Automated Surface Observing System (ASOS) Test Review Board (TRB) Charter

I. INTRODUCTION

This charter defines the authority, organization, roles, responsibilities, and operating rules and procedures of the Automated Surface Observing System (ASOS) Test Review Board (ATRB). The ATRB is formally established on June 17, 2008 by signature of the ASOS Program Management Committee (APMC) members. The ATRB will review all test deliverables for ASOS and decide whether prerequisites of a test have been met for any approved change to ASOS. Specifically, the ATRB serves the APMC through the ASOS Configuration Control Board (ACCB). The ATRB is a group of subject matter experts who ensure all test requirements of the ASOS component approved for test are satisfactorily met. The test process encompasses: Hardware Compliance Test; System Integration Test/Factory Acceptance Test; System Test; and, Operational Test and Evaluation. A Test Readiness Review (TRR) meeting is convened prior to commencement of each test phase. The ATRB will preside over each TRR meeting.

The ATRB is comprised of representatives from the Department of Commerce, Department of Transportation, and Department of Defense, and one representative from an agency with no programmatic ties to ASOS. A listing of ATRB members appears in Appendix A.

The primary objectives of the ATRB are to:

• Review all test deliverables required at the conclusion of each test phase. For test plans, the ATRB will validate the test scope to ensure reasonable objectives and test durations on test by test basis. The ATRB will also validate the acceptance criteria are reasonable and thorough for each validated test objective. For test reports the ATRB will review all test results, conclusions and recommendations to ensure the test objectives and acceptance criteria are met. Overall, the ATRB shall confirm

all deliverables for each test phase satisfactorily meet the technical functional requirements for any ASOS change which the ACCB approves for testing;

- Define specific tasks with due dates for completion by Working Groups when necessary;
- Make sound business decisions that are responsive to the priorities of the participating agencies and the APMC/ACCB and make efficient use of allocated resources;
- Reduce risk by identifying optimal test strategies for approved changes, tracking testing progress for each change through completion, and reporting intermediate and final results to the ACCB and, when required, to the APMC;
- Identify any major deficiencies in the deliverables for each test phase and recommend focal points responsible for tracking and reporting the satisfactory resolution of these deficiencies before recommending proceeding to the next test phase.

II. AUTHORITY

The decision authority of the ATRB is delegated by the ACCB. The ATRB performs functions as a working group to the ACCB; the APMC serves as the higher-level CCB. The ATRB passes any task which requires monetary and personnel resources to the ACCB/APMC with a decision recommendation requesting identification of the required resources and authorization to perform the task.

ASOS test recommendations shall be referred to the ACCB for decision if the ATRB cannot reach a consensus decision, or if an ATRB voting member requests referral to the APMC. The ATRB may also refer test recommendations with significant policy implications to the ACCB/APMC for decision.

III. ORGANIZATION

The ATRB consists of the members (and their alternates) listed in Appendix A. Members are expected to attend all ATRB meetings. Any change in the membership, including alternates, shall be made in writing to the ATRB Chair. The

list of ATRB participants will be maintained by the ATRB secretariat. The designation of a temporary alternate can be made prior to the next meeting via electronic mail or a memorandum to the Chair.

Advisors:

Members may invite advisors to help them with the evaluations and discussions made at ATRB meetings; however, members are responsible for representing the official positions of their Offices/Agencies.

IV. ROLES

The following participants have specific responsibilities beyond those identified above:

Chair The Chair presides over the ATRB, arranges the presentation of test deliverables and associated issues to the ATRB, and coordinates their resolution. The Chair may designate Working Group Chairs. The Chair determines what specific tasks, if any, are to be completed by a Working Group and assures that a milestone for completion of the task is assigned. The ATRB Chair alerts the ACCB Chair when there is a need for a meeting of the ACCB. The Chair provides a record of decisions/recommendations to ACCB and APMC participants through ACCB status reports.

<u>Members</u> ATRB members serve as their respective Office/Agency Representatives for technical and programmatic issues. The Office/Agency Representatives ensure appropriate coordination occurs within their Offices/Agencies to obtain input involving all test deliverable for each test phase.

<u>Secretariat</u> The Secretariat schedules meetings, coordinates distribution of items for decision, prepares meeting agendas and supporting data, assists the Chair in the conduct of meetings, prepares and distributes meeting minutes, and maintains the status tracking of change requests.

V. RESPONSIBILITIES

The NWS is responsible for managing the test design, documentation, conduct, and reporting of each Test Request for Change for ASOS throughout the program's life cycle. The ATRB is sponsored by the ACCB/APMC to support this role. As such, the NWS will Chair the ATRB.

The Federal Aviation Administration is responsible for the aviation safety and programmatic support of the ASOS regarding its support of Air Traffic Safety. As such, the FAA will designate a member to serve on the ATRB.

The Department of Defense, U.S. Air Force and the U.S. Navy also have mission requirements to support the ASOS programmatic requirements. As such, the DOD will designate a member from the U.S. AIR Force and another member from the U.S Navy to serve on the ATRB.

A representative independent of all three Government agencies supporting ASOS, will also serve as a member on the ATRB to ensure an impartial and unique vantage point to meet the ATRB objectives. This member will be a subject matter expert in the field of observing systems and sensors with full member "rights. The APMC will approve the nomination of this member based upon the person's academic and professional credentials.

The responsibilities of the ATRB include, but are not limited to the following:

- A. Identify all major test deliverables for each test phase of an approved ASOS change under test and recommend focal points responsible for tracking and reporting completion of the activities.
- B. Provide a determination of the readiness of each TRR deliverable for decision, and make a decision or provide the ACCB with a decision recommendation to support a decision at the ACCB level.
- C. Review all defined deliverables (e.g., test plans and reports) for a specific test phase associated with an ASOS change for their technical, scientific, and operational merits/deficiencies and determine whether the documentation addresses and supports the decision to commence the recommended test phase.
- D. Obtain additional technical information as necessary through coordination with the members' Offices/Agencies or task assignment to a Working Group.
- E. Recommend additional testing to resolve identified deficiencies in the deliverables as

well as track and report the progress of testing to the ACCB.

- F. Complete action items assigned by the ACCB Chair in a timely manner.
- G. Alert the ACCB Chair when there is a need for a meeting of ACCB.
- H. When resource limitations prevent additional work on identified deficiencies, identify the monetary and personnel resources limitations and notify the ACCB/APMC with a request for resolution.
- I. Perform special evaluations on technical issues at the request of the ACCB.

VI. OPERATING RULES AND PROCEDURES

The ATRB shall operate under the following rules and procedures:

- A. A TRR meeting will be scheduled with at least two weeks advanced notification to the ATRB members of the proposed start of the meeting. Emergency meetings may be announced with shorter lead times at the request of the ATRB Chair. Meetings will be setup using the Internet through a communication service provider (e.g. GOTOMEETING). This will allow attendees to participate remotely and in real-time.
- B. An agenda with all associated deliverable documentation for required for review will be provided to members at least 15 business days in advance of the scheduled meetings. For emergency meetings these documents will be delivered no less than 5 business days. Meeting minutes will be distributed to the 5 business days after a meeting to the ACCB.
- C. The Office/Agency Representatives will review test deliverables received electronically or by agenda distribution. Members will review each item for completeness, correctness, accuracy, and clarity of content (e.g., Test plan scope, methodology, evaluation criteria, and schedule). The ARTB will also judge the merit of test materials based on its technical, operational, and supportability information. Most decisions are

accomplished electronically. Each member will decide whether the information provided meets the pre-requisites established to move to the next test phase. Members will submit their recommendation within the time frame requested by the Secretariat. Members may request additional review time or items be deferred for discussion at a meeting, citing reasons for deferral.

- D. The ATRB members may decide certain aspects in making a decision are best addressed by a working group. The composition of the working group as well as its responsibilities and schedule will also be approved by the ATRB members. Any working group assignments made at the ATRB will identify a specific task for the working group, as well as a due date. Available information associated with a specific task will be provided by the ATRB Chair. Resulting decisions and their rationale will be recorded in appropriate ATRB meeting minutes and status accounting reports. The working group chair will be invited to attend ATRB meetings when working group tasks are addressed.
- E. The ATRB will operate on a "consensus-amongmembers" basis rather than a "majority vote" basis. If consensus cannot be reached via electronic review, the item will be deferred for a meeting. The Chair will lead a discussion with the members to form a "consensus" decision. If consensus cannot be reached through a meeting review, the dissenting member(s) opinion(s) will be reflected in the minutes for final adjudication, and the ATRB chair will alert the ACCB Chair of the need for ACCB consideration. The dissenting member(s) will have the right to review how their opinion is reflected in the minutes prior to distribution.
- If the ATRB has determined that sufficient details necessary to make a decision have been obtained, a consensus decision is made and the appropriate organizations are notified. If a consensus cannot be reached, the majority decision recommendation and dissenting viewpoint will be forwarded to the ACCB voting members for disposition.
- F. The ATRB recommends whether to proceed from one test phase to another through Operational Test and Evaluation for a change specified in a test Request for Change. All test recommendations will be forwarded to the ACCB. The ATRB should recommend ways to consolidate and organize test efforts to

expedite timely testing and minimize redundant testing.

- G. The ATRB reviews all formal test plans/reports. The project manager assigned to each change will present to the ATRB the case whether to proceed to the next test phase. The project manager will also brief the status of test Request for Change activities at ACCB meetings and will be recorded in ACCB meeting minutes.
- H. When resource limitations prevent immediate implementation of pending changes, the ATRB shall recommend priorities based on program requirements to the ACCB for concurrence.
- I. Draft minutes will be provided to the ATRB participants for review. Final minutes and status reports will be posted on the NOAA/NWS Office of Operational Systems Field Systems Operations Center, Test and Evaluation Branch (OPS24web site by the ATRB Secretariat. Regular status reports will be provided to the ACCB by the ATRB Chair.
- J. At the request of the ATRB, the ACCB will dedicate meeting time to discuss and evaluate special technical issues.

__ Date 06/17/08

APMC MEMBERS SIGNATURES and Date

John Van Kuren (Chair)

Approved

	Director, Fie Headquarters,	-	_			NWS
APMC MEMB	ERS SIGNATURES	and Date	(contd.)	-		
Approved _.	Kevin Schrab Chief, Observ Headquarters, Weather Servi	Office o		.on	06/17/08 er, and	
Approved John	Hahn			Date	06/17/08	8

Chief, Program and Plans Division Headquarters, Office of Science and Technology, NWS Date 06/17/08 Approved Frank A. Leute IV, DAFC Deputy Director, Strategic Plans and Programs Headquarters, Air Force Weather Agency, DOD Date 06/17/08 Approved Tim Kimbrell, P.E. SPAWARSYSCEN Charleston 5.3.7.L Project Manager, METOC Surface-based Atmospheric Sensors U.S. Navy, DOD Date 06/17/08 Approved Richard Simmons (Acting APMC) Manager, Alternate NAS Support Group, AJW-13 Headquarters, Federal Aviation Administration, DOT ____ Date 06/17/08 Approved Carmine Primeggia System Engineering Manager, ATO-T Headquarters, Federal Aviation Administration, Date 06/17/08 Approved ______ Joseph Facundo, Chair, ASOS Configuration Control Board Headquarters, Office of Operational Systems, NWS

Appendix A ATRB Members and Alternates

6/17/2008

PRIMARY

Chair

Jerald J. Dinges

National Weather Service Headquarters Chief, Test and Evaluation Branch W/OPS24

Ph: (301) 713-0326 x160 jerald.dinges@noaa.gov

ALTERNATE

Joseph V. Fiore

National Weather Service Headquarters Test and Evaluation Branch W/OPS24

Ph: (301) 713-0326x176 joseph.fiore@noaa.gov

DOC Member:

David Mannarano

National Weather Service Headquarters Observing Systems Branch W/OPS22

Ph: (301) 713-2093x103 david.mannarano@noaa.gov

Thomas Townsend

NWS Central Region Headquarters Integrated Services Division W/CR1

Ph: (816) 268-3149 tom.townsend@noaa.gov

Secretariat

Joseph V. Fiore

National Weather Service Headquarters Test and Evaluation Branch W/OPS24

Ph: (301) 713-0326x176 joseph.fiore@noaa.gov

Khien Nguyen

National Weather Service Headquarters Test and Evaluation Branch W/OPS24

Ph: (301) 713-0236x177 khien.nguyen@noaa.gov

PRIMARY ALTERNATE DOT Member: **Tuyen Kieu Bing Huang** FAA Headquarters FAA Headquarters ATO-W ATO-T ASOS P3I Lead Surveillance and Weather Support Group Ph: (202) 385-8579 Ph: (202) 267-9435 bing.huang@faa.gov tuyen.kieu@faa.gov **PRIMARY ALTERNATE DOD Member:** U.S. Air Force (YE-2) Mr. Robert J. Born (YE-3) Mr. Todd R. Allen HQ AFWA/A8PA(OS-21 Lead Command Mgr.) HQ AFWA/A8PA (OS-21 Lead Command Mgr.) Ph: (402) 294-3946 Ph: (402) 294-0866 todd.allen@offutt.af.mil bornr@offutt.af.mil U.S. Navy Gerald "Wayne" Knight **Ronald Heatherdale** Space and Naval Warfare Systems Space and Naval Warfare Systems Center, Charleston, SC (SPAWARSYSCEN) Center, Charleston, SC (SPAWARSYSCEN) Ph: (843) 218-4818 Ph: (843) 218-4322 gerald.knight@navy.mil ronald.heatherdale@navy.mil

PRIMARY

NCAR Member:

Roy Rasmussen

National Center for Atmospheric Research Program Director, Hydro-meteorological Applications Program

Ph: (303) 497-8430 rasmus@ucar.edu

ALTERNATE

Scott Landolt

National Center for Atmospheric Research Research Applications Laboratory

Associate Scientist Ph: (303) 497-2804 landolt@ucar.edu