

ASOS Test Review Board (ATRB) Meeting Minutes

Minutes: **ATRB Meeting**

Date: September 29, 2009

Attendees: Jerald Dinges - ATRB Chair, Joseph Fiore, Khien Nguyen, Harry Tran, Jae Lee (NWS/OPS24)
Dave Mannarano - ATRB Member, Rick Parry, Chet Schmitt (NWS/OPS22)
Hak Kim (NWS/OPS23)
Greg Dalyai (NWS/OPS12))
Bing Huang - ATRB Member (ATO-T), Jerry Kranz (FAA contractor)
Gerald "Wayne" Knight ATRB member (U.S. Navy SPAWARSYSCEN, Charleston, SC)
Ron Heatherdale Alternate (U.S. Navy SPAWARSYSCEN, Charleston, SC)
Roy Rasmussen ATRB Member (NCAR)
Scott Landlot ATRB alternate (NCAR)
Paula Kribell ATRB Member (USAF)
Tony Weiss (AOMC)
John Monte (W/OST11)

The tenth ASOS Test Review Board (ATRB) Meeting was held on September 29th at 10 AM EDT using "GOTOMEETING" web-based meeting software to display various documents and presentations that were discussed during the meeting. The audio part of the meeting was held by telephone conference. Representatives from all five groups comprising the ATRB were in attendance: The Department of Commerce (DOC) National Weather Service (NWS), the Department of Defense (DoD) U.S. Air Force and U.S. Navy, and the National Center for Atmospheric Research (NCAR) were present. The minutes, presentations, reports, and other important documents will be placed on the NWS/OPS24 website for access and review.

http://www.nws.noaa.gov/ops2/ops24/documents/atrb_docs.htm

The NWS National Weather Service Headquarters Office of Operational Systems (OOS), Field Systems Operations Center, Test and Evaluation Branch (OPS24) convened and moderated the meeting. Highlights of the meeting were:

The first part of the meeting consisted of roll call and a review of the previous meeting's minutes (May 7, 2009) and associated Action Items.

Action Items 1 and 5 from October 9th, Action Items 2 and 5 from the March 12, and Action Items 2, 4, 5, and 6 from the May 7th ATRB meetings were "CLOSED".

Action Items 2, 3, and 4 from October 9th, and Action Items 1 and 4 from the May 7th ATRB meeting remain "OPEN".

The minutes from the May 7th ATRB meeting were ratified and will be placed in the above stated URL link to the NWS/OPS24 website. The current status of the “OPEN” action items through May 7th were as follows:

Action Item 1(10/9/08): (CLOSED) John Monte (NWS/OST11) will perform a test of the bird abatement devices without the 4 short rod extensions at Sterling Field Support Center (SFSC), Sterling, VA before the ASOS CL31 Ceilometer Replacement OT&E and provide the test results to the ATRB.

STATUS: John Monte provided a bird abatement study final report to the ATRB. The report concludes that a bird abatement device (the one provided by Vaisala) is needed, but the extra metal rod perches are not needed, because the perches do not change the effectiveness of the bird abatement device. OZT&E sites will be instructed to remove the perches from their CL31's, and other sites (for deployment) will be instructed not to install the perches when they install the bird abatement device. **COMPLETE**

Action Item 2 (10/9/08) (OPEN): Assigned to John Monte (NWS/OST11). John will submit a Test RC for the AWPAG wind screen to the ASOS Configuration Control Board as a prerequisite for the operational testing of wind screens. UPDATE: There will be no OT&E conducted for the new AWPAG wind screen. There will be an ST to evaluate the Mod Note and installation of the new wind screen at SFSC and IAD. John Monte will update the RC to reflect this change and he will submit an RC for deployment if the ST is successful.

STATUS: Mod Note 93 needs to be validated by the Sterling WFO (LWX) at IAD after production wind screens are received by OST.

Action Item 3 (10/9/08) (OPEN): Assigned to John Monte (NWS/OST11). John Monte will order the production units for the altered wind screens from OTT for placement in NLSC.

STATUS: OST is waiting to receive the production wind screens.

Action Item 4 (10/9/08) (OPEN): Assigned to Greg Dalyai (NWS/OPS12). Greg will coordinate with Jerry Dinges (OPS24) on the delivery dates of the draft NWS Mod Notes required for the IFW Firmware V4.54 (Mod Note 85A) and the AWPAG alter wind screens (Mod Note 93). They will be needed for start of the System Tests.

STATUS: Mod Note 85A (IFW V4.54) was validated during V2.79X and IFW firmware version V4.54 OT&E. Mod Note 93 will be validated by the ET at LWX after the a production AWPAG wind screens are received.

Action Item 5 (10/9/08) (CLOSED): Assigned to David Mannarano (NWS/OPS22) will take the lead to ensure a policy decision is formally agreed on for threshold temperatures values for the AWPAG orifice heater turn-on and cut-off based on LogoSense V3.61 and the orifice heater controller firmware V2.1.

STATUS: The NWS policy decision was to set the low temperature threshold to 9 degrees Fahrenheit. This was included in Mod Note 93. **COMPLETE**

Action Item 2 (CLOSED) (3/12/09): Assigned to OPS24. Khien will include a baseline procedure in the V3.01 ST Test Plan. **COMPLETE**

Action Item 5 (CLOSED) (3/12/09): Assigned to USAF. Mac Lawrence will contact a USAF ASOS site in Florida to see if they would like to participate in V3.01 ST.

STATUS: Paula Kribell has replaced Mac Lawrence as the U.S. Air Force representative on the ATRB. Before Mac Lawrence moved on to his new job, he confirmed that Fort Rucker, AL will be the U.S. Air Force participant for V3.01/V3.05 OT&E.

Action Item 1 (OPEN) (5/7/09): W/OPS22 will coordinate with OS and the field on the priority for deploying the new APWAG wind shields, and determine how many shields to deploy initially.

STATUS: In progress. OPS22 is waiting for the production wind screens to arrive. This will determine (based on climate) the priority in which the ASOS sites get the new wind screen.

Action Item 2 (CLOSED) (5/7/09): Khien Nguyen (W/OPS24) will send Wayne Knight and Ron Heatherdale V2.79X via email, and then send a backup copy of V2.79X on CD by FedEx to the SPAWARSYSCEN in Charleston, S.C. **COMPLETE**

Action Item 3 (OPEN) (5/7/09): W/OPS12 will send 2 sets of line drivers (to boost the lines for daisy chained VDU's) to the U.S. Navy SPAWARSYSCEN, so they can run tests of this configuration to simulate daisy chained VDU's during the last part of ST.

STATUS: The line drivers were received by the Navy, but they have not had a chance to test them out yet.

Action Item 4 (CLOSED) (5/7/09): John Monte will find out from NWS Alaska Region Headquarters what were the strongest winds reported at Cold Bay and Bethel, AK after the new AWPAG wind screen was installed. **COMPLETE**

STATUS: The strongest winds reported at Cold Bay were 78 knots or MPH. The ATRB member (NCAR) who had asked that question was satisfied with the answer.

Action 5 (CLOSED) (5/7/09): Joseph Devost will confirm if a Test RC was generated for IFW V4.54 firmware. **COMPLETE**

Action 6 (CLOSED) (5/7/09): Greg Dalyai will confirm when the NLSC stocking is completed for the AXEL thin client to replace the ASOS OID/VDU and when the on-site spares are delivered to the WFOs supporting the installations **COMPLETE**

Next, the ATRB ratified the previous minutes (05/7/09) - The ratified minutes will be placed under "Meeting Minutes" on OPS24 Webpage:

http://www.nws.noaa.gov/ops2/ops24/documents/atrb_docs.htm

The following Microsoft PowerPoint presentations were given by the W/OPS24 and W/OPS23 staff on the status of ongoing FAT, ST, and OT&E activities related to ASOS:

A. Summary OT&E conclusions with draft "lessons learned" for CL31 ceilometer replacement with ACU V2.79X and DCP V2.0 EPROMS with and IFW V4.54

Joe Fiore presented a summary of CL31 V2.79X with DCP V2.0 EPROMS and IFW firmware V4.54 OT&E to the ATRB. The RC with the recommendation to proceed to deployment for the CL31 with V2.79X, DCP V2.0 EPROMS is currently out for review and vote by the members of the APMC. The votes by the APMC are due to OPS22 by October 22. Deployment of the CL31 ceilometer will not occur until the APMC vote is received by OPS22.

B. Status update on ST for ASOS ACU V3.01

Khien Nguyen presented a summary of V3.01 ST to date. SFSC needs approximately three more weeks to complete Hak Kim (OPS23) stated that for V3.01 and above the ACU software will not generate a \$ (data quality failure) in the SYSLOG if the IFW sensor returns a thermistor status "F" to the ACU. A meeting to discuss this topic will be arranged, hosted, and held by OPS23 (Peggy Hoch) in the near future. OPS23, OPS22, and OST will attend the meeting. This topic is not related to the ATRB functionality, so it will be tracked here for documentation purposes only.

Khien reported that TTR 218 is a critical TTR and must be fixed. A meeting to adjudicate and prioritize fixing other TTR's generated in V3.01 ST will be held (by OPS24, OPS23, and OPS22) in the near future. Chet Schmitt asked how SAIC validated the ice accretion amounts for the ice accretion algorithm from the frequency data sets. Chet will contact SAIC to ask this question.

C. Status and schedules on Factory Acceptance Test (FAT) for V3.05/V3.0X

Hak Kim (OPS23) gave a presentation on the status of V3.05 FAT. Hak reported that 4 of six RC's for V3.05 have been completed by PRISM, and that 2 more RC's needed to be completed. Hak and Jerry Dinges reported that perhaps there may be an interim load V3.0X that would include fixes for critical TTR's generated in V3.01 ST and some security RC's for V3.05. Another option (which has already been proposed) is to merge V3.01 and V3.05, and wait until the merged load is complete before running an ST and OT&E. A meeting to discuss this potential interim load or a completely merged load will be held by OPS22 in the near future.

D. Status update on ST for ASOS AWPAG LogoSense controller V3.61 and orifice heater controller V2.1

The ST was successfully completed at SFSC and NWSTC on September 18. The ST ran from August 17 to September 18.

E. Field Demo Test strategy for ASOS AWPAG LogoSense V3.61 and orifice heater V2.1.

The Field demo will be conducted at approximately two sites per NWS region after sites have been selected in the Eastern and Central region, and the orifice heater controller chips have been ordered and received by OST31. The Field demo will last for two weeks at the selected sites.

F. OT&E Results and TRG recommendation for the ASOS OID/VDU Logistics Replacement Using AXEL Thin Client

OT&E was successfully run and completed at ten OT&E sites. OT&E began on August 5th and ended on September 21. All the sites were very happy with the new thin client OID's and VDU's. On September 12, the TRG unanimously vote to recommend the ASOS OID/VDU Logistics Replacement Using AXEL Thin Client. Thin Client terminal at the OT&E site will remain in place for operational use. The logistics plan is to deplete the current stock of Old Wyse OID's and VDU's before using the thin client OID's and VDU's. All logistics questions on the OID's and VDU's should be directed to Eric Parr. Greg Dalyai gave kudos to Mickey Renegar for a job well done for his support during Thin Client OT&E. OPS 24 concurs with Greg's statement: thanks Mickey! Jerry Kranz said the FAA has new monitors, NIDS, which emulates the current ACE-IDS terminals. These NIDS monitors will be installed at FAA sites in approximately one year. Jerry also reported that all displays in FAA towers will be removed within 5 years.

After the presentations were complete, the ATRB voted on and unanimously approved the following decisions:

1. Recommendation for the field demo for AWPAG LogoSense Controller V3.61 and orifice heater controller V2.1.

ATRB members from NWS Headquarters and NCAR voted yes to the recommendation. The FAA, U.S. Air Force, and U.S. Navy abstained from the vote because they do not have AWPAG sensors on their ASOS's.

2. Recommendation to use of AXEL thin client for logistics replacement of the ASOS OID/VDU

All five members of the ATRB voted yes to the recommendation.

The chair of the ATRG will forward the ATRB recommendation to use of AXEL thin client for logistics replacement of the ASOS OID/VDU to the chair of the ACCB for approval.

The following new action items were assigned during the September 29th ATRB meeting:

Action Item 1 (9/29/09): Assigned to OPS23. OPS23 will arrange and host a meeting in the near future to discuss the V3.01 IFW issue in which the ACU software will not generate a \$ in the SYSLOG if there is a "F" returned from the IFW sensor for a thermistor failure. This is related to the IFW QC algorithm. OPS23, OPS22, OPS24, and OST will attend the meeting.

Action Item 2 (9/29/09): Assigned to OPS22. A meeting to adjudicate and prioritize fixing other TTR's generated in V3.01 ST will be held by OPS22 with OPS23 and OPS24 in the near future.

Action Item 3 (9/29/09): Assigned to OPS22. Chet Schmitt will ask SFSC (SAIC) how they validated the ice accretion amounts for the ice accretion algorithm from the frequency data sets run during V3.01 ST.

Jerry Dinges, Chair, ATRB will be retiring on October 2 from the Federal Government after 35.5 years of service. Jerry has been a big asset to the NWS, and the ASOS testing. Jerry has been an invaluable asset to the Test and Evaluation Branch and the field over the years, and we wish him all the best in his retirement.

Finally, Jerry introduced Jae Lee (currently OPS24 ST coordinator), and announced that she would be the ATRB chairman starting with the next ATRB meeting. The next ATRB meeting will be scheduled sometime in November 2009. Potential topics could include updates on the results of the V3.01 ST, the results of the AWPAG Logosense V3.61 and orifice heater V2.1 Field Demo, and perhaps plans for an interim V3.0X load, or a completely merged load of V3.01 and V3.05.

Please direct all questions/concerns to Joseph Fiore (Phone (301)-713-0326 x 119, email joseph.fiore@noaa.gov).