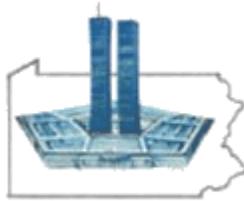


TUESDAY - OCTOBER 26, 2004 - 10:36 am

# Particle Post

## OCTOBER 2004

Editor: *Pamela Manning X4072*



**We Remember**  
*Sept. 11, 2001*

*Enthusiasm is contagious. Be a carrier.*



### A Note From Our Chairman

A new era in the Particle Post has begun as Pam Manning takes over the publishing responsibilities. I encourage everyone to provide Pam any interesting information, photos that others would be interested in reading.

On the fiscal front we are now operating under a continuing resolution. That means we will receive 1/12 of last years budget per month. This leaves us in an austerity state until Congress passes the FY2005 budget. The RSVP project has not been funded yet for a 2005 construction start. Phil Pile and a lot of other folks are preparing for a start this year, hopefully. As soon as we receive a firm budget I intend to present our plans etc. at the State of the Department presentation.

We will be turning on for RHIC operations in early November. The Siemens MG set is slated to be operational by mid-November. Thanks to Viorel Badea, Jon Sandberg and a lot of other folks who have worked with GE to repair the set.

On November 8-9 we will be hosting our Machine Advisory Committee and on November 10 NASA will be here to review the NSRL operations.

*Derek Lowenstein*



### Administration

October is a busy month during which we prepare the final FY 2004 financial results as well as put the initial "Trim # 1" budget on the books. The uncertainty of the FY 2005 budget and changing lab rates are making this a challenge.

A Continuing Resolution was signed by the President and will expire on November 20, 2004. We anticipate that an Omnibus spending package will be prepared for all of the

remaining FY 2005 spending bills that congress has failed to enact as stand alone bills. The Energy and Water Bill, which funds most of the DOE and C-AD operations, is hung up and has not been reported out of the Senate and therefore is not in a final bill form. It is not clear whether this bill will be part of the Omnibus bill that congress is expected to pass after the elections. If the Energy and Water Bill is not completed it is expected that a Continuing Resolution could be in effect for some time.

The hang-up is the Yucca Mountain funding and the role of Senator Reid from Nevada as the ranking member of the Energy and Water Appropriations Committee vis-à-vis the Chairman of the Energy and Water Appropriations Sub-committee, Senator Domenici, pushing for an aggressive nuclear waste repository program. Thus far they have not been able to agree on a funding level that will be a basis for a mark-up (the final Senate step before conferencing with the House and producing a single bill).

We currently have budget levels from the DOE to plan to and spending restrictions of 13.7% of last years budget through November 20, so budgets are tight. We are, however, proceeding as planned with RHIC Operations in anticipation of a complete budget by the end of January, 2005. SNS Project funds are arriving but also subject to limited amounts.

The property inventory has finally ended and we found almost everything. Sixteen items remain unlocated and we are in the process of removing them from our inventory and filing the appropriate paper work. This was a significant effort and we appreciate your help.

The process has begun to prepare the material necessary to secure CD # 1 for the EBIS Project. This is in accordance with the DOE Project Management Order requiring significant documentation to support our case to begin the project. The hope is that EBIS will appear in the FY 2006 President's budget in February for preliminary design.

*John Hauser*



## SNS

As a follow-up to last month's report, the Oak Ridge team remains busy with their beam commissioning efforts through the warm linac. The run has been extended to November 1<sup>st</sup> and, reportedly, has been quite successful to date. During this period a number of members of the BNL/SNS Diagnostic and Controls Groups have traveled to Oak Ridge to assist with the set-up, testing and commissioning efforts.

Other news:

The fiscal year 2004 ended with BNL/SNS obligating more than 99% of our authorized funds.

The 10<sup>th</sup> Accelerator Systems Advisory Committee review was conducted at ORNL. The ASAC committee recognized the progress made in the Ring/Transport systems and expressed confidence in BNL to complete all remaining work by March 2005.

All four ring arc sections are installed and under vacuum at ORNL. The initial vacuum level is at  $2 \times 10^{-8}$  Torr.

The Diagnostics group is preparing the production-version Beam-Position Monitor (BPM) electronics boards for beam tests during the linac beam commissioning run.

An improvement to the power supply design of the electronics board has reduced the noise level by a factor of 3 to 5 for all channels of the Beam Loss Monitor (BLM) and the neutron detector.

The Accelerator Physics (AP) group (H. Hahn, et al.) performed final impedance measurement on the production assembly of the extraction kicker system consisting of a TiN coated ferrite module, the production vacuum chamber, coaxial cable and the Pulse-Forming-Network (PFN) power supply. The measurement indicates that the effect of the TiN coating is negligible and the production-assembly impedance is comparable to the previously measured results.

The AP group (L. Wang, et al.) completed 3D modeling of the electron cloud formation due to stripped and scattered electrons near the ring injection stripping foil.

A pin-hole was found in the outer casing of a mineral insulated radiation-hardened 36Q85 coil (C. Pearson, et al.). Through a dehydration process, the ground resistance has increased from 250 kilo-Ohms to 50 mega-Ohms.

Our best wishes to John Jackson, Marty Kesselman, Yongbin Leng, Tom Nepsee and Bob van Wormer who recently left the SNS project.

*Bill McGahern*



## **g-2**

The muon g-2 experiment (E821) completed taking data in 2001, and we have reported our final result this year, with a precision of 5/10000000 (0.5 parts per million). With this precision we see a small discrepancy with the theory of particle physics (at about 1.3 parts per million). It is a very exciting prospect that we may be seeing for the first time that this theory is incomplete. There is a lot of work in progress on the theory, and we have proposed to run g-2 again to make an even more precise measurement.

At the September Program Advisory Committee meeting for RHIC and the AGS, the new muon g-2 proposal, E969, was approved as a "must-do" experiment, the highest recommendation of the committee. The experiment will use several new ideas/improvements, and use the present g-2 ring.

The main changes are for the beam line, inflector magnet, and detectors. There will also need to be considerable cryogenic work. We hope to prepare the experiment over the next 2 years, and we have requested running time of 1-2 years to collect the data.

The next step in this (a big one) is to get funding.

*Gerry Bunce and Bill Morse*



**Editor's Note**

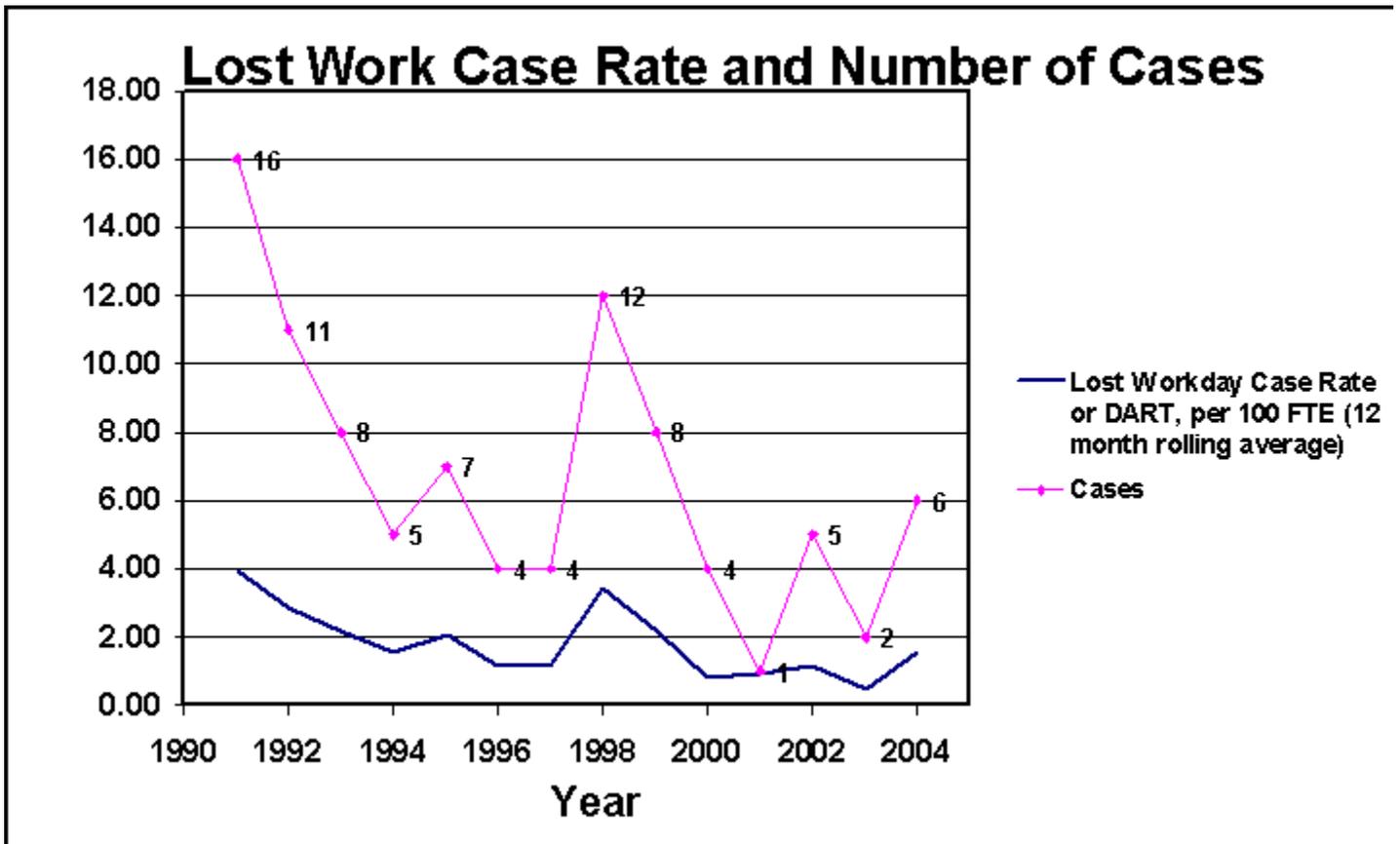
It is with great pleasure that I accept this new challenge. However, this month I haven't had the time I would have liked to produce this newsletter. Hopefully future editions will improve. I would like to take this opportunity to thank Penny for all the hard work she has done initiating this newsletter. Thank You Penny and we wish You and Ray a very Happy Retirement!

We've discovered that some employees social security statements did not list their BNL employment. Check the Human Resources self service web site to make sure your information is accurate and up to date.

<http://intranet.bnl.gov/>

Click on PeopleSoft HR and enter User ID (your life number) then your password. If you do not have a password click on Request/Forgot My Password.

*Pam Manning*



## C-AD Occupational Injury Statistics

	For Year 2003	Jan - Sept 2004
<b>First Aid Cases</b>	<b>12</b>	<b>3</b>
<b>Recordable Cases</b>	<b>5</b>	<b>9</b>
<b>Lost Work Cases</b>	<b>2</b>	<b>3</b>

*Peter Cirnigliaro*



**REMINDER: TLD exchange is done the FIRST WORKDAY of the Month.**

**NEXT EXCHANGE: Have your TLD on its assigned badge board by  
NOVEMBER 1, 2004**



## Departures

Martin Kesselman  
Yongbin Leng  
Florence Lo Presti  
Andrew Meyer  
Thomas Nepsee  
Johannes van Zeijts

Marty works with the SNS Instrumentation Group and will leave BNL 10/29  
Yongbin worked for the SNS Controls Group and left BNL 10/15.  
Penny worked for the ES&F Division and left BNL 9/30.  
Andrew worked in the MCR and will be leaving BNL 10/29  
Tom worked for the SNS Controls Group and left BNL 9/30.  
Johannes worked in the Accelerator Physics Group and left BNL 9/30.

**We wish you all well!**

## Arrivals

Brian Brueggert	Brian is working with Peter Ingrassia in the MCR.
Alexey Otboev	Alexey is a collaborator working with Vadim Ptitsyn.
Zvi Segalov	Zvi is a collaborator working with Ilan Ben-Zvi.
Dmitry Shvarts	Dmitry is a collaborator working with Vadim Ptitsyn.

## Transfers

**Raymond Diaz**

Ray has been with the Facilities & Experimental Support Engineering Group - will be transferring to the Energy Sciences & Technology Department 11/1

**Stephen Peggs**

Steve was the Head of the Accelerator Physics Group and has transferred to the Superconducting Magnet Division on Oct. 1.

Bob worked for the C-A Administrative Group and SNS Project Management



*We wish all of you born in **OCTOBER**  
a happy and healthy year ahead.*

***Birthday people ONLY click on cake***



## Penny's Retirement Party

# PENNY



Retirement Party CA Department  
 Sept 29, 200

**DID YOU KNOW????????????????**

Here is a site that is worth checking out and passing on to your children. It lists the sex offenders in

particular area. You never know who may be living next door to you.

<http://criminaljustice.state.ny.us/nsor/index.htm> <<http://criminaljustice.state.ny.us/nsor/index.htm>>



Click [HERE](#) for a nifty game of mathematics!



**ALUMNI NEWS: AGS/RHIC/C-AD RETIRED CROWD** -We'd enjoy hearing from you and what you're up to! Send your notes to [pmanning@bnl.gov](mailto:pmanning@bnl.gov)

You can catch up on all of Eric Forsyth's travels by clicking on his sailing yacht below



 <span style="float: right; font-size: 2em; font-weight: bold;">OCTOBER 2004</span>						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
						<b>BERA</b> L.I. Winery Tour \$45PP

						includes trolley
3	4	5	6 C-AD Accelerator Physics Seminar Dr. Ken-ichi Kanazwa - KEKB 911B - LCR 4 PM ----- Lecture "Software Proj. Mgmt. Practices" J. Petraglia, Programming Concepts, Inc. 4 PM - Bldg. 55 - SR	7	8	9
10	11	12	13	14 Community Advisory Council Meeting "Open to the Public" 6:30 PM, Berkner Rm. B	15 TIME CARDS DUE	16 BERA Culinary Inst. & Vanderbilt Mansion \$52PP includes lunch
17	18	19 Pegram Lecture "The Brave New World of Buckyballs" Prof. R. Smalley, Rice U. - 11 AM - Berkner	20	21	22	23
24	25	26 Physics Colloquium A. Piepke, U. Alabama - 3:30 PM, LSR Bldg. 510	27	28	29	30
31 						



# NOVEMBER 2004

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
				Veteran's Day Lab Closed		
14	15	16	17	18	19	20
	<b>TIMECARDS DUE</b>					
21	22	23	24	25	26	27
				HAPPY THANKSGIVING Lab Closed 	Lab Closed	
28	29	30				