



**Automated Surface Observing System (ASOS)
Acquisition control Unit (ACU) v3.05 System Test
Review Group Meeting Minutes**

**Thursday
Mar 03, 2011**

Attendees

- OPS23: Peggy Hoch, Hak Kim
- OPS24: Bert Vilorio, Khien Nguyen, Joe Fiore, Aaron Poyer
- OPS22: Rick Parry, Jen Dover, Chet Schmitt
- OS7: Sergio Marsh
- ER: Mat Ferrell, Tim Rutkowski, Kevin Murray
- SR: Lew Harrington, Tom Townsend
- PR: John Bush, David Meek
- WR: Scott Birch
- CR: Tom Towsend
- AR: Jim Durr
- FAA: Bing Huang
- USAF: Capt. William Lane

1. Discussions:

On Thursday, March 03, 2011, the National Weather Service Test & Evaluation Branch (OPS24) hosted the Automated Surface observing System (ASOS) Acquisition control Unit (ACU) V3.05 System Test (ST) Review Group Meeting. The purpose of the meeting was to discuss the status of the ST and the Test Trouble Reports (TTRs).

- The progress to date at SFSC and WSH is summarized in the below table:

As of March 3, 2011	Regression tests	Functional Tests	Data Sets
Total Planned	99	97	8
Completed	85	67	6
Complete Percentage	86%	69%	75%
Failed Procedures	4	0	1

- NWSTC has installed the test software on their systems.

- To date, NAVYSYSCEN has not installed the ASOS v3.05 software on their system. OPS24 is continuing to work with NAVYSYSCEN for the software installation and to confirm its operation.

- The FAA Test Group (FAA AJW-14A, Oklahoma City) has installed the test software on ASOS system and successfully tested the WSP interface.

- The FAA test Group at the FAA Technical Center, Atlantic, NJ, will conduct the ADAS/ALDARS test with SFSC next week.

- Two new TTRs were discussed and adjudicated by the TRG as follow:

TTR273: Ice Accretion Algorithm yields improper results (too much Accretion) – The Software Branch (OPS23) is investigating to determine if the problem exists. The TRG agreed to assign **Impact 1 and Priority 1** to this problem if it is confirmed by OPS23 - **OPEN**

TTR272: AOMC version of the Site Phys Page is not being updated to reflect the uploaded state of the Ice Remarks. – Hak Kim said the problem is in the software at the AOMC and he will address this after TTR273 is resolved. The TRG assigned **Impact 1 and Priority 1** to this problem - **OPEN**

- Three old TTRs were discussed and adjudicated by the TRG as follow:

TTR264: ACU SOLA UPS causing continuous TEST mode on OID – The TRG noted that this could be due to a RS232 Comms problem – The TRG recommended the Comms problem be investigated – Assigned to Jen Dover (OPS22).

Update: Jen Dover has replaced with a new RS232 interface board for the SOLA UPS and a new SIO card for the ACU to trouble shoot the Comms problem; however the problem still persists. She also ordered the inverter board for replacement

Discussion: Khien Nguyen asked the attending regional focal points about the behavior of the SOLA UPS systems in the field and whether any site with such equipment would volunteer to help out with testing. Jim Durr (AR) said that there are around 4 sites in Alaska using ASOS ACU V2.79Y which have such equipment. He will check with the technicians if there are problems at these sites and will also find out whether the V3.05 can be installed at a low-risk site for a short time to help investigating the problem.

Update 03/08/11: The inverter board was replaced today and all SOLA UPS Maintenance statuses passed – This TTR will be recommended to be closed at the next TRG meeting.

TTR265: Unexpected result for present weather code – When the observer entered “SQ+SN – FZRA” the result was coded as “+FZRASN SQ”. Rick Parry(OPS22) believes this result is correctly implemented in accordance to FMH-1 instructions. If there is no objection by other TRG members then this TTR will be closed and the Test Procedure will be updated to reflect the change (from –FZRASN SQ” to “+FZRASN SQ”) - Rick Parry recommended additional time for review.

Update: Sergio Marsh (OS7) will get together with Rick Parry (OPS22) to come up with a final determination. - **OPEN**.

TTR267: ST0 at SFSC has been reporting multiple CL31 sensor response timeouts on all DCP. There were also bad weather and radio transmission errors at the times.

Update: The TRG recommended trouble shooting the radio Comms problem first and continue monitoring the sensor response timeouts. However, SFSC currently does not have a technician to perform this task. Bob Retzaff said the RF link is operating at 2400 baud rate which is possibly a bottle neck for the data streams from the various sensors. Kevin Murray asked what if the problem get worst with more sensors configured. Chet said he will bring up this issue at the next ACM meeting –

Update: Currently SFSC does not have hardware support to investigate this issue - **OPEN**

- Tom Townsend (CR) asked why the Freezing Rain sensor now has a different baseline frequency. Peggy Hoch (OPS23) said this is a new change (Adaptive Baseline Frequency) and is described in the Draft software Release Notes for V3.05. Khien said there is a Factory Acceptance Test procedure dealing with this new change and he will send it out to Tom and Bob Retzlaff (NWSTC) for information.

2. New Action Items

a. The Software Branch (OPS23) will investigate whether the potential problem described in TTR273 exists and inform the TRG of their finding – **OPEN**

b. Jim Durr (AR) will check with the technicians if there are problems at the Alaska sites using ASOS ACU V2.79Y and ACU SOLA UPS and whether any such site can be used to verify the performance of V3.05 for a short time to help investigating the SOLA UPS problem at the ACU – **OPEN**

c. Sergio Marsh (OS7) will get together with Rick Parry (OPS22) to come up with a final determination for TTR265 - **OPEN**.

d. Khien will send a Factory Acceptance Test procedure dealing with Freezing Rain Sensor Adaptive Baseline Frequency to Tom Townsend and Bob Retzlaff for information - **OPEN**