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

Thursday April 28, 2011

Attendees

OPS23: Hak Kim
OPS24: Bert Viloria, Khien Nguyen, Joe Fiore
OPS22: Jen Dover, Rich Parry, Chet Schmitt
OPS32: Chris Stark
OS7: Sergio Marsh
PR: John Bush, David Meek, Steve Butler
WR: Son Nguyen
ER: Matt Ferrell, Tim Rutkowski, Kevin Murray
FAA: Bing Huang

---

1. Discussions:

On Thursday, April 28, 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 April 28, 2011	Regression tests	Functional Tests	Data Sets
Total Planned	98	97	8
Completed	98	97	8
Complete Percentage	100%	100%	100%
Failed Procedures	4	3	1

- The first round of the ST is completed. A revised software load V3.05 dated TBD will be available for testing on or about 05/10/2011.

- To date, NAVYSYSCEN has not installed the ASOS v3.05 software on their system.

- Two new TTRs were found:

TTR281 - In the course of verifying the Daily Summary Report (REVUE-RPT-DSM) against the daily summaries, it was discovered that the PEAK WIND SPEED and FASTEST 2MIN SPEED are either missing or corrupted somehow. Examination of the fields where they are supposed to be located shows 10 digits instead of 3 digits and the contents seem completely unrelated to the prevailing speeds. This problem is not found on V2.79Y. **This TTR will be fixed in the revised software load**.

TTR282 - The Handar Ceilometer data is still used in ASOS after REPORT PROCESSING has been turned off. Capt Lane WILLIAM A. LANE, Capt, USAF HQ AFWA/A5C Chief, Sensors Test and Fielding Team believes that any USAF Handar ceilometers have already been

DRAFT

upgraded, or will be soon. The plan is to not continue to use them in the future. **This TTR will not be fixed in the revised software load**.

- Old TTRs:

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 Retzlaff 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 to the ACM meeting.

Update: The SFSC technician will take a look at the comms hardware and provide status to the TRG – **OPEN**

TTR274: Incorrect computation of Averaged Wind Speed on the Daily Summary – The TRG agreed that this erroneous result needs to be investigated by the Software Branch (OPS23) and if found to be a problem, it is recommended to be fixed in the build prior to ST retest and before OT&E – **This TTR will be fixed in the revised software load**.

TTR276 - ECP S00788 Remove Additive Data from Specials transmitted during Hourly Edit Time - The additive data is still present in the SPECIs being transmitted during the hourly edit time - Impact 6, Priority 6. **This TTR will be fixed in the revised software load**.

TTR277 - S00847 Computing Minutes of sunshine at Latitudes Greater than 60 Degrees - A software check was supposed to have been implemented so that ASOS will not compute minutes of sunshine for sites at latitudes greater than 60 degrees. Tests performed on the SP1 ASOS test system show that the minutes of sunshine are not computed regardless of latitudes.

Update: The minutes of sunshine are properly computed in the "NORML" PAGE. This TTR is **CLOSED**.

TTR278 – At SFSC, when a "hard" reset of the DCP#3 was applied at the OID, the sensors data were missing on DCP#3 and will not come back until either "hard" reset of the ACU or a deconfiguration/reconfiguration of the sensors from the DCP - Impact 6, Priority 6.

Update: This problem might be related to the Comms or hardware problems on DCP#3. SFSC will investigate - **OPEN**

2. <u>Old Action Items</u>

1. OPS22 and OPS24 will need to investigate and discuss TTRs 274, 275, and 276 and provide directions to OPS23 for software revision. Afterwards, OPS22 will send their recommendations to OPS23 for software revision in the updated build - **CLOSED**

2. SFSC to investigate problems related to TTR#278 - **OPEN**

DRAFT