



Brookhaven
National Laboratory

BNL-105756-2014-TECH

EP&S No. 42;BNL-105756-2014-IR

G-10 Monitoring Systems

Y. Y. Lee

December 1971

Collider Accelerator Department
Brookhaven National Laboratory

U.S. Department of Energy

USDOE Office of Science (SC)

Notice: This technical note has been authored by employees of Brookhaven Science Associates, LLC under Contract No.AT(30-1)-16 with the U.S. Department of Energy. The publisher by accepting the technical note for publication acknowledges that the United States Government retains a non-exclusive, paid-up, irrevocable, world-wide license to publish or reproduce the published form of this technical note, or allow others to do so, for United States Government purposes.

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

BROOKHAVEN NATIONAL LABORATORY
Associated Universities, Inc.
Upton, L.I., N.Y.

EP&S DIVISION TECHNICAL NOTE

No. 42

December 6, 1971

G-10 MONITORING SYSTEMS

Y.Y. Lee and D.M. Lazarus

90° monitor: Maintained by AGS Division and quite adequate for tuning target etc. However, the particle off from G-10 traverses through target handling mechanism (Motors, Gears, Flanges, etc.) and significantly depends on the configuration of target manipulating system.

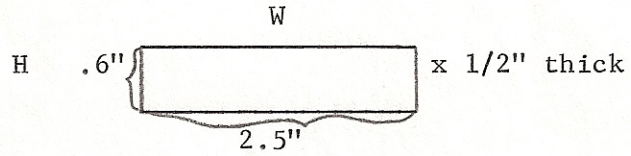
30° monitor: At present there are three systems present (of three counters each). All the experimenters on the floor use the last set, namely one installed by the Rochester Group. The electronics for the counters are sitting on the floor where the 30° hole is. We replaced the electronics with L-100 series modules.

Recommendations: a) the 90° monitor should be left as it is. The AGS multiplexing system has not been reliable but recently a new system has been installed by the AGS Division which supplies a signal to the Main Control Room and Target Desk. It is recommended that this signal be distributed to G-10 users.

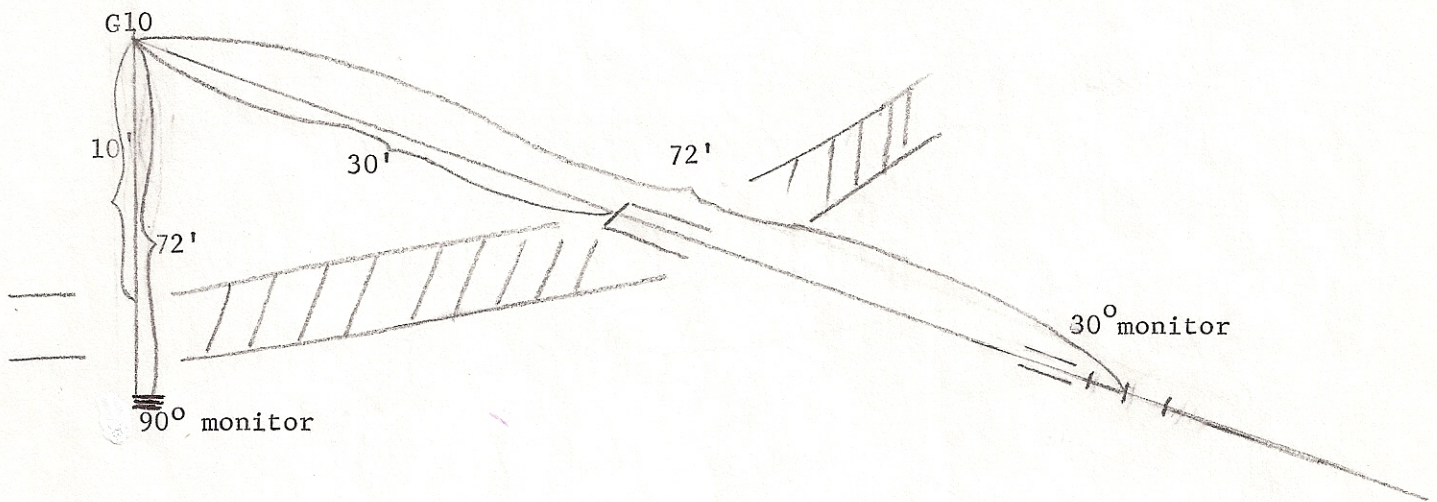
b) The 30° monitor should be renovated since most of the experimenter's work depends on it sometime or another.

i) 30° monitor hole; At present ~ 1" x 1". We would like to reduce to 1/4" vertical by 1" horizontal in order to minimize the other junk (?) viewed by the monitor telescope. Since there are plenty of counting rate, reducing the collimator wouldn't hurt the rate.

- ii) Counter telescope: At present it is 3-2" diameter counters. We would like to replace with the size just to cover the 30° hole, Recommended counter dimensions are:



- iii) The mount for the counter must be more rigid than present.
- iv) It is desirable to have this done during the Christmas shutdown.



D. Lazarus and Y. Lee would take the responsibility of maintaining the 30° monitor system.

Distr: EP & S Staff
Dept. Admin.