# Information Flow at the APS

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# Abstract

We all have meetings, briefings, shift logs, and methods of passing on day-to-day repetitive operational information. This paper will detail how the APS uses a web-based cgi tool to notify responsible groups of noncritical equipment or system issues, modification requests, and operations tool development.

# **1** Repair, Modify, and Development Tool (RMD)

The RMD tool was developed as a way to communicate via submissions made from the Main Control Room (MCR) the need for noncritical equipment repair, equipment or software modifications, and development of operating tools. This web-based tool notifies responsible groups of specific equipment and machine issues and offers a way for Operations to track the status of requests for repairs, modifications, and development.

# 2 Types of RMD Submissions

Repair Submissions - Almost all repair submissions related to the RMD tool involve noncritical systems and equipment that does not directly affect operations at the time of the event. This can include such items as temporary equipment events, faulty readbacks/status indications, computer/software anomalies, building issues, etc.

Modify Submissions - The RMD tool is used in this capacity to notify responsible groups of equipment or software modifications that may be needed. The modify submission is also used to request procedure updates that become necessary as machine/equipment operations change.

Development Submissions - RMDs submitted under this category are generally for developing new operating tools, software, operating screens, procedures, and equipment for the APS.

#### **3 RMD Submission Process**

The Operations Group is the primary user of this notification tool. The Operator submitting the report enters his/her badge number as originator and primary contact if further information is needed. Next the Operator selects the Responsible Group from a drop-down menu and then text is typed to describe the event in the Description box. See Fig. 1.

Please fill out the fu	ern and then press the submit button.
Badge # [4,50.93	
Responsible Group:	OPS 🗆
Description:	
hest	F
Activity at the Time	of Failure:
Test	
Urgency: / Urgent // Machine Affected:	As Time Permits Next Machine Intervention Next Shutdown Linac Par Booster Ring Beamlines LEUTL (Other
Urgency: (Urgent (	Linac Par Booster Ring Beamlines LEUTL gOther s  Group mail list help
Urgency: Urgent ( Machine Affected: System: op Beamline (if applies	Linac Par Booster Ring Beamlines LEUTL #Other s  Group mail list help able):
Urgency: Urgent ( Machine Affected: System: op	Linac Par Booster Ring Beamlines LEUTL #Other s Group mail list help able):
Urgency: Urgent & Machine Affected: System: op Boandine (If applies Equipment : Jacob E-Hail CC to:	Linac Par Booster Ring Beamlines LEUTL #Other s Group mail list help able):

Fig. 1 Form for RMD submission.

The Operator then types in the activity that was taking place at the time that the event or failure took place. Radio buttons are selected to note how urgently a response is needed and which machine is affected. Drop-down menus are then used to select the system or equipment affected and, if applicable which beamline is involved. Additional equipment information can be in the equipment text box to provide more details, and image files can be attached to further illustrate the event that took place. Once all of the information is in place, the Operator submits the report, which will be sent to selected members of the designated responsible group or via a group mailing list maintained by Operations. Each submitted RMD is issued a report number and placed in a text file in order to monitor its status.

# **4 RMD Response Process**

Once submitted, the responsible group and Operations receive notification of the RMD report via e-mail. A member of the responsible group is then required to submit a response to the RMD describing the actions that they will take to correct the item. In most cases the corrective action can be performed the very next day. However, there are times when the work needs to be delayed until the next period when User operations are not taking place, e.g., machine studies period or scheduled maintenance period.

The Operations Group staff is primarily responsible for following up on all RMDs that involve his/her area of responsibility. The RMD will remain current until some form of action has been taken or until a response has been issued. It is understood that RMDs submitted for modifications or development may not be resolved right away, and the tool has proven itself to be a good way to track items that are needed.

After the work has been completed to correct problems reported in an RMD, the responsible group then provides a response via e-mail noting that the repair has taken place. The Operations Chief of Operations (CO) then marks the RMD as completed and deletes it from the current records. All completed and deleted RMDs are kept in an archive for a period of two years. At the end of this period they are removed from the system.

# 5 Summary

The RMD reporting system has proven itself to be a very beneficial information tool at the APS. It provides the Operations Group with a web-based notification and tracking system for machine issues, modification needs, and development ideas for all areas of the APS.

# 6 Acknowledgement

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