Vol. 50 - No. 29 July 26, 1996 KXOXH **BROOKHAVEN NATIONAL LABORATORY**

BNL Responds to TWA Flight 800 Crash With Mutual Aid and More

After a TWA 747 jetliner bound for Paris, France, with 229 people on board plummeted into the Atlantic Ocean off the Moriches Inlet around 8:40 p.m. last Wednesday, July 17, the Laboratory and its employees once again responded to community need, this time lending personnel and support to the ongoing recovery effort.

As the Bulletin went to press, BNL's greatest involvement had been on the part of the Fire/Rescue Group of the Safety & Environmental Protection Division: As a result of an agreement with Brookhaven Town to provide mutual aid in response to situations involving hazardous materials (haz-mat), the Lab's Fire/Rescue Group has responded to two haz-mat calls within the Town, since the Town's own hazmat group is involved in decontaminating divers searching for the victims and remains of TWA flight 800.

In addition, many Brookhaven employees who either live near, were traveling by or were visiting the area witnessed the plane's in-air explosion. Recalls BNL Fire Chief James Roesler, who happened that night to be facing south on Roanoke and Sound Avenues in Riverhead, "I saw a white flash out

of the corner of my right eye, then a banner of flames fall from the sky and black smoke afterwards."

After returning home, Roesler was told by his daughter that it was a plane crash. "I knew, given what I had seen, no one could be alive," concludes Roesler, who has given a witness statement to the Federal Bureau of Investigation (FBI).

No employees on official business were on that flight, and the Bulletin knows of no employee who had been heading for vacation on that plane.

Answering the Call

On their own time, many BNLers have answered the call for assistance as part of their local fire companies.

Others were called upon in other official capacities: For instance, as part of the Coast Guard Reserve Station Shinnecock, Patrol Officer Brian McCarrick of BNL's Police Group in the Safeguards & Security Division served for four days as a crew member of a Coast Guard boat that recovered bodies, plane parts and the victims' personal belongings.

And, since the evening of Thursday, July 18, the Housing Office in the



Standing by BNL's haz-mat trailer are some of the Fire/Rescue Group staff who have provided mutual aid to Brookhaven Town: (from left) Fire Chief James Roesler, Lieutenant Antonino Realmuto, Firefighter Paul Larsen and Captain William Leigh-Manuell.

Administrative Support Division has provided dormitory rooms or apartments for 47 people, including U.S.

Navy divers, members of the U.S. Coast Guard and FBI agents.

Providing Mutual Aid

Ironically, the day before TWA flight 800 crashed, the Town of Brookhaven and the Laboratory entered into the haz-mat agreement.

So, the Fire/Rescue Group was first called by Brookhaven Town's Fire Marshal's office at 2:45 a.m. on Thursday, July 18. Because of the Town's haz-mat response to the "signal 27" airplane crash, the Lab was informed that its Fire/Rescue Group is now on standby to cover Brookhaven Town in case of another situation involving hazardous materials, or to provide relief to the Town's haz-mat workers.

Earlier, at 11:45 p.m. on Wednesday, Suffolk County's Fire, Rescue & Emergency Services had called BNL's Fire/Rescue, requesting special gloves for handling biohazards. The group complied with 300 pairs. Later, at 7:50 a.m. on Thursday, Roesler offered Chief Fire Marshal Joseph Sauerwein whatever haz-mat mitigation supplies the Lab has to spare. On Sunday, July 21, Roesler offered Sauerwein whatever other resources could be helpful in the recovery and could be temporarily loaned by the Lab.

In the meantime, Fire/Rescue rechecked its haz-mat trailer, which holds boots, suits, absorbents, containers, etc., to ensure its readiness, and the trailer was hooked up to a truck provided by the Plant Engineering Division.

The Lab's first haz-mat mutual aid response came on Sunday, July 21, at 3:45 p.m., when Deputy Chief Michael Carroll, Lieutenant Antonino Realmuto and Firefighter Paul Larsen were called to the Sands Pit Marina in Patchogue, to plug the gas tank of a 1989 Monte Carlo with New Jersey plates that had leaked ten gallons of fuel in the parking lot.

The second call came on Tuesday, July 23, at 7:30 p.m., which sent Captain William Leigh-Manuell, Acting Lieutenant Richard Richards, Firefighter Kevin Cosgrove, Safety Officer John Searing and Industrial Hygienist Robert Selvey to Stony Brook: A home owner had been overcome by vapors as a result of an accidental sulfuric acid spill in the basement during an incorrect attempt to unclog a cesspool.

Roesler anticipates that BNL may be called upon to relieve the Town's decontamination workers when more of the fuselage of the plane is found, and more bodies and plane parts are brought to shore. In that case, states Roesler, "We would call in off-duty people, so we can maintain our staffing here, yet fulfill our mutual-aid agreement." — Marsha Belford

The AGS — Fertile Field for Groundbreaking Research **Muon g-2 Experiment Reaches Three Milestones**



July 29, 1996, marks the 36th anniversary of the Alternating Gradient Synchrotron's (AGS) first reaching its design energy. With about 800 experiments under its belt — three of them Nobel Prize winners — the AGS continues to provide scientists with a fertile field for ground-breaking research.

achieved earlier this spring, when the BNL team had brought beam from the AGS all the way down the 220-meter beam line to the storage ring.

"These are three key milestones," said Gerry Bunce, E821's Project Manager. "Construction started in 1989, and the major R&D aspects of the experiment are now done, thanks to a great team who worked together very closely. It was good timing to have the inflector test go well more-or-less simultaneously with the storage ring." The inflector magnet, which will sit within the circle of the storage ring, was designed by Frank Krienen of Boston University, one of E821's 14 collaborating institutions, and Wuzheng Meng, AGS. It was built in Japan, with Akira Yamamoto, of the Koh Energie Ken (KEK) Laboratory, as project manager. "Bringing beam to the ring was another good moment," recalled Bunce. "Hugh Brown [AGS] designed the optics and Charlie Pearson [AGS] led the construction effort. After so much preparation, it is all coming together." For E821, the proton beam from the AGS will be directed onto a target to make pion particles. Pions decay into muons, which will be collected in the storage ring.

The gang's all here — almost. Many members of the team working on the muon g-2 experiment, E821 at the Alternating Gradient Synchrotron, gathered on the storage ring, the world's largest superconducting ring magnet.

This past January, the storage ring magnet was turned on for the first time and worked well at half-field strength, but there was some movement in the coil at higher fields, preventing its reaching full magnetic field. So the team studied the coil.

"This was quite a sleuthing effort." Bunce remarked. "At one point Sergey Redin [Yale University and Novosibirsk, Russia] showed us data we all immediately rejected. But his data were key to understanding the problem. Bill Morse [Physics] put the clues together, with models of the forces made by Chien Pai [AGS] and Francis Farley [Yale]. We even installed windows in the box that holds the coil to watch for movement. By the time we powered for the second time, in June, we were ready for another surprise. Fortunately, none came. We went to full field nervously, but uneventfully!" The design of the magnet dates from a meeting convened by Vernon Hughes of Yale in 1984, at which researchers agreed that the expected intensity of the AGS beam was ideal for a new, ultraprecise measurement of muon magnetism. Gordon Danby and John Jackson, both AGS, designed the magnetic cir-(continued on page 2)

This is the last in a series of stories that the Brookhaven Bulletin has run this month highlighting research at the AGS.

For most people at BNL on June 27 at 3:30 p.m., it was business as usual.

But at Experiment 821 at the Alternating Gradient Synchrotron (AGS), everyone was on top of the world: Their magnet — the world's largest superconducting ring magnet - had just reached its full field strength of 1.5 teslas. The magnet, which is 14 meters in diameter, will be used to refine one of the world's smallest measurements, a part of the muon particle's magnetism known as g-2.

The team had two other good reasons to celebrate: In Japan, the inflector magnet - the superconducting magnet built with no iron that will be used to inject beams of muons into the vast storage ring — had just been successfully tested.

A third high point had been

Coming Up

Ziping Chen, a physicist in the Physics Department, will present this year's Sambamurti Memorial Lecture, on Monday, July 29. His talk, entitled "Creating High-Density Matter With Heavy-Ion Beams at the AGS," will begin at 3 p.m., in the large seminar room of Physics, Bldg. 510. Students interested in nuclear physics are especially encouraged to attend.

BNL's Bagpiper Blows Off Lunch

In a small corner of BNL's all-American baseball field is a little piece of Ireland.

Every day at lunch, John Keane, an electrical engineer at the National Synchrotron Light Source, practices his bagpipe on the baseball field. Keane taps his toes and marches around while the eerie sound of the organ-like harmonies pours over the soaked grass.

Keane plays in the ballpark for the acoustics - it simulates the kind of places where competitions and performances are played, namely the outdoors. "The neighbors also appreciate it," Keane jokes.

Keane began playing the bagpipe over 25 years ago, after following a pipe band in the St. Patrick's Day Parade in New York City.

'I liked it. It felt good," said Keane.

Keane plays with the Safron Kilt Irish Pipe Band in Babylon, which has 35 pipers, 15 drums and five color guards. On July 6, his band traveled to Kilkenny, Ireland, and competed in the All Ireland Bagpipe Championship.

'We played well," said Keane, even though the band didn't place very well in the competition. Over 70 pipe bands played in front of 10,000 spectators.

Keane's pipe band plays in at least ten competitions and 20 parades a year, as well as on other special occasions. In March, they play a minimum of eight St. Patrick's Day engagements. The band has also played at

Radio Čity Music Hall and the White House. "The bagpipe is a hard instrument to play," Keane stressed. "You have to breathe and have fast fingers" and march all at the same time.

This instrument has four pipes and a Gor-Tex bag full of air. The bag acts as a reservoir of air, and only one of the four pipes is "played." The other three pipes are two tenors and a bass that harmonize with the main melody.

The bagpipe evolved over 2,000 years ago in Greece from an instrument that looked like a pair of pipes held in the mouth, blown simultaneously, and played with each hand. The bagpipe's bag was invented to allow more air to be available with less work. The bagpipe has basically been the same for the last 600 years.

Keane plays the bagpipe to relax and keep some of his heritage alive. "I've had a whole bunch of fun times," Keane said. "It's a good hobby." — Sarah Gilbert

John Keane plays his bagpipe at **BNL's base**ball field.

Muon g-2 Experiment (cont'd.)

cuit. The superconducting coil's initial design was by Ralph Shutt, now retired, and Krienen, Yamamoto and Hiromi Hirabayashi, KEK. The engineering effort was led by Jim Cullen, with Pai, Lou Snydstrup, all AGS, and Irv Polk, retired. Designers included Zion Armoza, AGS.

"This magnet is the size of the Cosmotron [BNL's first accelerator] and was built by eight people," declared Bunce. They were: Supervisor John Benante, with Joe Domiano, Terry Higgins, Rich Hintze, Steve Kochis, Don Von Lintig, all of the AGS, and Paul Mickaliger and Bob Soja, now of the Relativistic Heavy Ion Collider Project. Walter Ducoing, Central Shops Division, did much of the magnet welding, including 320 meters of pipe with no leaks. The cryogenic system, which keeps the huge coil at 5 degrees above absolute zero for months at a time, was built by the AGS Cryo Group to the design of Lin Jia, AGS, and Mike Green, Lawrence Berkeley National Laboratory.

The next step is to shim, or adjust, the magnet until the field reaches the ultimate uniformity of one part in a million. "It's a task that can take many months," warned Bunce, "but by February next year, we hope to be able to start storing muons." -Liz Seubert

Read the on the World Wide Web: http://www.pubaf.bnl.gov/

Second Edition of The Second Creation

THE SECOND

Ten years ago, The Second Creation: Makers of the Revolution in Twentieth-Century Physics, by BNL Historian Robert Crease and his collaborator Charles Mann, was first published. Enthusiastically acclaimed by both scientists and critics, the book was translated into several languages and became a New York Times "Most Notable Book of the Year." Now, a revised, corrected and updated version has been published by Rutgers

University Press. With this revision, the book begins and ends with a moodsetting description of BNL physicists, engineers and technicians gathering at the Laboratory one cold morning to construct part of the muon g-2 experiment (see story on page 1).

"We chose g-2 partly because it is a contemporary ex-

periment that stands a chance of going beyond the standard model," Crease says, "partly because it exemplifies a type of experiment that depends on extremely precise measurements of physical quantities, and partly because, as an experiment, it harkens back to the past — an earlier measurement of magnetic moments helped spark the renormalization of quantum electrodynamics.'

The opening description takes the reader into what Crease and Mann regard as the great accomplishment of 20th-century physics: the construction of the Standard Model of particles and fields. The Standard Model combines all known forms of matter and

forces into the theoretical structure.

To tell the story of the people who put together the Standard Model, Crease and Mann draw on scores of in-depth interviews with scientists who were involved. Using the words of the participants, they recreate the intellectual drama, the false starts and triumphant vindications of the theorists and experimentalists who have restlessly explored the frontiers of knowledge.

Especially fascinating to anyone at Brookhaven, The Second Creation not only shows the roots of today's science — the "terror and exaltation accompanying the action" unfolding among the "magnificent cliffs and valleys of the standard model" - but also includes many vital discoveries made at BNL, among them several that won Nobel Prizes.

The book can be ordered from Rutgers University Press at 1-800-446-9323; on the World Wide Web at http:// /info.rutgers.edu/Library/Rutgers/unipress/or by e-mail to woodley@rci.rutgers.edu. —Liz Seubert

Help Arrives Monday

If the acronyms IPAP, JCARS, LCDS, 3P mean something to you, but the management-information software systems that these initials represent have given you trouble in the past, fret no longer: Help arrives on Monday, July 29, when the Help Desk of the Application Support Group in the Financial Services Division (FSD) officially opens for business.

By dialing Ext. 6262, e-mailing fsdhelp@bnl.gov or walking over to room 25 of Bldg. 459, users of computer programs that manage the business of BNL will find help in the form of immediate attention to questions and problems related to FSD computer access, operations, procedures, etc. The desk, which operated successfully over a two-month trial, is staffed on a rotating basis by Help Desk project leader Juanita McKinney and other members of the Application Support Office, supervised by Michelle Cummings.

"People no longer have to guess whom to call in the Business Information Systems Section to help them with their problem — they just let us track the answer down," says Cummings. In addition to being a centralized place to bring inquiries, "The FSD Help Desk tracks all users' calls not only to provide individuals with prompt attention and quick answers, but also to spot more generalized problems and trends that need larger, more long-term solutions, such as making changes to the system, or providing users with additional documentation or more training. FSD Help Desk users are asked to provide their name, life number, extension, the name of the application with which they are having problems, and a description of the problem. All calls to the FSD Help Desk are then logged into problem-management software that has been customized for this application. During the FSD Help Desk trial, "We averaged six to seven calls per day," reports McKinney, "and we found that we could answer most of the questions during the initial phone call." "This is one of the best innovations devised for system users," comments Help Desk user Susan Perino of FSD's Fiscal Operations Section. "I no longer have to figure out whom to call, and my problems don't get lost in the shuffle.' "We wanted the FSD Help Desk up and running well ahead of time, so we can offer quality support for the new PeopleSoft general ledger software system scheduled to come on line during the next fiscal year," concludes Cummings. — Marsha Belford



Robert Crease

the strong, weak and electromagnetic

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.

• July 30, 1946 — All five of the incorporating trustees are present for the first meeting of Associated Universities, Inc. (AUI) as a New York corporation. At this meeting, the bylaws are adopted, the site of Camp Upton is approved for the Laboratory, and the committees of the Initiatory University Group are reconstituted as committees of the Board of Trustees.

Also, the Board of Trustees is expanded to 18, with two representatives from each of the nine founding universities: Columbia, George Pegram and I.I Rabi; Cornell, Arthur Adams and Robert Bacher; Harvard, Edward Reynolds and George Kistiakowsky; Johns Hopkins, P. Stewart Macaulay and Robert Fowler; Massachusetts Institute of Technology (MIT), Joseph Killian and Jerrold Zacharias; Pennsylvania, William DuBarry and Louis Ridenour; Princeton, George Brakeley and Henry Smyth; Rochester, Raymond Thompson and George Collins; and Yale, Edmund Sinnott and William Watson.

Additionally, an Executive Committee is elected, which includes: Bacher, Brakeley, Macaulay, Rabi, Reynolds and Zacharias

The trustees further decide to approach each of the nine cooperating universities for an advance of \$25,000 cash to provide working capital.

• August 1, 1946 — Philip Morse, a professor of physics at MIT, is appointed Director for the new Laboratory.

(To be continued on August 2.)

Letter to the Editor American Nuclear Society Awards HFBR's Excellence

On the evening of July 15, I attended a presentation at the Lab on BNL's Reactors. Its purpose was to provide the general public and BNL employees with an opportunity to become more knowledgeable about the High Flux Beam Reactor and the Brookhaven Medical Research Reactor.

Unfortunately, there were only about 30 attendees, the majority of whom were BNL employees. So many people missed a perfect opportunity to acquaint themselves with an area of BNL's scientific endeavors that are presently misunderstood by some of the general public.

Of greater concern to me, however was an incident that occurred at the coffee break. A non-BNL attendee approached John Axe [Head of BNL's Center for Neutron Science] and implied that BNL was not telling the truth. The individual was quite distraught and not receptive to discussion.

Later that evening, as I drove home, it saddened me to recall this incident. I envisioned this young man, probably with a young family, who has become convinced that the activity at BNL is a threat to his life and the lives of those he loves. As those of us who have given even the slightest attention to BNL's scientific activity and accomplishments know, *nothing* could be further from the truth. If anyone who works at BNL doubts this, please make it your responsibility to acquaint yourself sufficiently with the facts and draw your own conclusions.

From some of the irresponsible reporting by some local media, I can understand why there are caring individuals in our neighboring communities who are alarmed — and BNLers should feel alarm regarding the public's attitude toward BNL.

Everyone working at BNL should recognize that each of us has the potential of relating an image of BNL to our friends and associates outside the Lab, so we have an obligation to be certain that our projections to the public are accurate. One way to do this to attend presentations when the Laboratory offers them. Another way is to take one of the Sunday tours the Lab is offering this summer — and encourage a neighboring family, unfamiliar with BNL, to accompany you.

If we all give some of our time to become better informed and, subsequently, use this enhanced knowledge in our normal interactions with the community around us, we could significantly complement the efforts of our colleagues who are working hard to correct the misinformation that exists.

Employees know that BNL is a special community. And if we take the extra effort to help our neighbors understand the Lab as we do, then BNL will be an even more pleasant place to work. — John Dabrowski Dabrowski, a computer analyst in the National Synchrotron Light Source Department, has been at the Lab for over 35 years. On the balcony overlooking the experimental floor of the High Flux Beam Reactor (HFBR), Robert McNair, Program Development Group Leader for the Reactor Division (left), and David Rorer, Head of



the Reactor Division, display the American Nuclear Society's (ANS) award for "Excellence in Nuclear Operations" presented to the HFBR. The HFBR competed against power reactors and other research reactors for the honor, which commends performance for nuclear operations in 1995. McNair, who initially suggested that the Reactor Division apply for the award, accepted it on behalf of the HFBR at the ANS annual meeting in Reno, Nevada, this June. Rorer commented, "It is not a trivial task to keep the reactor running since almost any deviation from normal will shut the machine down for safety's sake. It was not just a matter of luck that the Reactor Division was able to achieve such an outstanding operating record: It was the result of everyone in the division's paying careful attention to detail while performing their job." The 30-megawatt HFBR is about 100 times smaller than the typical power reactor. About 250 researchers from all over the world perform experiments at the reactor each year in physics, chemistry, materials science, medicine and biology. - Diane Greenberg

Site Security Increased

In light of recent events worldwide, Brookhaven, like many other federal installations, has instituted some changes in security. While some of these may be obvious to BNL employees, others will not be. But all are intended to ensure the continued safety of employees and visitors to the Laboratory.

"Our protection of security-interest areas has always been good, and security has not been breached," said Russel Reaver, Manager of the Safeguards & Security Division. "But, unfortunately, we and the rest of the world are going through times that call for us to be even more sensitive to security issues. So the Laboratory is reacting appropriately, and we appreciate everyone's cooperation."

A Fellow BNLer Needs Your Help

Bill Slavinsky is Superintendent of Craft Shops & Services in the Plant Engineering (PE) Division. He is also

seriously ill with a rare form of cancer, so several of his friends in PE have established a fund to help him and his family through this very rough time. "Until now, Bill

has been reluctant to accept help," ex-

Tour BNL's Science Museum With Professional Guidance



Meet this summer's professional tour guides at BNL's Science Museum. Join a Summer Sunday tour any Sunday through August 25, from 10 a.m. to 3 p.m., and you'll find yourself guided from Berkner Hall, on a bus tour of the site and through the many exhibits in the three-story Science Museum by several of these informed individuals: permanent Museum Programs staff (seated, from left) Ruth Fernow, Carol Otto-Tvelia, Dolores O'Connor, Eloise Gmur, Supervisor Janet Tempel, Elaine Lowenstein, (not shown) Penny Byrne and Gail Donoghue; summer staff (center, from left) Susan Forstmann, Joseph Schmelter, Tom Sardella, Sudi Malloy, Jonathan Barton, Keith Richardson, Eric Kramer, Conrad Schnakenberg, Chris Ryon, Gerry Garcia (back, from left) Matthew Fernow, Peter Lowenstein, Mary Scheidet, Cory Carlson, Barbara Federmann, Lynn Olszewski and (not shown) Pattie Gremillion.

Reports Available

BNL Reports

& Daylighting — A Brighter Outlook ..." are available in the Public Affairs Office, Bldg. 134.

The report describes DOE's window research program, the long-term goal of which is to convert windows, doors and skylights into energy assets rather than energy liabilities, while maintaining or improving the comfort, health and amenity that those features provide to buildings and their occupants.



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http://www.pubaf.bnl.gov/~pubaf/bulletin.html

The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste. It can be recycled. plained PE's Patti

Bender, "but he has now agreed to let us help him to defray the extraordinary expenses associated with his illness.

"Although his medical insurance covers most of the medical expenses, there are mounting bills for travel to his hospital in Washington, D.C., and related expenses, which far exceed his available resources."

Bender, Bldg. 134C, Ext. 3145, and Lance Warren, Bldg. 97, Ext. 2015, are accepting contributions that will be passed on to Bill Slavinsky and his wife Fran. While checks are preferred, cash or money orders will be accepted; make checks and money orders payable to The William Slavinsky Recovery Fund. Contributions are *not* tax deductible.

"Please be generous in your response, as the Slavinskys really need your help," Bender said. "Let's show them how much we care." -

The following reports are available from the designated contact to Lab staff and affiliates of DOE, AUI and NRC. Others may purchase them from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

BNL-52492

Contact: N. White, Ext. 3857 Radiation environment and shielding for a high-luminosity collider detector. M.V. Diwan, Y. Fisyak, N.V. Mokhov **BNL-52493**

Contact: P. Manning, Ext. 4072 Diverse topics in crystalline beams. J. Wei, A. Drawseke, A.M. Sessler, X.-P. Li **BNL-52497**

Contact: J. Spara, Ext. 2255 Flow-reversal power limit for the HFBR. L.Y. Cheng, P.R. Tichler

DOE Report

Copies of the U.S. Department of Energy (DOE) publication "Windows

Garden & Art Bus Trip

Some seats remain for the Saturday, August 3, bus trip sponsored by the Art Society to see beautiful Wave Hill Gardens on the banks of the Hudson, as well as paintings, sculpture and furniture at the Caramoor Center for Music and Art near Katonah.

The bus will leave BNL at 7:45 a.m., returning by 9:30 p.m.The cost is \$30 per person (\$28 seniors). For information and reservations, call Liz Seubert, Ext. 2346 or 286-8563, evenings.

Reminder: Register Your Vehicle Now

By October 30, all employees and Laboratory guests who have not already done so must register their private motor vehicles used on site with BNL's Police Group of the Safeguards & Security Division (S&SD). To obtain a current registration sticker, come to S&SD's Personnel & Information Security Office in the Brookhaven Center, Bldg. 30, weekdays during usual business hours. For more information, call Hank Raimondo, Ext. 7258.

Sunday Outing **Planned for Visitors**

Attention summer students and other visitors living on site: This Sunday, July 28, the Lab will offer a shuttle service to two attractions in Riverhead - Tanger Factory Outlet Center and Splish Splash water park (buy tickets at the park; adults \$18.75).

Vans will leave from Fleming House parking lot at noon and 1 p.m., and return to BNL at 5 and 6 p.m.

For more information or to reserve a van seat, call Juanita Beatty, Ext. 2535, today.

Golf Tournament

The BERA Golf League will host a tournament on Friday, August 16, at Cherry Creek Golf Links, Riverhead. Tee times will be from noon to 2:15 p.m. The field is limited to 72 golfers. Nonmembers are invited. For more information or entry forms, contact Gordon Rawn, Ext. 7095 or e-mail rawn@mail.sep.bnl.gov.

Computing Corner

The Computing & Communications Division (CCD) offers the following. For more information about training classes and/or to register, call Pam Mansfield, Ext. 7286, or e-mail pam1@bnl.gov.

Windows 95 Demo

The PC Resource Center will present a one-hour demonstration of Windows 95 at 2 p.m. on Wednesday, July 31, in the CCD seminar room, Bldg. 515. For more information or to reserve your seat, call Pat O'Connor, Ext. 7341.

PC Training

A few seats remain for the following classes scheduled for August: Tue., Aug. 6 intermediate PowerPoint Thu., Aug. 8 from Windows 3.1 to Win-

0	dows 95
Tue., Aug. 13	beginner WordPerfect for
-	Windows
Wed., Aug. 14	beginner Microsoft Word
Mon. & Fri.	beginner ACCESS
Aug. 19 & 23	-
Tue. & Thu.	Visual Basic for applica-
Aug. 20 & 22	tions (prerequisite: adv.

EXCEL or equivalent) One-day classes costs \$150; two-day classes cost \$300. Classes are held from 8:45 a.m. to 4 p.m. in the PC training room, CCD, Bldg. 515.

Did You Get Your **Brookhaven Highlights?**

Within the next few days, the 1995 Brookhaven Highlights should be delivered to employees. If you do not get a copy, please ask your department/ division office for one, or contact Public Affairs, Ext. 2345.

BERA Is NYC-Bound For Shows This Fall

BERA is returning to New York City twice this fall: on Saturday, October 5, to see the Broadway hit Smokey Joe's Cafe; and, on Saturday, December 7, to see Radio City Music Hall's annual Christmas show.

The Broadway trip includes a stop at South Street Seaport, dinner at Lessans Coullettee, and orchestra or mezzanine seats to the matinee of Smokey Joe's Cafe.

The Radio City trip includes free time on 5th Avenue, orchestra or mezzanine seats to the 2:30 p.m. Christmas show, dinner at La Maganette restaurant, and a view of the Rockefeller Center Christmas tree.

Including round-trip motorcoach transportation, taxes and tips, the Broadway trip costs \$113 per person, while the Radio City trip costs \$103 per person. A \$50 deposit can be paid now, and reservations are being taken at the BERA Sales Office.

For more information, call Andrea Dehler, Ext. 2873, or M. Kay Dellimore, Ext. 3347.

Look Before You Leap

The Safety Glasses Office, Bldg. T88, will be closed on Wednesday, July 31. It will reopen on Wednesday, August 7.

Equipment Demos

On Tuesday, July 30, Xerox will present a document-imaging and management seminar at 10 a.m. in the CCD seminar room, Bldg. 515. The agenda includes a discussion of: desktop through centralized printing systems, office through document-center products, production-copying and print-on-demand systems, and more. For more information, call Maria Gatz, Ext. 4109.

On Wednesday, July 31, Minolta Business Systems will display its latest copier equipment from 10 a.m. to 2 p.m. in Berkner Hall. The equipment will include: the true-color CF 900 digital color copier, the fast and reliable EP 6000 copier, the Fax 3700 laser printer and scanner, and the DPC 3000 book copier, which includes the PS 3000 planetary scanner and the DI 30 digital copier.

Arrivals & Departures

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 pref-erence 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. The purpose of these listings is, 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 JOBI INE 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 select "Scientific Personnel Office" for scientific staff openings or "Employment Opportunities" or "BNL Human Resources Division" for all other vacancies.

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

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in physics, chemistry, materials science or biology, with expertise in one or more of the following areas: x-ray scattering, UHV or electrochemical surface science, phase transitions, liquid metals, magnetism or membrane science. The Department operates three bendingmagnet beam lines at the NSLS and is involved in a consortium to build a beam line at the APS. Contact L.D. Gibbs or B.M. Ocko, Physics Department

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

DD 4011. TOWER LINE PERSON - (term appointment) Under minimum supervision, installs, repairs and maintains overhead and underground electricaldistribution lines, systems, equipment, controls and related devices, ordinarily of 2,300 volts and over Duties include rigging, electrical and mechanical work incidental to the installation, maintenance and repair of equipment, wires, lines, instruments and fabricated metal on structures such as meteorology towers, pole stack and water tower. Will otherwise perform duties of Electrician A. Plant Engineering Division.

JAVA Programming

A free-of-charge, four-day JAVA programming class has been scheduled for Monday and Wednesday, July 29 & 31, and Monday and Wednesday, August 5 & 7. The class will meet from 10 a.m. to noon each day in the CCD seminar room, Bldg. 515. Participants must be proficient in C programming.

IDL Programming

An IDL programming class is scheduled for August 27-30. Participants must have at least six months of experience with IDL programming or be proficient in programming in another language. The fee is \$1,350.

Note to Employees:

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

Arrivals

None

Departures

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

Elise Keith-Monnia	AGS
Richard Przybylinski	RHIC

Softball

Standings as of July 22

Standings us of oury ##						
League E1	League E3					
System	6-2	Mesocyclones	8-2			
Blue Jays	7-3	Pick-Up Stick 5.5	-5.5			
Phoubars	6-3	Bombers	4-7			
Magnets	6-4	Medical 3.5	-6.5			
Ice Men	6-4	League M1				
Titans	2-8	Stingrays	7-2			
Cleen Sweep	0-9	Gour-Mets	7-2			
League E2		Snake Bites	6-3			
LightsOut	8-2	Good Timers	4-4			
Hammerheads	7-3	Parke Avenue	1-7			
Contaminators	6-4	OER Wellheads	1-8			
Hy Tech	6-4	League M2				
CCD	6-4	Skeleton Crew	5-0			
Phase Out	5-5	Varmints	4-1			
Scram	4-5	No Names	2-3			
Phytinphytos	4-6	What's on 2nd	1-3			
Feds	3-7	Stray Cats	1-4			
Sure Fire	0-9	Monday Nite Live	0-4			