U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

ORDER
JO 6000.53C

Effective Date:
04/25/2011

SUBJ: REMOTE MAINTENANCE MONITORING INTERFACE DEVELOPMENT AND IMPLEMENTATION

1. Purpose of this order. This order defines the requirements for National Airspace System (NAS) subsystems to provide Remote Maintenance Monitoring (RMM) capabilities and the roles and responsibilities for the development and implementation of the RMM interfaces.

2. Audience. Any program office that procures, installs, and/or implements subsystems or services into the NAS must comply with this order.

3. Where can I find this order? You can find this order on the My FAA Employee website under Tools & Resources, select Orders & Notices or on the Technical Operations Directives Information System (DIS) website: http://dis.faa.gov/.

4. What this order cancels. Order JO 6000.53B, Remote Maintenance Monitoring Interface Development and Implementation, dated May 1, 2007.

5. Explanation of changes. This revision incorporates changes resulting from comments, organizational realignment, and plain language initiatives. These changes include:

a. Administrative (new format and editing);

b. Clarification of RMM interface development process;

c. Clarification of requirements and responsibilities; and

d. Deletion of the appendices.

6. Requirements. All NAS subsystems are candidates to provide RMM capability. A NAS subsystem is any facility, equipment, system, subsystem, or service, including commercial or vendor provided systems or services, integrated into the NAS.

a. RMM capability is the ability to remotely monitor and control the NAS subsystem through the Federal Aviation Administration's (FAA) remote maintenance monitoring control system. RMM functionality will allow the user to perform the following functions from a remote location:

(1) Monitor system status and alarms;

(2) Periodic maintenance;

(3) Certification;

(4) Analyze system performance;

(5) Fault isolation and restoration; and

(6) Manage system configuration.

b. The NAS subsystems that are candidates to provide RMM are:

(1) FAA procured equipment/systems/subsystems;

(2) NAS environmental and support equipment, such as power systems, fuel tanks, security, fire alarms, etc.;

(3) Contractor provided services and/or equipment, to include provisional services;

(4) Other subsystems as required by law, contractual, or operational necessity; and

(5) Upgrades or replacements to any of the above subsystems.

c. All NAS subsystems/services that are required to provide RMM capability will have the appropriate RMM interfaces and will connect into the current remote maintenance monitoring control system.

d. All commercial or contractor provided NAS systems, services, or provisional services that the FAA is required to monitor, provide maintenance oversight, or certify due to contractual or operational requirements will have the appropriate RMM interface to connect into the current remote maintenance monitoring control system. The requirement to provide remote control capability on a contractor provided system, service, or provisional service will be determined on a case-by-case basis.

e. If an existing facility requires RMM functionality that is not currently installed, such as but not limited to environmental or power services, the office that identifies the need will submit a request for RMM functionality to the Maintenance Automation Program (MAP) Team. The MAP Team will evaluate the requirement and develop a solution. Only RMM systems approved by the MAP Team will be installed.

7. Responsibilities.

a. The MAP Team (AJW-131) is the RMM Program Office for the Air Traffic Organization (ATO). The MAP Team is responsible for identifying RMM requirements and coordinating with the NAS subsystem program offices on the development, implementation, installation and integration of RMM requirements.

b. The NAS subsystem program offices have the responsibility to coordinate with the MAP Team for the determination of the RMM requirements for all new NAS subsystems and/or services prior to the development of the initial requirements and specifications for the new subsystems/services. This includes any upgrades or replacements of existing and/or installed equipment. If the MAP office determines that RMM is required, the program office has the responsibility for funding the development of the interface and the implementation, installation, and connectivity of the RMM element of the facility.

8. Evaluation Criteria. The MAP Team will use the following criteria as a guideline for the initial determination if a system/service should provide RMM capabilities. The MAP Team will apply the criteria to each facility/service type on an overall system-wide basis, not on a site-specific basis.

a. Will the loss of this system/service most likely cause nationally reportable air traffic delays charged to equipment/service?

b. Will the loss of this system/service affect approach, landing, takeoff, or departure procedure minima or negatively affect en route procedures?

c. Would the RMM capabilities save trips to the site?

d. Is this system/service Interrupt Reportable?

e. Would the RMM capabilities reduce the number of outages or length of downtime?

f. Will the loss of the system/service require the issuance of a Notice to Airman (NOTAM)?

g. Will the loss of this system/service affect General Aviation operations?

9. Waivers. The MAP Team will provide the analysis and the determination as to whether a NAS subsystem requires RMM functionality. If it is determined that a NAS subsystem does not require RMM, the MAP Team will provide a written waiver, signed by the Vice President, Technical Operations Services, to the NAS subsystem program office.

10. RMM Interface Development.

a. If it is determined that a NAS subsystem is required to provide RMM capability, the MAP RMM program manager assigned to that system will manage the development of the RMM interface. The MAP RMM program manager will ensure that the following offices are involved in the development of the RMM Interface:

(1) Operations Support Team (AJW-141);

(2) NAS subsystem program office;

(3) Remote Maintenance Systems Engineering Team (AJW-175); and

(4) User community representatives.

b. To facilitate the effective development of the RMM interface, the MAP RMM program manager will ensure that:

(1) The NAS subsystem program office provides the necessary documentation, such as interface control documents, to develop the RMM interface;

(2) The NAS subsystem program office provides the necessary funding to develop and test the RMM interface;

(3) The appropriate offices that will build the interface are identified;

(4) The appropriate interface is identified;

(5) The appropriate monitoring data points are identified;

(6) The appropriate Facility, Service and Equipment Profile (FSEP) information and entries are coordinated and implemented; and

(7) Schedules for the interface development and testing are established.

11. Installation and Implementation. The Technical Operations service area will be responsible for ensuring that the program office responsible for equipment or facility installation and implementation completes the installation, end-to-end testing, and implementation of RMM at individual sites. This is to include, but not limited to, ensuring that:

a. Site engineering plans and project scope agreements contain RMM installation.

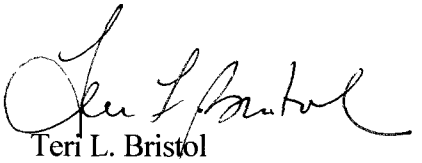
b. The funding and installation of the RMM communications circuits will be in accordance with FAA Order 1830.10, Managing New Telecommunications Requirements.

c. The appropriate NAS subsystem program office provides the funding for the RMM installation, end-to-end testing, and implementation at the facility location and at the site of the remote maintenance monitoring control system.

d. Any Joint Acceptance Inspection (JAI) exception regarding RMM that pertains to a remote monitoring subsystem (RMS) that is built-in to the equipment will be a minor exception. Any JAI exception regarding a stand-alone RMS, or an RMS that has its own FSEP entry such as the environmental remote monitoring subsystems (ERMS), will be a major exception.

12. Exceptions. In some cases, a site identified as receiving equipment with RMM capability may not provide as much benefit as with another location. For these sites, the Technical Operations service area, in concert with the appropriate operations control center (OCC), service operation center (SOC) and the MAP Team, will determine both the cost and operational benefits of implementing RMM at

individual locations. If it is determined that a location does not have a positive benefit with RMM, the Technical Operations service area will submit a request for an exception from implementing a specific RMM capability to the NAS Integration and Support Group (NISG) manager. The request will explain the lack of RMM benefit for that site and the plans to relocate the RMM assets (if possible) to a location where the benefits are more positive.



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Appendix A. Administrative Information

1. Distribution. Distribution is to the group level within Technical Operations Services, Terminal Services, and En Route and Oceanic Services in Washington headquarters; to the division level at the FAA Academy at the Mike Monroney Aeronautical Center; to the group level within the Technical Operations, Terminal, and En Route and Oceanic Service Areas; and to all Technical Operations field offices with a limited distribution.

2. Background. A remote maintenance monitoring system (RMMS) facilitates efficient management of NAS services in accordance with FAA Order 6000.30, National Airspace System Maintenance Policy. RMMS supports the NAS Infrastructure Management (NIM), enhances the integrity of the NAS, reduces maintenance and support costs, and minimizes the impact of equipment failures. The RMMS will improve personnel productivity by using centralized maintenance techniques.

3. Related Publications. The latest edition of:

a. FAA Order 6000.30, National Airspace System (NAS) Maintenance Policy, identifies the RMM requirements for Technical Operations Services.

b. FAA Order 6000.15, General Maintenance Handbook for National Airspace (NAS) Facilities, identifies policy and procedures for utilizing RMM for maintaining NAS facilities.

c. FAA Order 6000.5, Facility, Service, and Equipment Profile (FSEP), identifies the FSEP entry requirements.

d. The Remote Maintenance Monitoring Program Management Plan, V 1.0, August 2010