

OSFPLN-SSB-06

April 12, 2000

Supercedes CCB Charter

10 June 1996



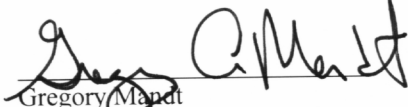
OPERATIONAL SUPPORT FACILITY

**WSR-88D CONFIGURATION CONTROL BOARD
CHARTER**

Next Generation Weather Radar
WSR-88D Configuration Control Board Charter
12 April 2000


Approved:

For the Department of Commerce


Gregory Mandt
National Weather Service
Director, Office of Services

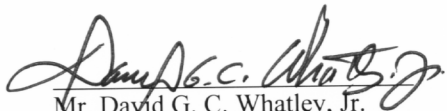
Date 4/12/00

For the Department of Defense


Col. Alan Shaffer
HQ Air Force Weather Agency
Director of Systems

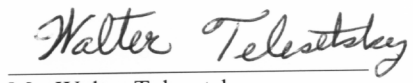
Date 12 April 00

For the Department of Transportation


Mr. David G. C. Whatley, Jr.
Headquarters Federal Aviation Administration
Program Director for Aviation Weather

Date 4/12/00

For the WSR-88D Program


Mr. Walter Telesetsky
National Weather Service
Director, Office of Operational Systems
Chairman, WSR-88D Program Management Committee

Date 4-12-00

WSR-88D
CONFIGURATION CONTROL BOARD
CHARTER

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4-12-00

Date

WSR-88D
 CONFIGURATION CONTROL BOARD CHARTER
 REVISION RECORD
 OSFPLN-SSB-06

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Table of Contents

SECTION	PAGE
1 Authority	1
2 Purpose	1
3 Scope	1
4 WSR-88D Change Control Structure and Authority	2
4.1	2
4.1.1 Change Authority Tier 1 - WSR-88D CCB	2
4.1.1.1 Level 1 Triagency CCB	2
4.1.1.2 Level 2 PMC	2
4.1.2 Change Authority Tier 2 - OSF TRC	2
4.1.3 Change Authority Tier 3 - Project Team	3
5 WSR-88D Change Authority Responsibilities	4
5.1 Change Authority Tier 1 -	4
5.1.1 WSR-88D Triagency CCB Membership	4
5.1.2 Meetings	4
5.2 Change Authority Tier 2 -OSF TRC Responsibilities	4
5.3 Change Authority Tier 3 - Project Team Responsibilities	5
6 WSR-88D Change Classifications	7
6.1 Class I Criteria	7
6.2 Class II Criteria	7
6.3 Limited Impact Changes	8
7. WSR-88D CM Focal Points	8
7.1 National Weather Service (NWS)	8
7.2 Department of Defense (DOD)	8
7.3 Federal Aviation Administration (FAA)	8

1 Authority

Weather Surveillance Radar, 1988, Doppler (WSR-88D) Program Management Committee (PMC) Terms of Reference, dated July 18, 1997 defines the PMC membership and establishes the WSR-88D Configuration Control Board (CCB). The WSR-88D Configuration Management (CM) Plan, OSFPLAN-SSB-03A, governs the WSR-88D CM process.

2 Purpose

Each WSR-88D participating agency has established their own internal CM process. However, by authority granted by the PMC, all Triagency CM activities are the responsibility of the WSR-88D Operational Support Facility (OSF). The WSR-88D OSF has responsibility for establishing and maintaining viable configuration control and change management processes, to include CCB operating procedures, consistent with requirements stated in the PMC Terms of Reference.

This charter defines the authority, roles, responsibilities, and delegations for a WSR-88D 3-tiered configuration control and change authority process. It establishes the responsibilities and structure for the WSR-88D CCB and delegates authority to the WSR-88D CCB for configuration changes. The primary objective of the WSR-88D CCB is to maintain a systematic change management process that (1) regulates life cycle costs, (2) optimizes design and development latitude with configuration change control procedures, (3) provides efficient application of configuration changes, (4) ensures complete, accurate, timely, and controlled configuration documentation, and (5) eliminates unnecessary changes. This revised charter authorizes the WSR-88D CCB to develop and implement a configuration management plan consistent with today's best commercial practices.

3 Scope

This charter establishes the structure and authority for the WSR-88D change control and identifies those activities responsible for review and approval of changes to the WSR-88D system. In addition, it identifies those classes and categories of changes that the various tiers of the change approval process will adjudicate. The responsibilities and authority for CCB supporting activities, e.g., the System Recommendation and Evaluation Committee (SREC) and Adaptable Parameter Working Groups (APWG) are beyond the scope of this charter. However, where applicable, this charter will reference the types of changes that the SREC and APWG will review and select.

This charter authorizes a 3-tiered approval authority to review, approve and implement WSR-88D system changes. Paragraph 4 defines the 3-tiered approval authority. The 3-tiered approval authority reviews and approves primarily Class I ECPs, i.e., those ECPs which change the form, fit, or function of components of the WSR-88D system. The WSR-88D Project Team has approval authority for Class II Hardware Changes, i.e., those changes which do not affect the form, fit, or function of WSR-88D system components. Section 6 provides a detailed definition of Class I and II changes.

The SREC reviews and selects Class II software changes for inclusion in a Class I ECP. The Triagency CCB and PMC are the approval authorities for Class I ECPs designated for a Software Release. The CCB only reviews or approves site specific adaptable parameters when requested by an agency.

4 WSR-88D Change Control Structure and Authority

This section describes the approval process for proposed changes to the WSR-88D System. Before any project can be approved for implementation, funding must be available.

4.1 Structure

The WSR-88D change process shall employ a 3-tiered configuration control and change authority structure as indicated below. Figure 1 illustrates the following 3-tiered concept.

Tier 1: The NEXRAD WSR-88D Configuration Control Board (WSR-88D CCB), consisting of two-approval levels:

Level 1: The Triagency CCB

Level 2: The PMC.

Tier 2: The Operational Support Facility Technical Review Committee (OSF TRC)

Tier 3: The WSR-88D Project Team

4.1.1 Change Authority Tier 1 - WSR-88D CCB

The NEXRAD WSR-88D CCB is the approval authority for configuration changes costing more than \$100,000. Its principal function is to provide Triagency oversight of the TRC and approval of major hardware and system level changes. To ensure the WSR-88D CCB remains responsive to the needs of the WSR-88D agencies, the PMC established a 2-level change approval authority.

4.1.1.1 Level 1 Triagency CCB

The Triagency CCB has approval and disapproval authority for configuration changes with an estimated cost between \$100,000 and \$1,000,000. The CCB shall refer with recommendation all changes exceeding \$1,000,000 to the PMC for approval.

4.1.1.2 Level 2 PMC

The CCB Change Authority Level 2 belongs to the PMC. The PMC is the approval authority for changes that exceed \$1,000,000.

4.1.2 Change Authority Tier 2 - OSF TRC

The OSF TRC's principal function is to conduct technical assessments of all hardware and system level Configuration Change Requests (CCRs) that the three agencies have approved. The TRC shall review, provide benefits and recommend disposition of all changes that exceed \$100,000 to the WSR-88D CCB. The TRC also provides management oversight to the Project Teams.

After CCRs have been approved by the agencies, the OSF TRC will select projects for activation from the Project Pool. The OSF TRC is the approval authority for those projects with estimated costs up to \$100,000. Projects selected for activation shall be based on budgetary limits imposed by the WSR-88D 8-Year Modification Plan or the OSF Sustaining Engineering Budget. Before any project is activated, the TRC shall notify the Agencies to ensure the applicable change request is still valid and that project activation is supportable from a fiscal standpoint.

4.1.3 Change Authority Tier 3 - Project Team

Tier 3 is the Project Team. The Project Team acts as a Change Development and Implementation Board. The Project Team will direct and carry out all changes approved by one or more change authority tiers. This team has the authority to make minor revisions. Each minor revision will not exceed \$2500. However, the Project Team Leader shall document and update any changes made to an approved project. The Project Team shall provide continuous project oversight throughout each phase of the change process. The Project Team leader shall advise the TRC of all changes made to approved projects. The TRC shall subsequently notify the agencies of changes made.

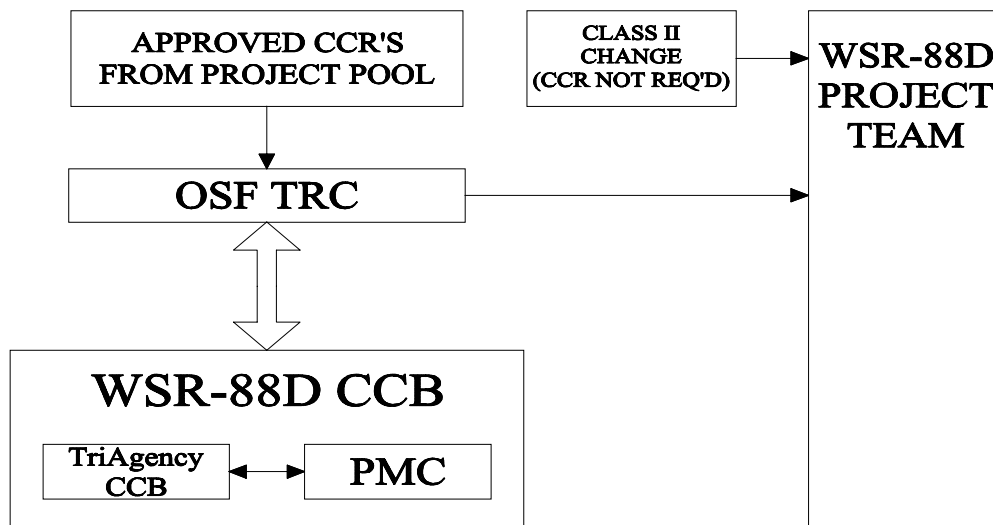


Figure 1. Change Authority Structure

5 WSR-88D Change Authority Responsibilities

5.1 Change Authority Tier 1 - WSR-88D CCB Responsibilities

The WSR-88D CCB is the principal change authority for the WSR-88D system. The WSR-88D CCB is the Current Document Change Authority (CDCA) for all WSR-88D Baseline Documentation. The CDCA is the organization that has the design authority over the contents of the document, reflecting proprietary or data rights to the information that the document contains. The CDCA may be a Government activity or a contractor, and the authority may be transferred. However, there is only one CDCA for a document at a time.

The CDCA has decision authority over the content of each baseline document. Documents not specifically under the WSR-88D CDCA authority must be changed via ECP approval from the applicable CDCA for that document, or the document must be submitted as an altered item for approval by the appropriate WSR-88D Change Authority Tier.

This CCB rules by consensus on all changes affecting the WSR-88D system which are greater than \$100,000. They will evaluate hardware and system changes to determine their effect on other systems, funding, scheduling and over all good business practices. The Triagency CCB, by authority delegated from the PMC, approves all engineering changes to the WSR-88D configuration baseline which are less than \$1,000,000. The Triagency will refer with recommendations all changes exceeding \$1,000,000 to the PMC. Figure 2 illustrates this decision flow process.

5.1.1 WSR-88D Triagency CCB Membership

The Triagency CCB membership consists of agency representatives or designated staff with the Director of the OSF serving as the Chair and the OSF Deputy Director as Vice-Chair. The Chief, OSF CM Section, or designee, serves as the CCB Secretary. The Secretary is responsible for developing the agenda, conducting the meeting and recording the minutes. The OSF Branch Chiefs and designated staff will attend the CCB and advise the Chairperson on technical and program issues related to proposed changes. Changes are approved by agency consensus through their respective agency focal points or designates.

5.1.2 Meetings

The Triagency CCB will meet monthly, or as required. Any CCB member may request a special convening of the CCB. This charter authorizes the CCB Chairperson to use electronic meetings, if appropriate.

5.2 Change Authority Tier 2 -OSF TRC Responsibilities

The TRC, with Triagency CCB oversight, approves Engineering Changes affecting WSR-88D baseline configuration up to \$100,000. The TRC selects projects from the approved CCR pool for activation to the WSR-88D Prioritization List, assigns ECP numbers, assigns Project Team members from each functional area, and advises the WSR-88D CCB of projects which have been activated. The TRC monitors the progress of Project Teams and refers with recommendations Engineering Changes to the WSR-88D CCB if higher level approval is necessary.

The OSF TRC shall consist of OSF Branch and Section Chiefs, or their alternates and will invite other staff and Project Engineers depending on the subject matter. The CM Section Chief, as TRC Chairperson, is responsible for developing the agenda, conducting the meeting, recording minutes and approving all Class II changes.

5.3 Change Authority Tier 3 - Project Team Responsibilities

Approved project leads will report to the TRC on the status of each active project. This includes approval of drawings and related engineering data. The Project Team is responsible for the development, reporting, management, installation and documentation of approved projects assigned by the TRC. This charter authorizes the team to approve and implement minor changes to the projects up to \$2500. The Project Leader will refer major changes to the appropriate level that approved the project. The Project Team will initiate and implement Class II changes through the Engineering Change Order (ECO) process. The Project Team operates by team consensus.

The Project Team composition will vary according to the project. The team will consist of personnel from the following functional areas:

- Systems Engineering
- Integrated Logistics Support
- Software Engineering
- Radar Engineering
- Documentation
- Radar Operations
- Electronic Maintenance
- Field Support
- Training
- CM (Drafting)
- CM (Baseline Management)

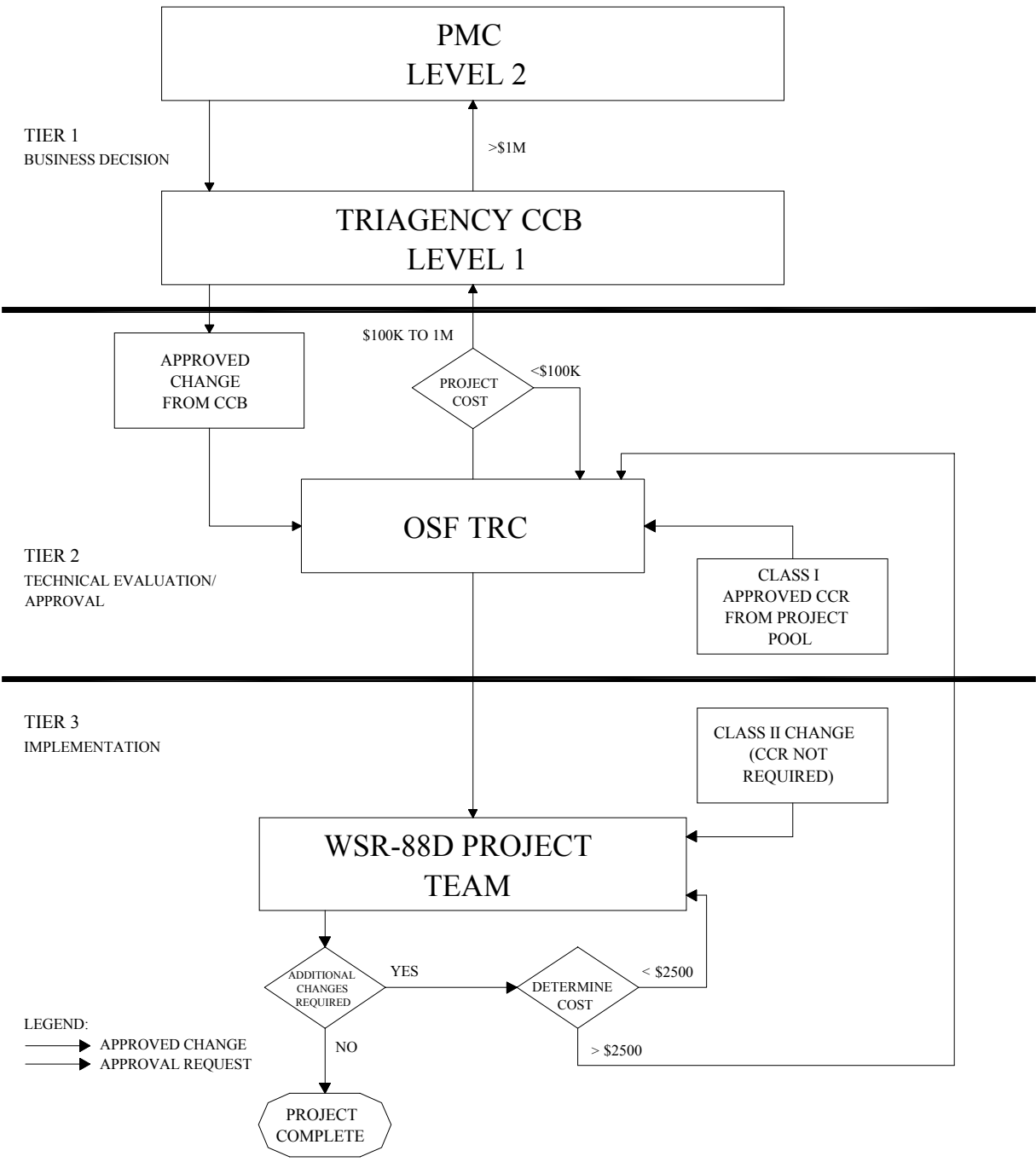


Figure 2. Change Process Flow

6 WSR-88D Change Classifications

Class I and Class II changes for the WSR-88D Program are defined based on the general guidelines from MIL-HDBK-61, Table 4-2. These definitions apply to hardware, software, RPIE, and facility changes, as summarized below:

6.1 Class I Criteria

A change is classified as Class I if it proposes a change to approved configuration documentation for which the WSR-88D CCB is the Configuration Control Authority or that has been included in the contract or statement of work by the tasking activity, and one or more of the following:

1. It affects any physical or functional requirement in approved functional or allocated configuration documentation
2. It affects any approved functional, allocated, or product configuration documentation, and cost, warranties or contract milestones
3. It affects approved product configuration documentation and one or more of the following:
 - (a) Government furnished equipment,
 - (b) safety,
 - (c) compatibility, interoperability, or logistic support,
 - (d) delivered technical manuals for which changes are not funded,
 - (e) retrofit of delivered units,
 - (f) preset adjustments or schedules affecting operating limits or performance to the extent that a new identification number is required,
 - (g) interchangeability, substitutability, or replaceability of any item down to non-replaceable subassemblies,
 - (h) sources on a source control drawing, and Skills, staffing, training, biomedical factors, or human engineering design.

6.2 Class II Criteria

A change is classified as Class II when it proposes a change to approved configuration documentation for which the Government is the CDCA or that has been in the contract or statement of work by the tasking activity and which is not Class I. Changes affecting documentation only, and not affecting form, fit, function, or logistics and/or other support elements will be classified as Class II changes.

Class II changes to Hardware will not require CCRs. They will be tracked by the routine ECO process in the WSR-88D Configuration Management Product Data Management System. The OSF System Support Branch Chief will make the final determination as to classification.

6.3 Limited Impact Changes

A Limited Impact Change does not impact system baseline and consist of either (1) a special request CCR that modifies a specific site configuration or (2) the change affects only the equipment controlled by the submitting agency that operates in accordance with a certified interface. This change requires no expenditure of Triagency resources other than OSF resources to analyze the requested changes, update relevant databases, and certify interfaces. The TRC will process requests of this type as any other change according to this charter and the CM Plan.

7. WSR-88D CM Focal Points

Each agency will have an office serving as the single focal point for WSR-88D-related change management activity. The agency Focal Point and the agency CCB member are not necessarily the same individuals.

7.1 National Weather Service (NWS)

The focal point for the NWS is the NWS Systems Change Manager, as dictated by the Weather Service Operations Manual (WSOM) Chapter A-21, NWS Configuration Management for Operational Systems. The Systems Change Manager is responsible for timely review and ensuring all requests for changes/modifications are properly boarded, approved, and complete documentation is forwarded to the OSF for action.

7.2 Department of Defense (DOD)

The focal point for Department of Defense (DoD) action is the Programs Division Collections Branch (HQ AFWA/XPS-C) or a designated representative. This office is responsible for timely review and ensuring all requests for changes/modifications are properly boarded, approved, and complete documentation is forwarded to the OSF for action.

7.3 Federal Aviation Administration (FAA)

The focal point for the Federal Aviation Administration (FAA) is the National Airway Systems Engineering Division, AOS-200. AOS-200 has designated the Weather Systems Engineering Branch, AOS-250, to assess the technical merit and readiness of the proposed changes (e.g., case files). This office is responsible for timely review and ensuring all requests for changes/modifications are properly boarded, approved, and complete documentation is forwarded to the OSF for action.