comprehensive knowledge of rigging operations pertaining to moving heavy equipment by use of rollers, jacks, forklifts and cranes; previous supervisory experience; and good written and oral communication skills. Will be responsible for first-line supervision of the Rigging Section, which includes directing employees on jobs, assignments, training and technical direction. Plant Engineering Division.

DD 4871. OFFICE SERVICES POSITION - (part-time position) Requires excellent communication and customer-service skills and knowledge of word processing, with WordPerfect 5.1 or 6.0 preferred. Familiarity with a variety of PC-based programs desired. Will provide primary support to the Housing Office and act

Celebrate Spring

Tickets are still available for the BERA Indo-American Association's celebration of Holi, the festival of spring, in music, dance and skits, on Saturday, March 29, from 2:30 to 5:30 p.m. in Berkner Hall. Admission is \$10 for adults; \$5 for children 6-12 years old. Proceeds will go to the Association for India's Development. For more information, call Anand Saxena, Ext. 4844 or 689-9771; Piyush Joshi, Ext. 3847 or 744-0217; Animesh Jain, Ext. 7329 or 474-0056; or Rangasayi Halthore, Ext. 7920 or 689-1486.

IBEW Meeting

Local 2230, IBEW, will hold its regular monthly meeting on Monday, March 24, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. The agenda includes regular business, committee reports and the president's report. There will be a meeting for shift workers at 3 p.m. at the union office.

Arrivals & Departures

Arrivals

Susan M. Jones.....Computing & Comm.
Bruce J. King.....Physics
Paul H. Philipsberg.....RHIC
Travis C. Shrey.....AGS

Departures

This list includes all employees who have terminated from the Lab, including retirees:

Robert G. Grego.....RHIC

Buy Daffodils Today

Today is the final day to pick up your reserved bouquet of daffodils at the BERA Sales Office. If you didn't reserve them, you may be able to purchase a bunch, at \$5 each, to benefit the American Cancer Society. Call Andrea Dehler, Ext. 3347, or stop by the Berkner Hall lobby between 11:30 a.m. and 1 p.m.

as backup to Transportation and Division Offices, as required, during the 4:00 p.m. to midnight shift. Duties will include handling reservations, check-in/check-out of customers, data management and report generation; acting as liaison with all residents; and assisting in the scheduling of housekeeping and maintenance services. Administrative Support Division.

DD 3107. TECHNICAL POSITION - (term appointment) Requires an AAS in electronic technology or equivalent and significant relevant experience. Must be able to work from wiring diagrams, schematics, mechanical drawings and verbal instructions. Duties will include assembly, wiring and testing of assemblies such as high-voltage power supplies, rf amplifiers and the associated control circuitry. RHIC Project.

DD 3645. SECRETARIAL POSITION - (term appointment) Requires an AAS in secretarial science or equivalent, a working knowledge of Laboratory policies and procedures, and demonstrated excellent communication skills. Familiarity with WordPerfect 6.1 for Windows (tables and equations) and graphics software for presentations, and the ability to work with tight schedules and on parallel projects are highly desirable. Will perform complex secretarial duties for the Deputy Division Head of the Engineering Research and Applications Division. Duties include preparing technical reports, correspondence (some of which may be confidential) and BNL forms; arranging both foreign and domestic travel; ordering supplies; and maintaining office files. (reposting) Department of Advanced Technology.

BERA Elections All Next Week

The following four BNLeers are running for two four-year terms on the Executive Board of the Brookhaven Employees Recreation Association (BERA): Jim Alduino, Alternating Gradient Synchrotron Department; Deborah Botts, Division of Contracts & Procurement; John McCaffrey Jr., Relativistic Heavy Ion Collider Project; and Terry Sullivan, Department of Advanced Technology. Biographical sketches of the candidates appeared in last week's Brookhaven Bulletin.

Elections are scheduled for next week as follows:

• Monday, Tuesday and Wednesday, March 24-26, Berkner Hall, 11:30 a.m. to 1:30 p.m.

• Thursday and Friday, March 27 & 28, Teachers Federal Credit Union, 10 a.m. to 2 p.m.

• Submit absentee ballots in person at the Recreation Office, Bldg. 185, through today if you will not be on site all next week.

Eligible voters are BERA members: employees of BNL, AUI or DOE or any permanent on-site contractor.

BERA Trip to Disney

Spaces remain available in the seventh annual BERA trip to Walt Disney World in Florida for seven days starting October 23. All BERA members and their families may sign up. For information, call M. Kay Dellimore, Ext. 2873, or Andrea Dehler, Ext. 3347.

Amateur Radio

The BERA Amateur Radio Club will next meet at noon on Thursday, March 27, in Room C, Berkner Hall. All are invited to attend. For more information, call Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

Golf Tournament

The BERA Golf Association will hold its first tournament of the season, a two-person scramble, on Friday, April 25, on the green course of Bethpage State Park. The per-person entry fee is \$40 for members and \$42 for non-members, which includes breakfast before each person's tee time. Completed applications are due Wednesday, March 26. For applications and more information, call Jeff Williams, Ext. 5587.

Bowling

Red and Green League

G. Mack 243/217/650 scratch series, J. Goode 228/223/644 scratch, R. Raynis 233/213/618 scratch, E. Larsen 220/202/602 scratch, R. Prwivo 221/200, H. Arnesen 211/202, R. Larsen 248, N. Besemer 224, F. Wahlert 224, J. Cuccia, Jr. 223, R. Eggert 223, D. Fisher 216, J. LaBounty 211, B. Giuliano 206, K. Koebel 205, R. Wiseman 205, R. Mulderig 205, A. Pinelli 201.

Purple and White League

B. Tozzie 276/245/204/725 scratch series, S. Frei 247/236/210/693 scratch, R. Picnich 247/189/183, M. Guacci 233/205/620 scratch, Don King 231/196, Doug Fisher 213/199, E. Meier 204/194/181, R. Raynis 203/200/199/602 scratch, B. Mullaney 209/184, P. Callegari 208/203, K. Riker 199/182, K. Batchelor 190/190, P. Wynkoop 202, E. Sperry IV 200, R. Flack 197, P. Manzella 196, D. Botts 193, E. Sperry III 190, N. Fewell 188, P. Baker 180, J. Gormley 180, D. Reynolds 173, M. G. Meier 172.

Scotch Doubles Sign Up

The annual Scotch Doubles Tournament, for BNL employees and their immediate-family members will be held on Sunday, April 13, at 1:30 p.m. at Port Jeff Bowl. The cost of \$30 per couple includes bowling, prizes and buffet. Pick up applications at the BERA Sales Office, Berkner Hall, weekdays, 9 a.m. to 1:30 p.m., and return them by Friday, April 4. If you need a partner or more information, contact Debbie Botts, Ext. 3888.