

CHARTER
NEXRAD Software Recommendation and Evaluation Committee (SREC)
In Support Of The
Weather Surveillance Radar – 1988 Doppler (WSR-88D)
July 2015

1. AUTHORITY, PURPOSES, AND RESPONSIBILITIES

- a. **Authority.** The Next Generation Weather Radar (NEXRAD) Program Committee (NPMC) charters the Software Recommendation and Evaluation Committee (SREC) as a triagency organization to review and recommend changes to the WSR-88D software baseline. This version of the charter updates and replaces the SREC charter approved by the NPMC in October 2007.
- b. **Purposes.** This charter:
 - (1) Establishes SREC voting and non-voting membership.
 - (2) Describes procedures for the SREC to recommend to the NPMC:
 - a) The priority order of presented software modifications based on approved Configuration Change Requests (CCRs),
 - b) Software build contents,
 - c) Software build schedules, and
 - d) Future data quality efforts.
 - (3) Establishes an SREC meeting schedule in synchronization with the WSR-88D planned software build cycle as described in paragraph 2(d).
- c. **SREC Responsibilities.**
 - (1) Evaluate and prioritize software modifications, based on approved CCRs, for integration into the WSR-88D baseline,
 - (2) Recommend the contents and schedule for WSR-88D software builds to the NPMC, and
 - (3) Facilitate enhanced communication, cooperation, flexibility, and discipline among the triagencies that a shorter software build cycle, paragraph 2(d), requires.

2. DEFINITIONS

- a. **Approved Configuration Change Request (CCR).** Depending on the impact and cost of a change to the WSR-88D system, a CCR must be approved by the WSR-88D Configuration Control Board (CCB) or the NPMC. The WSR-88D Configuration Management Plan establishes the impact and cost thresholds of changes.
- b. **NEXRAD Program Management Committee (NPMC).** The NPMC has a high-level configuration management responsibility for the NEXRAD program. The triagency membership and functions are described in the NPMC charter.

- c. **WSR-88D Radar Operations Center (ROC).** The triagency ROC provides centralized management, coordination, and control for comprehensive life-cycle support of the WSR-88D systems operated and maintained by the NEXRAD triagencies. This includes integration, testing, and deployment of software builds.
- d. **WSR-88D Planned Software Build Cycle.** The ROC has, as a goal, a regular 6-month cycle of releasing maintenance, algorithm, and targeted changes to the WSR-88D software baseline. The content and release date of software builds will be planned with and approved by the NEXRAD agencies in advance.
- e. **Emergency Software Release.** A release needed to correct problems in fielded software that negatively impacts customers, operators, or maintainers, and/or changes required to support system security.
- f. **WSR-88D Software Baseline.** The software used at operational field sites to operate the Radar Product Generator (RPG) and Radar Data Acquisition (RDA).
- g. **Technical Interchange Meeting (TIM).** A meeting of triagency technical staff called by the SREC members to address specific technical issues.
- h. **NEXRAD Technical Advisory Committee (TAC).** A triagency committee established by the NPMC to address technical needs and issues related to the operational use and evolution of the WSR-88D system.

3. MEMBERSHIP, SUPPORT STAFF, AND APPOINTMENT

- a. **Membership.** The SREC consists of 3 voting and up to 7 non-voting members as follows. Members, see list below, attend all SREC meetings including executive sessions. Current membership is listed in Appendix A.
 - (1) Chairperson and Vice Chairperson (non-voting).
 - (2) Executive Secretary (non-voting).
 - (3) Agency Members (voting). There is one voting member from each agency. If unable to attend the SREC, the agency member is responsible for assigning a designee.
 - (4) Integration Members (non-voting). ROC Applications, Engineering, Operations, and Program branch chiefs, or their designee(s).
- b. **Support Staff (non-voting).** Support staff may include, but are not limited to: ROC personnel, agency representatives, Warning Decision Training Division chief and representatives, National Severe Storm Laboratory personnel, Lincoln Laboratory personnel, and other invited guests. Support staff may attend executive sessions by invitation of an agency member, the chair, or executive secretary to provide presentations to the SREC.
- c. **Appointment of Members.**
 - (1) The Chairperson is the Director, Radar Operations Center.
 - (2) The Vice Chairperson is the Deputy Director, Radar Operations Center.
 - (3) The Executive Secretary is appointed in writing (email is acceptable) by the Director, Radar Operations Center.
 - (4) One member from each agency is appointed in writing (email is acceptable) by the

NPMC representative (or his/her designee) from each agency to the SREC Executive Secretary.

(5) The Integration Members are appointed in writing (email is acceptable) by the Director, Radar Operations Center.

d. **Substitute Appointments.** In the event an SREC member is unable to attend a specific meeting, he or she is responsible for assigning an appropriate designee.

4. RESPONSIBILITIES AND FUNCTIONS

a. **Chairperson.** The chairperson presides over the SREC meetings.

b. **Vice Chairperson.** The Vice Chairperson assumes the duties of the Chairperson in his or her absence and performs other duties as assigned by the Chairperson.

c. **Executive Secretary.** The Executive Secretary, working with the Chairperson and Vice Chairperson, is responsible for:

(1) Meeting management, scheduling, setting location and time, physical arrangements, and administrative duties in connection with meetings and records.

(2) Ensuring technical information supplied by presenters is available to SREC members.

(3) Oversees the distribution of approved CCRs, completed WSR-88D algorithm process checklists, and other relevant technical information.

(4) Tracking action items.

(5) Recording, writing, and distributing meeting minutes, including action items, within 30 days of the close of each SREC meeting.

d. **Agency Members.** Agency members are responsible for:

(1) Reviewing all WSR-88D algorithm process checklists (Appendix B) in advance of meetings.

(2) Developing a coordinated agency position on approved CCRs to aid in prioritizing the software changes related to those CCRs.

(3) Representing their agency in the SREC's development of a consensus prioritization of the CCRs, software build contents, and software build schedule.

(4) Attending SREC meetings and executive sessions.

(5) Voting to provide guidance to the NPMC. Each agency has one vote. The voting member casts the vote for the agency.

(6) Reviewing and commenting on meeting minutes.

e. **Integration Members.** The Integration members, representing the ROC branches, will make assessments of proposed software changes, including, but not limited to, readiness of the system to accept proposed software changes, the impact of the changes on system performance (e.g. sizing and timing), results of independent verification and validation tests,

supportability of the change in the field and at the WSR-88D Hotline, and suitability of adaptable parameter studies.

5. SREC MEETING STRUCTURE AND PROCEDURES

- a. **Meeting Schedule.** The SREC meetings will be synchronized with software builds. In general, an SREC meeting will be staggered with software deployments such that the present meeting will consider the next software deployment, typically held 6 months before the build is released. Additional CCRs intended for at least two subsequent software builds also will be considered and given preliminary priority ranking. The recommendation to the NPMC for the subsequent software builds will be for planning purposes and reassessed at later SREC meetings. The Executive Secretary will coordinate the meeting calendar with the Chairperson, Vice Chairperson, and Agency members and announce the dates, times, and location of the upcoming meeting and will publish the meeting agenda not less than 5 workdays prior to the meeting. Meetings may be in-person, via telecom, video teleconference, or a combination thereof.
- b. **Meeting Structure.** The SREC will consist of an opening executive session (optional as determined by the chair), a general session with invited presentations and directed discussions, and a closing executive session where the prioritization of software modifications and assignment to builds will be performed.
- c. **WSR-88D Algorithm Process Checklist.** Presenters to the SREC will submit a completed checklist (Appendix B) to the SREC Executive Secretary at least 5 workdays prior to the SREC meeting to ensure all information brought before the SREC will be in a uniform format for ease of review, understanding, and discussion and to ensure all elements of information are available to the voting members. Failure of agency advocates of a CCR to provide a completed checklist to the Executive Secretary 5 workdays prior to its scheduled presentation at the SREC meeting may be cause for the SREC to defer the CCR to a future meeting. Checklists are required for projected major software changes or baseline additions.
- d. **Software Build Content/Schedule.** The SREC will recommend to the NPMC the content and release date of WSR-88D software builds. The SREC may take into account the workload of the ROC integrators, the system capacity and capability to receive new software, and the ability of the ROC to support new software.
- e. **Emergency SREC Meetings.** Emergency software builds may be handled by a teleconference meeting of the SREC members. The SREC Chairperson or Vice Chairperson will inform the NPMC Chairperson that an SREC teleconference meeting is being called. The Agency (or ROC) requesting the emergency software build will complete and deliver to the SREC Executive Secretary a WSR-88D Algorithm Process Checklist (if required) as quickly as possible, but not less than 2 work days prior to the emergency meeting. The Executive Secretary will record the transactions of the emergency meeting and publish a summary including action items, if any, within 5 work days following the close of the meeting.
- f. **Technical Interchange Meeting (TIM).** The SREC may vote to convene a Technical Interchange Meeting of triagency technical staff to address specific technical issues. The SREC will use the information as part of their recommendations to the NPMC. The SREC Executive Secretary will be responsible for setting up, leading the TIM, and providing a written summary of the TIM to the SREC.

- g. **Algorithm and Product Readiness for Integration into the Baseline.** The SREC will recommend which algorithms and products the NEXRAD TAC should evaluate. The SREC will consider the TAC evaluations along with other “scientific readiness” inputs when recommending algorithms and products for inclusion in a particular software release. The TAC evaluations and other validation documentation will be included in the CCR kept at the ROC.

6. **RESOURCES AND FUNDING**


The ROC will provide administrative support. The agencies will be responsible for the salaries and travel expenses of the members they appoint.

7. **REVISION OF SREC CHARTER**

- a. The SREC charter may be modified upon petition to the NPMC. The NPMC charter requires documents to be submitted to the NPMC not less than 15 working days prior to meetings.
- b. The SREC charter will be reviewed and revalidated by the NPMC every two years.

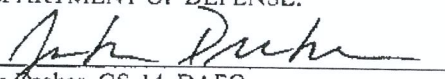
SIGNATORIES

FOR THE DEPARTMENT OF COMMERCE:

Approved 
Capt. Joseph Pica
Acting Director, NWS Office of Observations

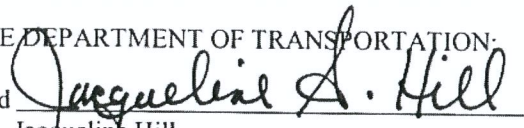
Date 04 Aug 15

FOR THE DEPARTMENT OF DEFENSE:

Approved 
John Dreher, GS-14, DAFC
Chief, Weather Programs Branch
Air Force Life Cycle Management Center

Date 15 Jul 15

FOR THE DEPARTMENT OF TRANSPORTATION:

Approved 
Jacqueline Hill
AJM-3, FAA Deputy Director for Enterprise Services

Date 7/28/2015

**APPENDIX A: SREC MEMBERSHIP
July 2015**

CHAIRPERSON:

Terrance J. Clark
Acting Director, Radar Operations Center

VICE CHAIRPERSON:

Terrance J. Clark
Deputy Director, Radar Operations Center

EXECUTIVE SECRETARY:

Steven D. Smith
Team Lead, ROC Software Engineering

DOC/NWS AGENCY VOTING MEMBER:

Jessica Schultz
NWS Radar Focal Point

DoD/AIR FORCE AGENCY VOTING MEMBER:

Ricky Keil
DoD Radar Focal Point

DOT/FAA AGENCY VOTING MEMBER:

Dennis Roofe
FAA Radar Focal Point

INTEGRATION MEMBERS:

Maj. David McDonald, Chief, ROC Applications Branch
Christina Horvat, Chief, ROC Engineering Branch
Michael W. Miller, Chief, ROC Operations Branch
Cheryl Stephenson, Chief, ROC Program Branch

APPENDIX B: WSR-88D Algorithm Process Template

Available online:

http://www.roc.noaa.gov/WSR88D/PublicDocs/ENG/WSR88D_Algorithm_Process_Template.pdf