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# EMCal SUBSYSTEM DISCRIPTION FOR ENGINEERING RUN

procedure name

PHENIX Procedure No. PP-2.5.2.9-06

Revision: A

Date: 5-10-99

## Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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## Approvals

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PHENIX S E & I Date

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Cognizant Scientist/Engineer Date  
/Activity Manager

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PHENIX QA/Safety Date

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RHIC ES&H Date

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REVISION CONTROL SHEET

LETTER	DESCRIPTION	DATE	WRITTEN BY	APPROVED BY	CURRENT OVERSIGHT
A	First Issue (Available copy marked draft it is uncertain whether or not this document was ever released. Document on record is PP cover page and copies of 2 memos)	5/10/1999 cover page, 6/5/1998 memo from A. Etkin to C. Welandics, 4/29/ 1999 memo from C. Woody to W. Lenz	n/a	Cover page unsigned	n/a
RETIRED	Engineering Run Completed	3/8/2007	n/a	D. Lynch, R. Pisani & P. Giannotti for PHENIX	D. Lynch

BROOKHAVEN NATIONAL LABORATORY  
Environment Safety and Health Services Division

MEMORANDUM

DATE: June 5, 1998  
TO: A. Etkin  
FROM: C. Weilandics *C. Weilandics*  
SUBJECT: Operation of LSI-337ND-Lasers

Over the past several years members of the PHENIX group have incorporated the use of nitrogen lasers as part of a photomultiplier test system for the PHENIX e/m calorimeter. These units have been reviewed previously and have been approved for operation. This memo is meant to cover operations in Bldg. 510 laboratories, as well as their use in the Bldg. 902 annex. In summary the following operating criteria apply.

It is understood that the above laser is to be a totally enclosed (except for tune-up/alignment) laser system which, once set up, is designed to be operated as essentially a turn-key system when used for calibration purposes at the 902 annex with very low output levels.

Within the small interlocked enclosure around the laser and optical train, it is possible to have a hazardous direct beam exposure. This enclosure is, therefore, a controlled area and the following guidelines apply when the optics are being worked on as in tune-up/alignment:

1. The area around the laser shall be cordoned off and posted so as to establish a temporary controlled area and to keep unauthorized personnel out (i.e. doors posted).
2. Safety glasses which have an optical density of 1 @ 337 nm are to be worn when working with the laser beam. These will afford the necessary protection from the beam.
3. The laser must be operated by qualified and authorized personnel. In addition, those individuals who will be working with the laser must have the requisite eye exams.

I do not consider a serious exposure outside the confines of the portable enclosure to be a credible hazard because of the filtration needed to lower the intensity, and the scatter and diffusion of the beam inside the diffusion area.

It is probably a good idea to label the fibers in a manner which alerts people to the fact that light is being conducted through the fibers, and that the responsible individuals (Authorized Users) should be contacted if the cables have to be removed/disconnected. This is more for operational continuity than anything else. In addition, all feed-through for inputs/outputs on the laser system enclosure should be labeled. I can supply any additional labels if needed.

As usual, please keep me informed as to the changes in the status of the lasers' location, output characteristics, configuration, user status (additions/deletions), etc.

cc: L. Bower G. David K. Einfeldt E. Kistenev R. Gill  
S. Stoll J. Vignola C. Woody F. Zafonte  
CW/sc/IH5520.98

**Subject: Procedure for YAG aser in 1008**

**Date: Thu, 29 Apr 1999 17:56:14 -0400**

**From: Craig Woody <woody@bnl.gov>**

**To: Bill Lenz <wlenz@bnl.gov>**

Bill,

I met with Chris Weilandics today and he essentially approved our procedure for operating the YAG laser in the laser hut in 1008. He said he would just like us to put up a light which would come on outside the hut when the laser is being operated with the box open, and we will do that. I'm meeting with Asher tomorrow morning at 9:30 in 1008 to get his approval, and I would like to have a cover page for the new procedure with a new number when I see him in the hopes that he would be willing to sign it on the spot. If you could get me a cover page by then, I would greatly appreciate it. Just for your info, the number for the procedure for using the YAG in 902 was PP-2.5.2.9-02.

Many thanks,  
Craig