

Memo

Date: 1/5/2007

To: Record

From: Derek Lowenstein, Chair C-A Department 
Gene-Jack Wang, Chair Medical Department 

Subject: Memorandum of Understanding Regarding Safety Responsibilities for C-AD
Areas Occupied By Brookhaven Linac Isotope Producer (BLIP) Personnel
and/or Guests

Work Planning and Control for BLIP

The intent of this agreement is to ensure that all work is evaluated for safety, security and environmental protection and that responsibility for review of work on the BLIP related facilities or BLIP operations is clearly understood by both organizations.

The Medical Department is responsible for reviewing and approving operations, new construction or modification work on BLIP Building 931 and associated utilities. This includes radiation shielding and environmental emissions.

The Medical Department is responsible, via the BLIP Facility Supervisor, for notifying C-AD for all new construction or modification work on the BLIP Facility or Building 931 and associated utilities. C-AD will make the decision on whether or not there is an impact on contiguous C-AD facilities or operations.

The Collider-Accelerator Department (C-AD) is responsible for reviewing construction or modification work to the BLIP building that relates to beam interlocks or any work involving the adjacent Linac or Building 930.

C-AD is responsible for assigning a Liaison Physicist and a Liaison Engineer to interface with the BLIP Facility Supervisor.

Conduct of Operations

The Linac and BLIP spur tunnel in Building 930 and the BLIP facility in Building 931 shall operate-with-beam from the C-AD Main Control Room (MCR) in Building 911. Responsibility for safe and reliable operation-with-beam shall reside with the on-duty C-AD Operations Coordinator (OC). The OC is the supervisor for operating personnel and the person to whom all operations related questions shall be addressed. BLIP operational issues (i.e., tuning) are to be communicated to the C-AD OC, MCR Operator or Linac Liaison Physicist. Minor operational issues, such as increasing or decreasing intensity or moving the beam spot, are to be communicated directly to Linac staff for correction; however, the Linac

Liaison Physicist is responsible to review these communications between Linac staff and BLIP staff. Moreover, the Linac Liaison Physicist must be contacted directly for significant issues such as beam energy change and significant change to beam spot shape with octupoles.

The C-AD Scheduling Physicist shall set the schedule for daily operation-with-beam of the Linac, BLIP spur tunnel and BLIP Facility. This schedule shall be authorized by the C-AD Experimental Support and Facilities Division Head with the joint concurrence of C-AD Accelerator Division Head and Medical Department's BLIP Facility Supervisor. The C-AD OC is charged with implementing this schedule.

A regular weekly Time Meeting shall be held during operations with beam. The Time Meeting shall bring together members of the C-AD, RHIC Users, NSRL Users and the BLIP Facility staff. These meetings shall be scheduled during all running periods. The weekly Time Meetings are to be coordinated by the C-AD Scheduling Physicist.

Operations Authority and Conduct of Maintenance

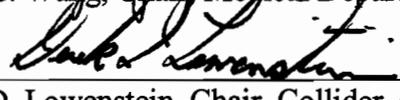
The beam in Linac and the BLIP spur tunnel in Building 930, and the beam inside the BLIP Facility must be operated by authorized C-AD Accelerator Division personnel only. All C-AD Operators are authorized to shut down beam-transport systems whenever an unsafe condition arises, or whenever in their judgment they believe that continued beam operation is not safe. C-AD Operators shall be authorized to operate beamline systems only after completion of appropriate training programs related to the C-AD Operations Procedure Manual and BLIP orientation training. C-AD Operators shall operate beamline systems under the direct supervision of the on-duty C-AD OC.

All scheduled maintenance performed by BLIP or Medical Department personnel or guests inside the BLIP spur tunnel in Building 930 must be done with the authorization of the C-AD Maintenance Coordinator.

If work on components related to beam delivery to the BLIP Facility inside Building 931 is required during a running period (e.g., turning off and then on for target manipulations or maintenance, etc.), then the on-duty OC or MCR Operator shall be informed by BLIP staff.

Approved: 
G. Wang, Chair, Medical Department

Date: 01/19/07

Approved: 
D. Lowenstein, Chair, Collider-Accelerator Department

Date: 1/12/07

C-AD Primary Reviewers for Work Planning

C-AD ESSHQ Division Head: R. Karol, ext. 5272

C-AD Work Control Manager: P. Cirnigliaro, ext. 5636

C-AD Maintenance Support

P. Sampson, Group Leader, ext. 7178

BLIP Liaisons

C-AD Liaison Physicist: D. Raparia, ext. 4849

C-AD Liaison Engineer: J. Ritter, ext. 8478

BLIP Facility Supervisor: L. Mausner, ext. 4457

Distribution:

Alessi, J., PreInjector Systems Head

Beavis, D., C-AD Radiation Safety Committee Chair

Bebon, M., BNL Deputy Director for Operations

Bond, P., BNL Associate Director for Nuclear and Particle Physics

Henn, F., BNL Associate Director for Life Sciences

Ingrassia, P., MCR Group Leader

Karol, R., C-AD ESSHQ Division Head

Lessard, E., C-AD Associate Chair for ESSHQ

Lowenstein, D., C-AD Chair

Makdisi, Y., C-AD Experimental Safety Review Committee Chair

Mausner, L., Liaison Scientist

Pilat, F., Machine Operations Head

Pile, P., C-AD ES&F Division Head

Raparia, D., Liaison Physicist

Ritter, J., Liaison Engineer

Roser, T., C-AD Accelerator Division Head

Sampson, P., Maintenance Support Group Leader

Wang, G., Medical Department Chair

Memo

Date: 1/5/2007

To: Record

From: Derek Lowenstein, Chair C-A Department 
Carl Anderson, Chair Biology Department 

Subject: Memorandum of Understanding Regarding Safety Responsibilities for C-AD Areas
Occupied By Life Sciences Personnel and/or Guests

Tier I Inspections

The intent of this agreement is to ensure that all areas are inspected regularly for safety, and that the responsibility of Tier 1 Inspections is clearly understood by both organizations.

The Collider-Accelerator Department (C-AD) is responsible for Tier 1 Inspections for areas occupied by Life Sciences personnel or guests and/or equipment housed in C-AD buildings.

Work Planning and Control for Experiments

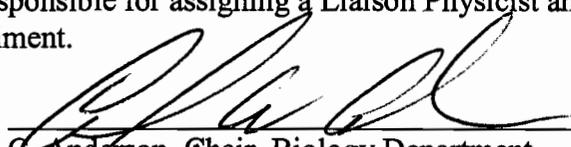
The intent of this agreement is to ensure that all work is evaluated for safety, security and environmental protection and that responsibility for review of work or experiments is clearly understood by both organizations.

The Biology Department is responsible, via Liaison Scientists or other designees, for notification of C-AD for new construction, installation or modification work on experiments performed by Biology personnel or guests in C-AD buildings.

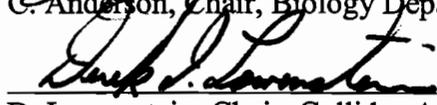
The C-AD is responsible for reviewing new construction, installation or modification work on experiments in C-AD buildings. Moreover, CAD is responsible for the work planning and control program for all work, including experimental activities, conducted at the NSRL.

Members of experimental groups are required to follow all applicable C-AD requirements (e.g., attend annual C-AD Users Training, attend weekly Time Meetings or be escorted in C-AD experimental areas by trained personnel).

C-AD is responsible for assigning a Liaison Physicist and a Liaison Engineer to interface with each experiment.

Approved: 
C. Anderson, Chair, Biology Department

Date: 1/16/07

Approved: 
D. Lowenstein, Chair, Collider-Accelerator Department

Date: 1/12/07

C-AD Primary Reviewers for Work Planning

C-AD ESSHQ Division Head: R. Karol, ext. 5272

C-AD Work Control Manager: P. Cirnigliaro, ext. 5636

NSRL Experimental Areas, Building 958

C-AD Liaison Physicist: A. Rusek, ext. 5830

C-AD Liaison Engineer: D. Phillips, ext. 4671

NSRL Liaison Scientist: B. Sutherland, ext. 3380

Distribution:

Anderson, C., Biology Department Chair

Beavis, D., C-AD Radiation Safety Committee Chair

Bebon, M., BNL Deputy Director for Operations

Bond, P., BNL Associate Director for Nuclear and Particle Physics

Emrick, A., ESH Coordinator

Henn, F., BNL Associate Director for Life Sciences

Ingrassia, P., MCR Group Leader

Karol, R., C-AD ESSHQ Division Head

Lessard, E., C-AD Associate Chair for ESSHQ

Lowenstein, D., C-AD Chair

Makdisi, Y., C-AD Experimental Safety Review Committee Chair

Pilat, F., Machine Operations Head

Pile, P., C-AD EF&S Division Head

Roser, T., C-AD Accelerator Division Head

Sutherland, B., Liaison Scientist

Memo

Date: 1/8/2007

To: Record

From: Derek Lowenstein, Chair C-A Department 
Steve Peggs, US LARP Program Leader 

Subject: Memorandum of Understanding Regarding Safety Responsibilities for C-AD Areas Occupied By LARP Personnel and/or Guests

Tier I Inspections for LARP Areas

The intent of this agreement is to ensure that all areas are inspected regularly for safety, and that the responsibility of Tier 1 Inspections is clearly understood.

The Collider-Accelerator Department (C-AD) is responsible for Tier 1 Inspections for areas occupied by LARP project personnel or guests and/or equipment housed in C-AD buildings.

Work Planning and Control for LARP Research

The intent of this agreement is to ensure that all work is evaluated for safety, security and environmental protection and that responsibility for review of work or research is clearly understood.

The LARP is responsible, via the Liaison Scientist or other designees, for notification of C-AD for new construction or modification work on equipment performed by LARP project personnel or guests in C-AD buildings.

The Collider-Accelerator Department is responsible for reviewing new construction or modification work on LARP research in C-AD buildings.

Members of research groups are required to follow all applicable C-AD requirements (e.g., attend annual C-AD Users Training or be escorted by trained personnel).

C-AD is responsible for assigning a Liaison Physicist and a Liaison Engineer to interface with the LARP research.

Approved: 
S. Peggs, US LARP Program Leader

Date: 1/17/07

Approved: 
D. Lowenstein, Chair, Collider-Accelerator Department

Date: 1/12/07

C-AD Primary Reviewers for Work Planning

C-AD ESSHQ Division Head: R. Karol, ext. 5272

C-AD Work Control Manager: P. Cirnigliaro, ext. 5636

LARP Research Area, RHIC Facility

C-AD Liaison Physicist: K. A. Drees, ext. 2348

C-AD Liaison Engineer: D. Phillips, ext. 4671

LARP Liaison Scientist: K. A. Drees, ext. 2348

Distribution:

Beavis, D., C-AD Radiation Safety Committee Chair

Bebon, M., BNL Deputy Director for Operations

Bond, P., BNL Associate Director for Nuclear and Particle Physics

Drees, K. A., Liaison Physicist

Karol, R., C-AD ESSHQ Division Head

Lessard, E., C-AD Associate Chair for ESSHQ

Lowenstein, D., C-AD Chair

Makdisi, Y., C-AD Experimental Safety Review Committee Chair

Peggs, S., US LARP program Leader

Pile, P., C-AD EF&S Division Head

Phillips, D., Liaison Engineer

Roser, T., C-AD Accelerator Division Head

Memo

Date: 1/8/2007

To: Record

From: Derek Lowenstein, Chair C-A Department 
Sally Dawson, Chair Physics Department 

Subject: Memorandum of Understanding Regarding Safety Responsibilities for C-AD
Areas Occupied By Physics Department Personnel and/or Guests

Tier I Inspections

The intent of this agreement is to ensure that all areas are inspected regularly for safety, and that the responsibility of Tier 1 Inspections is clearly understood by both organizations.

The Collider-Accelerator Department (C-AD) is responsible for Tier 1 Inspections for areas occupied by Physics personnel or guests and/or equipment housed in C-AD buildings.

Work Planning and Control for Experiments

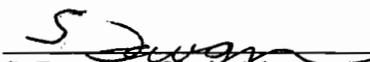
The intent of this agreement is to ensure that all work is evaluated for safety, security and environmental protection and that responsibility for review of work or experiments is clearly understood by both organizations.

The Physics Department is responsible, via Liaison Scientists or other designees, to notify C-AD about new construction, installation or modification work on experiments performed by Physics personnel or guests in C-AD buildings.

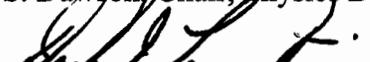
The Collider-Accelerator Department is responsible for reviewing new construction, installation or modification work on experiments in C-AD buildings.

Members of experimental groups are required to follow all applicable C-AD requirements (e.g., attend annual C-AD Users Training or be escorted in C-AD experimental facilities by trained personnel).

C-AD is responsible for assigning a Liaison Physicist and a Liaison Engineer to interface with each experiment.

Approved: 
S. Dawson, Chair, Physics Department

Date: 1/14/07

Approved: 
D. Lowenstein, Chair, Collider-Accelerator Department

Date: 1/12/07

C-AD Primary Reviewers for Work Planning

C-AD ESSHQ Division Head: R. Karol, ext. 5272
C-AD Work Control Manager: P. Cirnigliaro, ext. 5636

PHENIX Experiment, RHIC Facilities

C-AD Liaison Physicist: Y. Makdisi, ext. 4932
C-AD Liaison Engineer: C. Pearson, ext. 7641
PHENIX Liaison Scientist: E. O'Brien, 4318

STAR Experiment, RHIC Facilities

C-AD Liaison Physicist: W. Meng, 2120
C-AD Liaison Engineer: A. Pendzick, ext. 4715
STAR Liaison Scientist: W. Christie, ext. 7137

Polarized Jet Target, RHIC Facilities

C-AD Liaison Physicist: Y. Makdisi, 4932
C-AD Liaison Engineer: J. Ritter, ext. 8478
Polarized Jet Target Liaison Scientist: Y. Makdisi, ext. 4932

Building 901A, Offices and Labs

C-AD Liaison Physicist: J. Alessi, ext. 7563
C-AD Liaison Engineer: L. Snydstrup, ext. 7222
Building 901A Liaison Scientist: H. Kirk, ext. 3780

Distribution:

Alessi, J., Building 901A Liaison Physicist
Beavis, D., C-AD Radiation Safety Committee Chair
Bebon, M., BNL Deputy Director for Operations
Bond, P., BNL Associate Director for Nuclear and Particle Physics
Christie, W., STAR Liaison Scientist
Dawson, S., Physics Department Chair
Karol, R., C-AD ESSHQ Division Head
Kirk, H., Building 901A Liaison Scientist
Lessard, E., C-AD Associate Chair for ESSHQ
Lowenstein, D., C-AD Chair
Makdisi, Y., C-AD Experimental Safety Review Committee Chair, Jet LP and Jet LS
Meng, W., Liaison Physicist
O'Brien, E., PHENIX Liaison Scientist
Pearson, Liaison Engineer
Pendzick, A., Liaison Engineer
Pile, P., C-AD EF&S Division Head
Roser, T., C-AD Accelerator Division Head
Snydstrup, L., Liaison Engineer

Memo

Date: 1/22/2007

To: Record

From: Derek Lowenstein, Chair C-A Department

Gene-Jack Wang, Chair Medical Department

Subject: Memorandum of Understanding Regarding Safety Responsibilities for C-AD Areas Occupied By Life Sciences Personnel and/or Guests

Tier I Inspections

The intent of this agreement is to ensure that all areas are inspected regularly for safety, and that the responsibility of Tier 1 Inspections is clearly understood by both organizations.

The Collider-Accelerator Department (C-AD) is responsible for Tier 1 Inspections for areas occupied by Life Sciences personnel or guests and/or equipment housed in C-AD buildings.

Work Planning and Control for Animal Facilities at C-AD

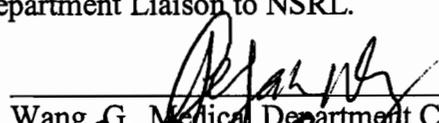
The intent of this agreement is to ensure that all work is evaluated for safety, security and environmental protection and that responsibility for review of work on or at animal facilities at C-AD is clearly understood by both organizations.

The Medical Department is responsible, via Liaison Scientists or other designees, for notification of C-AD for new construction, installation or modification work on animal facilities in C-AD buildings.

The C-AD is responsible for reviewing new construction, installation or modification work on animal facilities in C-AD buildings consistent with requirements set forth by animal welfare regulatory agencies. Moreover, CAD is responsible for the work planning and control program for all work conducted at the NSRL animal facilities.

Members of Medical Department's animal care groups are required to follow all applicable C-AD requirements (e.g., attend annual C-AD Users Training or be escorted in C-AD experimental areas by trained personnel).

C-AD is responsible for assigning a Liaison Physicist and a Liaison Engineer to interface with the Medical Department Liaison to NSRL.

Approved: 
Wang, G., Medical Department Chair

Date: 01/26/07

Approved: 
D. Lowenstein, Chair, Collider-Accelerator Department

Date: 1/23/07

C-AD Primary Reviewers for Work Planning

C-AD ESSHQ Division Head: R. Karol, ext. 5272

C-AD Work Control Manager: P. Ciriigliaro, ext. 5636

NSRL Experimental Areas, Building 958

C-AD Liaison Physicist: A. Rusek, ext. 5830

C-AD Liaison Engineer: D. Phillips, ext. 4671

Medical Department Liaison to NSRL: P. Guida, ext. 2913

Distribution:

Beavis, D., C-AD Radiation Safety Committee Chair

Bebon, M., BNL Deputy Director for Operations

Bond, P., BNL Associate Director for Nuclear and Particle Physics

Guida, P., Medical Department Liaison to NSRL

Henn, F., BNL Associate Director for Life Sciences

Karol, R., C-AD ESSHQ Division Head

Kershaw, M., Medical Department Animal Facility Manager

Lessard, E., C-AD Associate Chair for ESSHQ

Lowenstein, D., C-AD Chair

Makdisi, Y., C-AD Experimental Safety Review Committee Chair

Pilat, F., Machine Operations Head

Pile, P., C-AD EF&S Division Head

Roser, T., C-AD Accelerator Division Head

Sutherland, B., Liaison Scientist

Wang, G., Medical Department Chair

Memo

Date: 1/5/2007

To: Record

From: Derek Lowenstein, Chair C-A Department *DL*
Praveen Chaudhari, Monopole Experiment Leader *PC*

Subject: Memorandum of Understanding Regarding Safety Responsibilities for C-AD Areas Occupied By Monopole Experiment Personnel and/or Guests

Tier I Inspections for Monopole Experimental Areas

The intent of this agreement is to ensure that all areas are inspected regularly for safety, and that the responsibility of Tier 1 Inspections is clearly understood.

The Collider-Accelerator Department (C-AD) is responsible for Tier 1 Inspections for areas occupied by Monopole Experiment personnel or guests and/or equipment housed in C-AD buildings.

Work Planning and Control for Monopole Experiments

The intent of this agreement is to ensure that all work is evaluated for safety, security and environmental protection and that responsibility for review of work or experiments is clearly understood.

The Monopole Experiment is responsible, via the Liaison Scientist or other designees, for notification of the C-AD for new construction, installation or modification work on experiments performed by Monopole Experiment personnel or guests in C-AD buildings.

The Collider-Accelerator Department is responsible for reviewing new construction, installation or modification work on the Monopole Experiment in C-AD buildings.

Members of experimental groups are required to follow all applicable C-AD requirements (e.g., attend annual C-AD Users Training, attend weekly Time Meetings or be escorted in C-AD experimental facilities by trained personnel).

C-AD is responsible for assigning a Liaison Physicist and a Liaison Engineer to interface with the ~~LARP~~ *Monopole* experiment.

Approved: *P. Chaudhari*
P. Chaudhari, Monopole Experiment Leader

Date: 1/26/07

Approved: *D. Lowenstein*
D. Lowenstein, Chair, Collider-Accelerator Department

Date: 1/12/07

C-AD Primary Reviewers for Work Planning

C-AD ESSHQ Division Head: R. Karol, ext. 5272

C-AD Work Control Manager: P. Cirnigliaro, ext. 5636

Monopole Experiment, RHIC Experimental Areas

Liaison Physicist: K. Yip, ext. 4116

C-AD Liaison Engineer: D. Phillips, ext. 4671

Monopole Experiment Liaison Scientist: P. Chaudhari, ext. 5302

Distribution:

Beavis, D., C-AD Radiation Safety Committee Chair

Bebon, M., BNL Deputy Director for Operations

Chaudhari, P., Liaison Scientist

Bond, P., BNL Associate Director for Nuclear and Particle Physics

Karol, R., C-AD ESSHQ Division Head

Lessard, E., C-AD Associate Chair for ESSHQ

Lowenstein, D., C-AD Chair

Makdisi, Y., C-AD Experimental Safety Review Committee Chair

Pile, P., C-AD ES&F Division Head

Phillips, D., Liaison Engineer

Roser, T., C-AD Accelerator Division Head

Yip, K., Liaison Physicist