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C-A OPERATIONS PROCEDURES MANUAL

15.6.2 Procedure for Bypassing an Inoperable AGS RF Cavity
During HI Intensity Proton Operations

(RF Group Procedure RF002)

Note: This document was formerly a C-A Group Procedure. The content of the group procedure was reviewed by the Technical Supervisor. All approvals and/or issue dates of the original group procedure are maintained for present use.

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Signature on File
Collider-Accelerator Department Chairman _____
 Date

A. Zaltsman

RF Group
Group Procedure RF002
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Revision 00

PROCEDURE FOR BYPASSING AN INOPERABLE AGS RF CAVITY DURING HI INTENSITY PROTON OPERATIONS

If there is a problem with the AGS HL RF System, contact RF System Specialist.

Do not execute this procedure without first contacting an RF System Specialist.

For optimal machine performance of the AG RF system only seven or eight stations at a time have to be running. Two or three stations are on stand-by. To minimize the down time and keep the HEP running in the event of one of eight stations faults, one of the stand-by could be energized.

To eliminate the possibility of equipment damage, the following steps should be complied with explicitly.

A Disabling the Station

1. Press the **Driver Off** button on the “Redi Panel” for the station to be shut down; (Mezz. 929 racks 5232 & 5233)
2. Go down stairs. On the front of the ENI driver (Racks 5162-5166) turn the breaker (toggle switch) to not ON position;
3. Deenergize the 208v DRIVER breaker (triple switch) for that ENI; (south wall to right of panel PDRF/2)
4. Go to the back of racks 5162 - 5166 and take out the fuse labeled “25ASB” from the ENI of the station to be disabled.
5. On the patch panel in the rear of rack #5463 put the toggle switch labeled "relay CW" to DISABLE position.
6. Install the fuse removed from the ENI (step #4) in the fuse holder for the station to be disabled; The fuse holder is located on the same patch panel as the toggle switch of step #5 (rear of rack#5463); **Use the fuse cup from the fuse holder in the rack #5463.**

Note that putting the fuse in the wrong station position can cause extensive equipment damage

7. Put the toggle switch labeled “relay CW” in the ENABLE position; (the red LED on the appropriate relay driver card in front of rack #5463 will be on all the time).
8. In the Mezz. 929 rack 5232 on the 1.25" panel named “Gap short relay panel” connect the BNC connector to the scope and observe the voltage: for the lockout station it should be CW and more then 3 volts.

B. Enabling the stand-by station

To energize the stand-by station, follow the steps 7 thru 1 in the descending order.