

# Asset Management and Maintenance Management



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# Asset Management



# References for Reporting Requirements

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- **USSTRATCOM Instruction 538-1, Volume I, BMDS Description and Asset Management**
- **MDA 3000.02, BMDS Asset Management, Scheduling, Planning and Execution**



# The Asset Management Process

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- **Purpose**
  - **The process for planning, scheduling, and managing all missile defense-related assets to ensure an effective and efficient operational capability, while concurrently executing developmental improvements and enhancements, tests, and training related activities**



# Asset Management Tools and Players

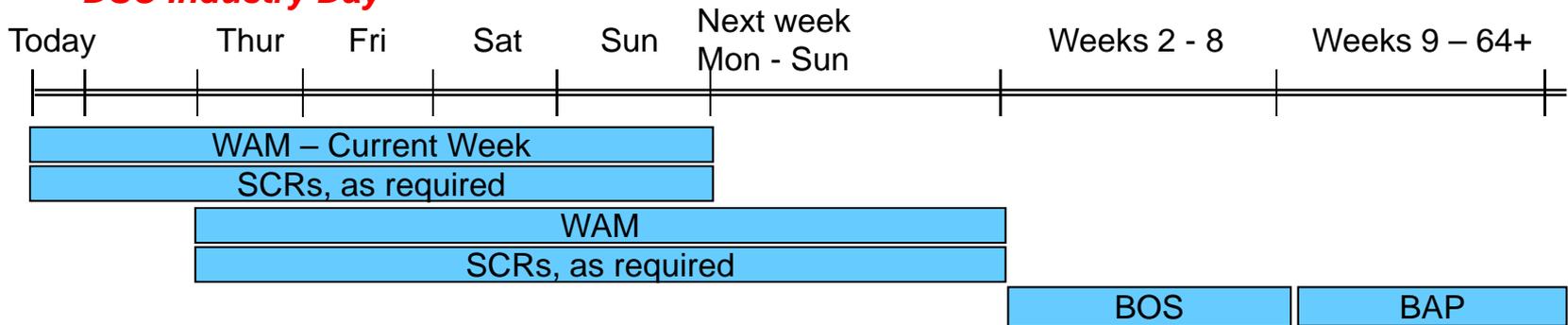
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- **Asset Management Tools:**
  - **Event Objective Worksheet (EOW):** Used to schedule events into the BMDS Annual Plan and BMDS Operations Schedule
    - Event Name, Objectives, Methodology, Dates / Times
    - Assets required for event
  - **Schedule Change Request (SCR):** Used to add, delete, change or modify an aspect of scheduled tasks on the Weekly Activity Message (WAM)
- **Asset Management Players:**
  - **Event Owner:** The entity responsible for scheduling an exercise, test, maintenance, operations, training, or upgrade event
  - **Asset Manager:** The intermediate echelon responsible for management of subordinate BMDS assets
  - **Asset Owner:** The entity with the authority to commit an asset to participate in an exercise, test, maintenance, operations, training, or upgrade event



# Asset Management Products

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- **Asset Management Products**

- **BMDS Annual Plan (BAP):**

- Contains BMDS scheduled activities out to 15 months.
    - Uses “place-holders” for significant events and lacks detail of events

- **BMDS Operations Schedule (BOS):**

- Long term.
    - Rolling 8-week schedule.
    - Contains all events anticipated to occur during the 8-week time period
    - Weeks 5 - 8: some events may require additional de-confliction or detail
    - Weeks 2 - 4: contain greatest granularity

- **Weekly Activity Message (WAM): Short term. The first week of the BOS. All anticipated events de-conflicted and executable as listed.**

- **Schedule Change Request (SCR): Daily, as required, to change WAM.**



# Event Objective Worksheet (EOW)

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- Where it all Starts
- Planning Tool
- Event Owner Develops
- Management Concurs and Quality Reviews

Task 1 Name: Ratchet Test Conduct Integration Dry Run									
Work Order Numbers / Requests for Maintenance									
Consecutive - Days									
Daily Start Date		08/22/06		Daily Finish Date		08/22/06			
Daily Start Time (Zulu)		0800		Daily Finish Time (Zulu)		0900			
Calculated Data:		Recurring Day Count:		Change to Hours		Daily Duration (in Hours)		1.00	
Asset Name:									
Multi-Mission TAB Required									
Equipment Status Code									
Recall time Full Mission Capability									
Asset Daily Start Time (Zulu)									
Asset Daily Finish Time (Zulu)									
Max Downtime Duration									
Remarks and Alerts									
Test Asset - 1									
Test Asset - 2									
Insert copied rows to add Assets here...									
(O)/R (pick 1)									
Task 2 Name: Ratchet Test Conduct Run for Record									
Work Order Numbers / Requests for Maintenance									
Consecutive - Days									
Daily Start Date		08/23/06		Daily Finish Date		08/23/06			
Daily Start Time (Zulu)		0800		Daily Finish Time (Zulu)		0900			
Calculated Data:		Recurring Day Count:		Change to Hours		Daily Duration (in Hours)		1.00	
Asset Name:									
Multi-Mission TAB Required									
Equipment Status Code									
Recall time Full Mission Capability									
Asset Daily Start Time (Zulu)									
Asset Daily Finish Time (Zulu)									
Max Downtime Duration									
Remarks and Alerts									
Test Asset - 1									
Test Asset - 2									
Insert copied rows to add Assets here...									
(O)/R (pick 1)									
Event Coordination Section									
Annotate When All Required Event Coordination and Notification Complete.									
Asset Name:									
Contact									
Coord Complete									
Coord Date									
Test Asset - 1									
(O) V (888) 555-1212 (C)/WF(888)555-1234, test.owner1@usa.mil									
Yes									
07/06/06									
Test Asset - 2									
(O) V (888) 555-1212 (C)/WF(888)555-1234, test.owner1@usa.mil									
Yes									
07/06/06									

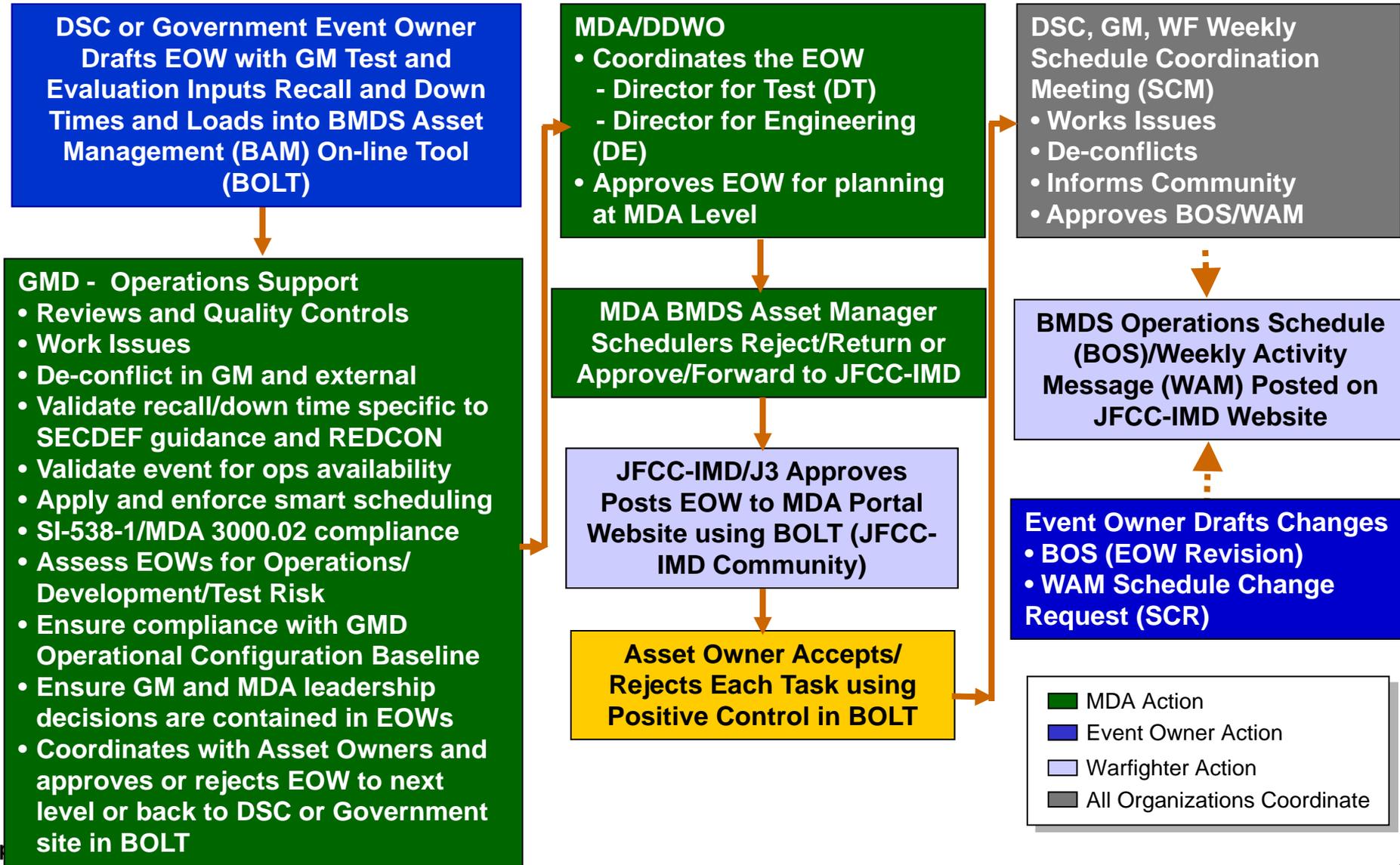
NORAD. Further dissemination requires prior approval by the Missile Defense Agency (MDA/DOS). Case No. T00-D-0025-06 06 April 2006.			
Get Blank EOW Template files from the STRATCOM WEB site (http://portal.mda.smil.mil/portal/server.pt?) by selecting "JFCC-IMD" Tab Then "JFCC References" - "EOW Template Vxx-xx"			
Legend: Blue-Heading information, Yellow-Pull down cells, Green-Auto fill-in cells, White-manual fill-in cells.			
Temporary EOW Number:	T06GMD-0000	Initial Date:	7/5/06
Permanent No.:	06GMD0000		
Event Title / Name:	Ratchet Test 2A		
EOW Revision Number (Add more rows as Needed):	Rev 1	Date:	07/08/06
EOW Revision Number (Add more rows as Needed):		Date:	
Event Owner Information:	Test Event Owner 1	(U) V (888) 555-1212 (C)/WF(888)555-1234, test.owner1@usa.mil	
Alternate Event Owner Information:			
Government Lead / Sponsor:			
Other Coordination POC:			
System Transition required BEFORE this Event?	No	** If this Event requires any Asset to change Configuration, Select "Yes" in the cell to the left of this one. ** If not known if a transition is required contact the BMD's Watch Officer (BWO) at (719) 721-9549 or E-mail to MDA-BWO@mda.smil.mil immediately!	
System Transition required AFTER this Event?	No	** If this Event requires any Asset to change Configuration, Select "Yes" in the cell to the left of this one. ** If not known if a transition is required contact the BMD's Watch Officer (BWO) at (719) 721-9549 or E-mail to MDA-BWO@mda.smil.mil immediately!	
Priority:	01	Really Important Maintenance	
Downtime Code:	J	Damage or Deterioration	
Event Objectives:			
Event Test to turn ratchet to right six times with out stopping. Determine lubrication required.			
Event Methodology/Configuration			
Ratchet on test stand Various sockets and bolts with torque ranges to 200 lbs engaged until failure.			
System Configuration during Event:	Development	System Configuration After Event:	Operational
Multi-Mission Asset Coordination:			
Task 1 Name:			
Work Order Numbers / Requests for Maintenance			
Consecutive - Days			
Daily Start Date		Daily Finish Date	
EOW Form			

- GMD Coordinates and Quality Reviews
- Asset Owners Coordinate
- JFCC-IMD/J3 Approves and Posts to MDA Portal



# Asset Management Process Flow

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- MDA Action
- Event Owner Action
- Warfighter Action
- All Organizations Coordinate



# Asset Management Process and Readiness

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- **Day-to-day Readiness**
  - **Follow Established BOS/WAM and SCR Coordination Procedures**
  - **WAM Executed as Published (with SCRs)**
  - **NORTHCOM/J31 Coordinates on All Scheduled Maintenance**
  - **NORTHCOM/J3 Approves Deviations**
- **Higher States of Readiness**
  - **Daily Asset Management Meeting**
  - **Established BOS/WAM Coordination Procedures continue; however, WAM May Not be Executed as Published**
  - **CDR or DCDR US NORTHCOM Briefed / Approves**
- **Highest State of Readiness**
  - **BOS/WAM Activities are NOT Executed as Published**
  - **CDR or DCDR USNORTHCOM Approves Any Scheduled Maintenance**



# GM and DSC Functions in Asset Management

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- **GM**
  - **Leadership direction, coordination with external agencies, and contractual insight / oversight, as well as scheduling non prime contractor activities**
- **DSC**
  - **Provide the resources necessary to execute and manage the planning, scheduling and controlling the use of GMD assets to include planned and corrective maintenance, both scheduled and unscheduled**

*Asset management process supports maintenance execution, configuration management and transition management for the GMD Weapon System*



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# Maintenance Management



# References for Reporting Requirements

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- **STRATCOM Instruction (SI) 538-1, Volumes I and II**
- **GM Situational Awareness and Operations Reporting Directive, dated 1 March 2010**



# Preventive Maintenance

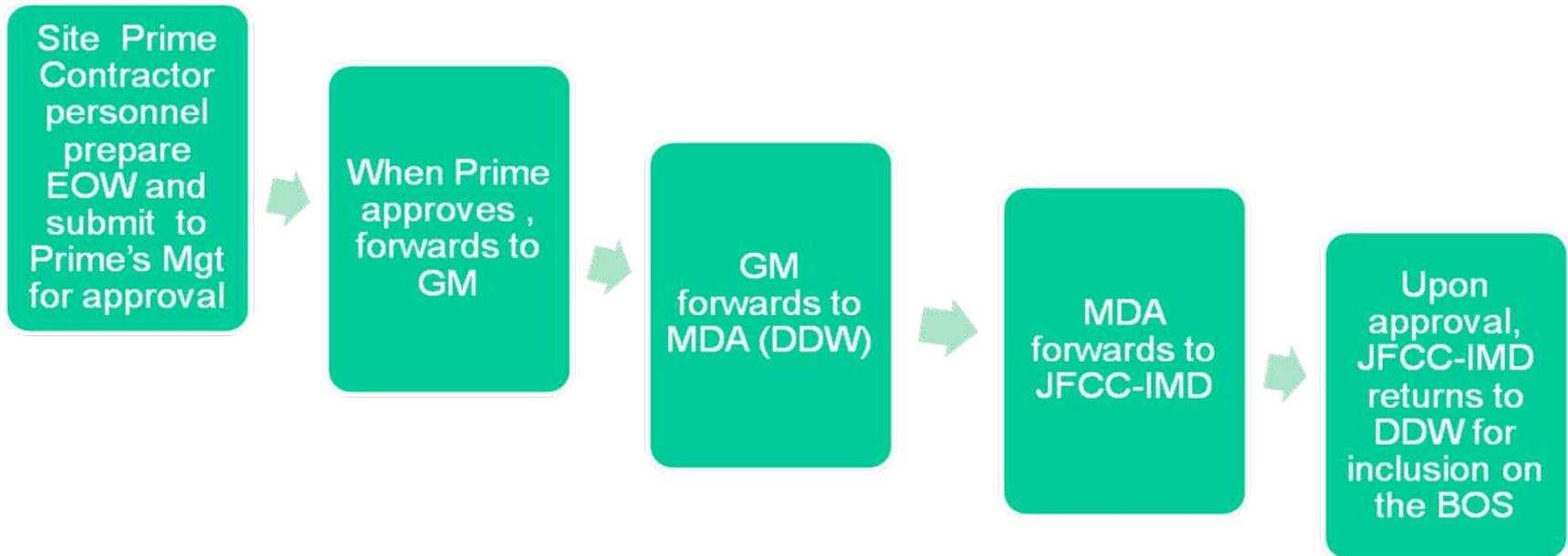
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- **Preventive Maintenance Scheduling**
  - **Scheduled via Event Objective Worksheets (EOW) generated at the sites**
  - **Approved EOWs forwarded to GM for approval, then to MDA for approval, and finally to USNORTHCOM and JFCC-IMD for approval**
  - **After all approvals, DDW adds item to the BMDS Operational Schedule (BOS)**
  - **Recurring events (i.e. Quarterly Maintenance activities) can be “auto-scheduled” via the Integrated Scheduling Tool (IST) using parameters given by the scheduler**
  - **Maintenance Built-in Tests (MBITs) are performed on fielded GBIs quarterly**



# Maintenance Management Scheduling Diagram

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*Transmission of EOWs throughout this process is performed via the BMDS On-line Tool (BOLT)*



# Preventive Maintenance (PM)

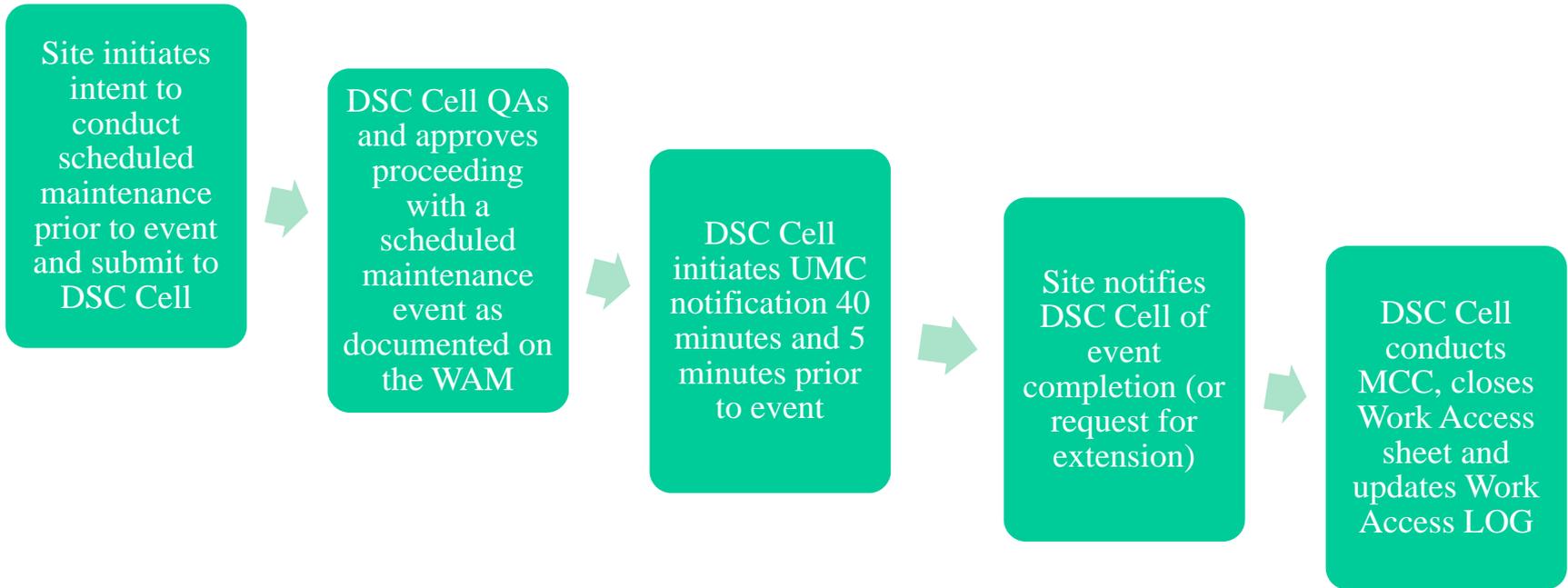
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- **Preventive Maintenance Execution**
  - **Event execution is managed via the Weekly Activity Message (WAM)**
  - **Upcoming Maintenance Conferences (UMC) are initiated by the DSC Integration Cell (DSC Cell) at 40 minutes and 5 minutes prior to an event start time. The Cell monitors maintenance events from start to finish**
  - **The Cell conducts a Maintenance Conclusion Conference (MCC) the conclusion of the event to return asset to operational status**



# Maintenance Management Execution Diagram

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# Unscheduled Corrective Maintenance (CM)

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- **Unscheduled Corrective Maintenance Execution**
  - **Unscheduled CM activities can result from PM activities, alarms, anomaly troubleshooting, etc.**
  - **If a CM required action is discovered during a PM activity, the CM can be conducted simultaneously with the PM if it can be performed within the scheduled PM timeframe (or reasonable extension)**
  - **If the CM activity does not meet the deadline for WAM update submission or needs to be conducted immediately, it becomes unscheduled and needs Warfighter approval**



# Scheduled Corrective Maintenance (CM)

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- **Scheduled Corrective Maintenance Execution**
  - **CM events that meet the current day WAM submission deadline or must be deferred due to lack of spares or technicians, to coincide with a scheduled event to limit system impact, etc., will become scheduled CM events**
  - **The request to schedule these events are generally submitted by the sites to the DSC Cell schedulers via an EOW which generates a schedule change request (SCR)**
  - **These requests are posted to the WAM update for approval**
  - **Scheduled CM actions still require Warfighter approval, but this approval is obtained through the routine WAM approval process**



# Fix or Fight Maintenance Execution

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- **Fix or Fight Maintenance Execution**
  - **Fix or Fight Maintenance decisions are based upon REDCON**
  - **DSC Cell provides recommendations and risks to GM for decision**
  - **GM will coordinate with the Warfighter for final disposition instruction**
  - **Warfighter makes final decision on fix, fight, remove from inventory or other option**



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# Precision Measurement Equipment Laboratories (PMEL) Support



# PMEL Support

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- **Industry Question**
  - **What calibration, maintenance, and proof load capabilities / facilities are available on site?**
- **Government Response**
  - **Calibration**
    - **Calibration of standard equipment (i.e., torque wrenches, meters, etc.) is available through the host wing (VAFB) / garrison (FGA) PMEL contractor**
    - **PMEL calibration will be provided for equipment identified in the BSRL by the government through ISAs**
    - **Prime contractor coordinates and executes calibration requirements directly with the PMEL contractor**
  - **Proof Load Facilities**
    - **The host unit does not provide any proof load facilities or equipment for tenant units at either site**