

**“CL31 Replacement with ASOS ACU V2.79V and DCP V2.0 EPROM” OT&E Test
Review Group Status Meeting**

May 21, 2009

ATTENDEES:

NWS:

OT&E Site Electronics System Analyst (ESA)/ Electronic Technician (ET):

WFO Caribou, ME
WFO Burlington, VT
WFO Gaylord, MI
WFO Phoenix, AZ
WFO Midland, TX
WFO Amarillo, TX
WFO Bismarck, ND
WFO Honolulu, HI

NWS Regional Headquarters:

Don Bolton, ARH
Jim Jones, ARH (ABSENT)
John Bush PRH
Lew Harrington, SRH RMS
Dan Lester, CRH RMS
Duane Wilkenson CRH ASOS Focal Point
Bob Brashears CRH former ASOS Focal Point
Matt Ferrell, ERH RMS (ABSENT)
Kevin Murray, ERH (ABSENT)
Tim Rutkowski, ERH (ABSENT)
Son Nguyen, WRH

National Weather Service Headquarters:

John Monte – W/OST11
Joel Williams – W/OST11 (ABSENT)
Greg Dalyai – W/OPS12 (ABSENT)
Joseph Devost – W/OPS12
David Mannarano – W/OPS22
Richard Parry - W/OPS22 (ABSENT)
Chet Schmitt – W/OPS22
Peggy Hoch – W/OPS23 (ABSENT)
Hak Kim – W/OPS23
Kevin Conaty – AOMC (ABSENT)
Beth McNulty – W/OS23
Laura Cook – W/OS7
Jennifer Dover – W/OPS22 (ABSENT)
Brian Rice – SAIC SFSC

Barbara Childs – SAIC SFSC (ABSENT)
Khien Nguyen – W/OPS24
Harry Tran – W/OPS24 (ABSENT)
Joseph Fiore – W/OPS24 (OT&E Test Director, Moderator)
Jerald Dinges – W/OPS24 (Moderator) (ABSENT)

National Weather Service Training Center

Bob Retzlaff - Kansas City, MO (ABSENT)

NWS Employees Organization (NWSEO) Representative:

Chris Kornkven –WFO Milwaukee, WI (ABSENT)

FAA:

Bing Huang, ATO- T (ABSENT)
Jerry Kranz, (contractor) (ABSENT)

DoD - U.S. Navy:

Gerald “Wayne” Knight - Space and Naval Warfare System Center (SPAWARSSYSCEN), Charleston, SC (ABSENT)

Ronald Heatherdale – Space and Naval Warfare System Center (SPAWARSSYSCEN), Charleston, SC (ABSENT)

DoD - U.S. Air Force:

William (Mac) Lawrence

The eleventh CL31 ceilometer replacement Operational Test and Evaluation (OT&E) Test Review Group (TRG) status meeting was held by audio conference call on Thursday, May 21, 2009. Joe Fiore, moderator, convened the meeting with a “roll call” (See above list of attendees).

After roll call, Joe asked the TRG if there were any changes to the minutes from the May 14 TRG meeting. There were no changes to the minutes. The minutes from the May 14th TRG meeting were ratified, and will be posted on the W/OPS24 website:

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

Joe Fiore provided an update on the status of the “Switch to the CL31 as the Operational Ceilometer” at the 16 dual installation OT&E sites, using the spreadsheet that he sent out to the group with the TRG minutes. A total of twelve sites completed the switch successfully to date. Joe reported Fairbanks, AK (FAI) is having trouble switching the CL31 to the operational ceilometer, and FAI personnel are working on the problem. FAI is having communications problems between the ACU and DCP. John Monte presented a status of the ongoing SYSLOG analysis at the CL31 OT&E sites. This problem, which was observed at Hilo, HI (ITO), and is now seen at Fairbanks, AK (FAI) (confirmed after the TRG meeting) will be documented as a Test Trouble Report (TTR) by OPS24: “SIO

card failures will not allow CL31 to become the Operational Ceilometer” without a warm start of the ACU and hard reset of the DCP. Next, Joe reviewed the “OPEN” Action Items from the May 14 TRG meeting related to the CL31 OT&E project. In addition, OPS24 summarized the ongoing System Tests (ST) for ASOS ACU test firmware for V2.79X and V3.01 at Sterling Field Support Center, Sterling, VA (SFSC) and at the US Navy SPAWARSYSCEN, Charleston, SC. Lastly, OPS24 provided an update on the status of the test readiness for the OID/VDU Thin Client Logistics Replacement OT&E.

The noteworthy discussions and statements from the May 21st CL31 OT&E TRG meeting included:

- 1) Joe Fiore presented a summary on the status of the “Switch to the CL31 as the Operational Ceilometer” at the 16 dual installation OT&E sites using the Microsoft Excel spreadsheet he created. Joe reported 12 OT&E sites have either switched the CL31 to the operational ceilometer as of 1 PM EDT on May 21. Joe explained the content of the spreadsheet to the group. He noted once again, that an important part of switching the CL31 to the operational ceilometer was to have the ET’s (especially at the sites with temporary mounts) check the tilt angle of the CL31 on the maintenance page to make sure that it was still within the 2-5 degree tilt angle tolerance. Burlington, VT (BTV), Guadalupe Pass, TX (GDP), Sault Saint Marie, MI (ANJ), Bismarck, ND (BIS), Cheyenne, WY (CYS), and Aberdeen, SD (ABR) reported they checked the tilt angle of their ceilometers. In addition, Caribou, ME (CAR), Jackson, KY (JKL), Dodge City, KS (DDC), Hilo, HI (ITO), and Beaufort, SC (KNBC) previously reported they checked the tilt angle of the CL31 ceilometers. BIS reported the ASOS maintenance page reported a tilt of 4.5 degrees, but a separate reference device (a type of level) recorded a tilt angle of 1.5 degrees. John Monte (W/OST11) explained a level could not be used to check the tilt angle of the CL31. John suggested BIS use a washer to shim the CL31 to make sure it is within the 3-5 degree tilt range. The following twelve sites have switched the CL31 to the operational ceilometer:

KNBC- Beaufort, SC (U.S. Navy) – CL31 switched to operational ceilometer on 5/8/09 at 12 PM EDT

KITO – Hilo, HI – PNS sent out on 5/11/09, CL31 switched to the operational ceilometer at 10 AM HST on 5/13/09

KGEG- Spokane, WA – CL31 switched to operational ceilometer at 2100 UTC on 5/13/09.

KJKL – Jackson, KY – sent out the PNS on 5/8/09, CL31 switched to operational ceilometer at 10 AM EDT on 5/14/09

KGDP – Guadalupe Pass, TX – sent out the PNS on 5/14/09, CL31 switched to operational ceilometer at 9 AM CDT on 5/14/09

KCAR – Caribou, ME – PNS sent out on 5/8/09, CL31 will be switched to the operational ceilometer at 1300 UTC on 5/15/09

KBTV- Burlington, VT – CL31 switched to operational ceilometer on 5/18/09 at 12 PM EDT, PNS issued on 5/15/09.

KANJ – Sault Ste. Marie, MI –CL31 switched to the operational ceilometer at 7 AM CDT on 5/13/09, PNS issued on 5/15/09,

KBIS- Bismarck, ND – CL31 switched to operational ceilometer at 8 AM CDT on 5/18/09.

KCYS – Cheyenne, WY – CL31 switched to operational ceilometer at 11 AM MDT on 5/14/09

KHIO – Portland, OR – CL31 switched to operational ceilometer at 1430 UTC on 5/21/09, PNS issued on 5/18/09.

KABR – Aberdeen, SD – CL31 switched to the operational ceilometer at 11:40 CDT on 5/21/09.

The following site will switch the CL31 to the operational ceilometer next week:

KDDC – Dodge City, KS – CL31 will be switch to the operational ceilometer on 5/26/09; the PNS was issued on 5/21/09.

Joe asked Son Nguyen (NWS Western Region Focal Point) if he had heard about the status of the two California sites:

KOKR – Oxnard, CA

KCMA, Camarillo, CA

Son reported he sent an e-mail to Gary Strickland (ESA KOXR) asking when KOXR and KCMA would be switched to the operational ceilometer. Son reported he did not receive a reply yet. Joe Fiore also reported he sent an e-mail to Gary Strickland and did not yet received a reply. Son agreed to contact Gary Strickland again to ask when the switch would occur at the California sites.

UPDATE: *Son Nguyen sent an e-mail to Joe Fiore on 5/21/09 after the TRG meeting. In the e-mail, Son asked Jerry Dinges to contact Gary Strickland to let Gary know what date next week would be a good date to switch the CL31 to the operational ceilometer at KOXR and KCMA. Joe replied (and cc'd Jerry Dinges and Gary Strickland) that KCMA and KOXR could switch CL31 to*

operational on any day they choose next week, as long as the PNS statement goes out before the switch is made.

Joe then reported Fairbanks, AK (FAI) was having trouble switching the CL31 to the operational ceilometer. Joe stated there were serious ACU/DCP communications problems at FAI. Joe also stated both he and the FAI ET were unsuccessful in switching the CL31 to the operational ceilometer. Joe stated after he switched the CL31 to the operational ceilometer, only the 1st 30-second value (there should be two 30-second values each minute) was being recorded in the CL31 12-hour archive. After 30 minutes, the CL31 data remained missing on the OID one-minute screen. Joe also stated there were ACU/DCP communication problems occurring during that time. Joe then switched the CT-12K ceilometer back to the operational ceilometer, and made the CL31 the test ceilometer. The CL31 data in the test 12-hour archive continued to only report the 1st 30-second cloud report. Joe then reported the FAI ET (Robbie Parker) and the ESA (Randy Davis) were at the FAI ASOS site working on the problem during the TRG meeting. They were installing new radios in the ACU and DCP. After installation of the radios was complete, FAI planned to turn off the power to the CL31 for a short period of time, then turn the power to the CL31 back on, and try to switch the CL31 ceilometer to the operational ceilometer. Joe said he would get an update on the status of the work at FAI later in the day. **UPDATE:** *Randy Davis (ESA) reported (by e-mail after the TRG meeting) FAI could not switch the CL31 to the operational ceilometer, because the SIO cards locked up when the switch was made to make the CL31 to the operational ceilometer. Randy also reported they switched the CT-12K back to the operational ceilometer (and made the CL31 to the test ceilometer), and the ASOS was back to normal operations.*

While FAI was investigating the problems at their site, there was a separate, but related issue that Joe talked about concerning locking up of SIO cards at Hilo, HI (ITO), and Guadalupe Pass, TX (GDP). Joe asked John Monte if he thought this problem should be documented as a TTR. John stated he believed it should be documented as a TTR. Walt Jameson (ET, PHX) stated he saw similar problems with the SIO cards locking up in previous ASOS software loads. As a result of the updated status from FAI, which indicates that they also had SIO card lock-ups, a TTR will be written by W/OPS24 to track this problem. Joe asked Steve Butler (ET, ITO) if he could help FAI with their SIO lock-up problem, since ITO had similar problems when they tried to switch the CL31 to the operational ceilometer. Steve Butler agreed to help FAI with this problem if needed.

Joe also noted a problem at Burlington, VT (BTV) where the SYSLOG reported a 1534 CLG Suspect Module (Primary) Warning “W” for the CL31. John Monte said this SYSLOG message was most likely caused by an ACU/DCP communication glitch, and it was not a problem with the CL31.

John Monte reported on the status of the SYSLOG analysis at the OT&E sites being performed by the staff at the SFSC, Sterling, VA. John referred to the latest spreadsheet (5/19/09) that summarizes SYSLOG error messages seen to date at the OT&E sites. Overall, most sites continue to exhibit no SYSLOG issues since installing V2.79V. John noted there were some issues at Sault Ste. Marie, MI (ANJ), Spokane, WA (GEG), Guymon, OK (GUY), and Hilo, HI (ITO). John said ANJ reported an “HO-83 temperature sensor response timeout” problem which might have been caused by a continued ASOS “clock drift” at ANJ; and, subsequent “clock corrections,” which take up CPU time. Hak Kim (W/OP23) stated he believes the “sensor response timing” issues have got worse as new sensors have been added to ASOS, especially since V2.79S (with dual ceilometers configured). Hak stated he did not believe the ASOS software contractor could fix these timing issues, especially as more sensors are added to ASOS. Hak said the ASOS software contractor had already changed the sensor polling timing sequence to try to fix sensor response time outs in V2.79S. Hak believes the age of the ASOS system makes it more difficult to fix these timing issues, especially as more sensors are added to ASOS.

Spokane (GEG) experienced unexplained “sensor response timeouts” from May 13-18, but have not had any occurrences of the CL31 sensor response timeouts since that time. Guymon (GUY) continues to report CT-12K sensor response timeouts, but GUY is an SCA site, and SCA sites have frequently experienced this problem. Hopefully, when GUY replaces the CT-12K sensor with the CL31 (phase II) the ceilometer sensor response issue will go away. John also reported occasional “background radiance” warnings from the CL31 at Hilo, HI. John stated that Vaisala had contacted him and said that this is not a serious issue.

Next, Joe reviewed the OPEN Action Items from the May 14 TRG meeting. A status of the most important Action Items follows. Joe first reported on (Action Item 3) the status of the shipment of CL31 ceilometers, hardware mounting kits, ancillary hardware kits, V2.0 DCP EPROMS, and V2.79V firmware for Phase II of OT&E to Roanoke, VA (ROA), Phoenix, AZ (PHX), Oklahoma City, OK (OKC), and Columbus, OH (CMH). Joe reported all four sites received their CL31 ceilometers. CMH still needs one more hardware mounting kit, and two ancillary kits. PHX still needs one hardware mounting kit. The ET’s noted when they tried to order these hardware mounting kits from NLSC using the part number for the hardware kit, they could not because the kits were “temporarily on hold” at NLSC. Since that time, the hardware kits have been taken off “on hold” status. However, in the interest of time, John Monte agreed to ship the required hardware mounting kit and ancillary kit to CMH, and to ship the required hardware mounting kit directly to the other sites from WSH. Joe Devost agreed to put V2.79V firmware on the secure OPS12 website next week, so the four sites in phase II could download and install the firmware on their ASOS once the okay to start OT&E phase II is given by the W/OPS24 and the TRG.

Joe reported on the plans for local disposal or shipment of the old CT-12K ceilometers back to NRC once the new CL31 ceilometers are deployed. There was a lot of discussion on this topic, especially about who would be paying for the disposal or shipment of the old CT-12K sensors. Dave Mannarano reported W/OPS22 would talk in detail about plans for disposal of the old CT-12K ceilometers during Deployment Readiness Review Meetings which will be piggy backed onto the CL31 TRG meeting beginning in late June when OT&E is nearing completion. Bob Brashears (CRH) suggested Dave Mannarano get in touch with Edward Berkowitz (ROC) for information about how to dispose of the CT-12K sensors locally. Ed Berkowitz has used an outside contractor for the removal of old equipment in the past that was in compliance with all NOAA disposal requirements. Dave Mannarano agreed to contact with Ed Berkowitz on this issue.

Joe reported on the status of moving the CL31 ceilometers used for the “ice crystal” test from the test bed in Fairbanks, AK, to a test bed in Barrow, AK. Don Bolton (ARH) reported he spoke with the WFO FAI personnel, and the OIC in Barrow, with the agreement the WFO FAI will move the two CL31 ceilometers to Barrow. This needs to be completed before the long winter sets in at Barrow.

- 2) Khien Nguyen, OPS24, updated the TRG on the V2.79X and V3.01 ST at SFSC and the US. Navy SPAWARSYSCEN, Charleston, SC. Khien provided a summary of the new TTR 213 ‘\$ Causes a Hidden “N” Within the Test Maintenance Page.’ Khien Nguyen (W/OPS24) provided detailed information on this TTR and supporting file (in PDF format) through an e-mail sent by Joe Fiore to the entire TRG distribution list before the TRG meeting on May 21. There was extensive discussion on this topic during the TRG meeting. In summary, this problem has existed in ASOS since the firmware version that contained the DTS-1 dew point sensor. Walt Jameson confirmed this problem has been seen previously. The root of the problem is an “N” (instead of a “D”) is now generated on the lowest level of the maintenance page when there is an SIO card error. This “N” does not propagate up through the higher-level maintenance pages to indicate that a failure has occurred (an “F” on those pages.) Instead, a “P” for pass is displayed on all pages above the lowest level maintenance page. There is no way for an ET to know what has caused this “\$” unless they “dig” down to the lowest level maintenance page to clear the “N”. Since this problem has existed in previous ASOS software loads, the TRG agreed it will become an Operational Trouble Report (OTR), and perhaps should be fixed in V3.01. Walt Jameson (with help from WRH (Son Nguyen) will use the information that he has gathered on this problem to generate an OTR and send it to Gary Alessi (W/OPS22) for inclusion in the ASOS OTR database. Once an OTR is written for this, the TTR will be closed with reference to the OTR.

- 3) Finally, Joe provided [after speaking with Greg Dalyai (W/OPS12)] an update on the status of the test readiness for the OID/VDU Thin Client Logistics Replacement OT&E. The vendor for the thin client replacement of the ASOS OID and VDU is now the same, AXEL. Joe reported 50 OID thin clients were received at NLSC with the incorrect configuration file. The configuration file on these OID's was the configuration file for the VDU (which has no keyboard). Greg Dalyai and NLSC have decided to send back the 50 OID's to the vendor and get the correct configuration file installed on them; and, then the vendor will ship the 50 OID's with the correct configuration file back to NLSC. In the future, the vendor (and NLSC) will need to ensure the right configuration file is on the right thin client for the OID and VDU. OT&E will not start until the 50 OID's with the correct configuration file are received at NLSC. 72 VDU Thin Clients with the correct configuration file for a VDU were received at NLSC. Another prerequisite for OT&E is the delivery of the thin client spares (one spare for each WFO participating in OT&E) to each WFO participating in OT&E. Greg Dalyai also informed Joe the line driver test (power boost) of the "daisy chained" VDU's at the US Navy SPAWARSYSCEN in Charleston, SC went well. Khien Nguyen will contact the U.S. Navy to confirm this test is complete.

The following is the accounting for each action items from the previous TRG meetings:

- a. Action Items 3, 6, 7 (11/17/08), and 12 (03/19/09) remain OPEN (No change until Phase II OT&E). **NO CHANGE**
- b. Action Item 8 (03/09/09), 11 (3/12/09), 17 (3/19/09), and 35 (4/16/09) remain OPEN. (No change until OT&E is completed). **NO CHANGE**
- c. Action Items 45 (5/7/09), 49 (5/14/09), 50 (5/14/09), 53 (5/14/09), and 57 (5/14/09) were **CLOSED**.
- d. Action Items 41 (4/30/09), 42 (4/30/09), 43 (5/7/09), 52 (5/14/09), 54 (5/14/09), 55 (5/14/09), and 61 (5/21/09) remain **OPEN**.

The specifics for each action item follow:

Related to CL31 OT&E:

Action Item 3 (11/17/09) - OPEN: Assigned to W/OPS12 and W/OPS24 regarding when Phase II OT&E sites will get their additional CL31. E-mail will be sent to ROA, CMH, OKC, and PHX to inform them when to except the second ceilometers. ROA, CMH, OKC, and PHX will receive their second CL31 ceilometer after the decision is made to make the CL31 the operational ceilometer. W/OPS12 will make sure that all four-phase II OT&E sites have all the required hardware and software to begin OT&E. This includes:

Required hardware mounting kits for each site:

- Required ancillary kits for each site,
- Required number of sets of V2.0 DCP EPROMS, and,
- Putting V2.79V ACU firmware on the secure OPS12 website so each site can download

STATUS: PHX, ROA, and OKC have received their phase II CL31 ceilometers. CMH still needs two CL31's, and they were shipped to CMH from SFSC on May 14, 2009. CMH also needs 2 sets of V2.0 DCP EPROMS, 1 more hardware mounting kit, and two ancillary kits. John Monte agreed to ship the required hardware mounting kit and ancillary kit to CMH, and to ship the required hardware mounting kit directly to these sites from WSH. Joe Devost will Fedex the CV2.0 DCP EPROMS to CMH. Joe Fiore agreed to provide Joe Devost with the correct address for CMH.

Action Item 6 (11/17/09) – OPEN: Assigned to ESA's to inventory all items they receive from NLSC and WSH. The ESA's will inventory all items received (CL31 ceilometer) CL31 hardware kits, V2.0 DCP EPROMS, V2.79V software (and documents obtained from the OPS12 website), and let the OT&E Test Director (Joe Fiore) know by e-mail (or phone) if the inventory list is complete.

STATUS: This action will remain OPEN until all 22 OT&E sites have the CL31 ceilometer installed along with the ASOS ACU V2.79V firmware and DCP V2.0 EPROMS.

Action Item 7 (11/17/09) - OPEN: Assigned to ESA's. The ESA's (NOTE: exception is Dan Lester for NWS Central Region) will notify the OT&E Test Director (Joe Fiore) by e-mail when they are ready to install the CL31 ceilometer, V2.0 DCP EPROMS (for sites that use EPROMS), and ASOS V2.79V ACU Software. They will also notify the OT&E test director when installation of all required material is complete.

STATUS: This action will remain OPEN until all 21 OT&E sites have the CL31 ceilometer installed along with the ASOS ACU V2.79V firmware and DCP V2.0 EPROMS.

Action Item 8 (03/09/09) - OPEN: WSH will download the SYSLOG error messages (1015, 1515, and 1537) from all 22 OT&E sites daily and will analyze the data to determine how many random sensor time out SYSLOG error messages are generated with a \$. SAIC contract personnel at Sterling Field Support Center, Sterling VA will perform the work. Jennifer Dover (W/OPS22) will report the statistics to the OT&E TRG at the weekly meetings during the OT&E. In preparation for this activity OPS24 personnel will analyze the same SYSLOG error messages for each 15 OT&E site (22 minus the 7 Meteorological Comparison Evaluation Beta sites) for 30 days PRIOR to the OT&E. This analysis will "baseline" the number of random sensor time out errors occurrences before V2.79 V is installed.

STATUS: This action will remain open until the completion of the OT&E.

Action Item 11 (03/12/09) – OPEN: Assigned to W/OPS24. Joe Fiore will provide the TRG a status update at each status meeting on the CL31 ceilometer and ASOS ACU V2.79V and DCP V2.0 EPROM installation until all 22 sites have completed this activity.

STATUS: This action will remain OPEN until all 21 OT&E sites have completed their installations.

Action Item 12 (03/19/09) – OPEN: Assigned to W/OST11. John Monte will query EMRS to obtain the serial numbers for the CL31 installed at the 22 OT&E sites. He will e-mail the appropriate contact if the information is not found in EMRS.

STATUS: This activity is ongoing, and will be complete once all 22 OT&E sites have provided the CL31 Serial number in EMRS or by email to John Monte.

Action Item 17 (03/19/09) – OPEN: Assigned to W/OPS12 and W/OPS14. Joe Devost and Fred Hauschildt will provide the disposal plan for the CT12K.

STATUS: Dave Mannarano reported that W/OPS22 would talk in detail about plans for disposal of the old CT-12K ceilometers during Deployment Readiness Review Meetings which will be piggy backed onto the CL31 TRG meeting beginning in late June when OT&E is nearing completion. The main question still revolves around who will pay for local disposal of the CT12K sensors and who will pay for the return of the old CT12K to NLSC. Another question that arose still pending is whether the entire CT12K unit will be returned or just components of the ceilometer? These scenarios will occur when the CL31 replaces the CT12K during national deployment of the CL31 ceilometer if V2.79V CL31 OT&E is successful.

Action Item 35 (4/16/09) - OPEN: Assigned to OPS12 and OPS24. Greg Dalyai and Jerry Dinges will track “Lessons Learned” to ensure the problems encountered and solutions found are published, as appropriate (i.e., test report, final Mod notes, Tech tips, etc.) to minimize repeated problems occurring during the installations of CL31 for general deployment.

STATUS: This action will remain OPEN until the OT&E Report is generated.

Action Item 41 (4/30/09) OPEN– The NWS (W/OPS22) agreed to ask the FAA how (and if the TIN was sufficient) the correct way to the CWO would be notified of the switch to the CL31 as the operational ceilometer, and if the CWO would need a method to report significant difference in cloud heights for the new CL31 ceilometer. A modification was made to this action item for Rick Parry to ask the FAA (Jerry Kranz, Paul Armbruster, Bing Huang) to inform the CWO that on the maintenance report processing page the new CL31 ceilometer will say “CL31”, while the current CT12K ceilometer will say “ceilometer” on the report processing page. The action is to find out if the CWO has any problems with this slight change.

STATUS: Rick Parry, Jerry Kranz, Bing Huang, and Jerry Dinges discussed this topic in detail. Jerry Kranz reported he had asked Paul Armbruster about the change to the report-processing page when the CL31 is configured, and Paul reported there was no issue with

that from the air traffic controllers, but that he would ask the head of the CWO if they had any issues with the change.

Action Item 43 (5/7/09) OPEN: Assigned to W/OPS12. Joe Devost and Greg Dalyai will coordinate with the field plans to discuss options for a possible national policy on the issue of the new solar winds program download problems on ET's laptops, and possible issues with local WFO access rights with the laptops and the LAN.

STATUS: OPS12 will continue to investigate options for downloading the solar winds programs to the ET's laptop with WSH, the NWS regions, and the individual WFO's.

Action Item 49 (5/14/09) CLOSED: Assigned to OPS24. Joe Fiore will write "Watch Item" TTRs for the two new problems discussed during the meetings' SYSLOG status report:

- 1) ASOS Clock Drift Problem synchronization with the AOMC seen at ANJ and CYS; and, 2) the random warm start problem seen at PHX. **COMPLETED**

Action Item 50 (5/14/09) CLOSED: Assigned to OPS24. Joe Fiore will maintain a spreadsheet documenting the status of the Phase I OT&E sites' switch to the CL31 and provide it as an attachment to the weekly TRG minutes. **COMPLETED**

Action Item 52 (05/14/09) OPEN: Assigned to U.S. Navy SPAWARSYSCEN, Charleston, SC. Ron Heatherdale will ensure the proper U.S. Navy liaison with NCDC is notified to contact NCDC about the switch to the CL31 May 8 for the ASOS at Beaufort, SC.

Action Item 53 (5/14/09) CLOSED: Assigned to OPS24 and the WFO's participating in OT&E. Joe Fiore will pass the link to the ASOS CL31 Implementation Plan provided by OPS22 (section 5-D) containing forms A-1 and A-3 to the WFO's participating in OT&E. The OPL or DAPM from each site participating in OT&E will then make sure that the necessary forms (A-1 and A-3) and send them to NCDC. The link to the forms and address for NCDC was provided earlier in this document. **COMPLETED**

Action Item 55 (5/14/09) OPEN: Assigned to the NWS Alaska Region Headquarters and OST11. The NWS Alaska Region Headquarters will coordinate (with OST 11 help) moving the CL31 ceilometers from the test bed in Fairbanks, AK, to a test bed in Barrow, AK. This will allow further testing of the CL31 ice crystal study, because, climatologically. Barrow has 10 times more occurrences of ice crystals than any other site in the U.S.

STATUS: Don Bolton and Joe Fiore reported the WFO FAI will move the two CL31 ceilometers from Fairbanks to Barrow. This needs to be completed before the long winter sets in at Barrow.

Action Item 57 (05/14/09) CLOSED: Assigned to OPS12. Greg Dalyai will confirm the NWS will NOT include as a requirement in the NWS ASOS Technical Manual S-100 to tilt the CL31's and point them at buildings for calibration. **COMPLETED**

STATUS: Joe Devost confirmed that the NWS would NOT include as a requirement in the NWS ASOS Technical Manual S-100 to tilt the CL31's and point them at buildings for calibration.

The following new CL31 Action Items were assigned during the May 21, 2009 TRG meeting:

Action Item 58 (5/21/09): Assigned to W/OPS24. Joe Fiore will pass Walt Jameson's email (and PDF attachment) about the section of the Vaisala CL31 User's Manual which talks about tilting the CL31 and pointing at a building for calibration to Joe Devost.

Action Item 59 (5/21/09): A TTR will be written by W/OPS24 to track the problem of SIO cards locking up.

Action Item 60 (5/21/09): Assigned to W/OPS22. Dave Mannarano agreed to get in touch with Ed Berkowitz (ROC) on the issue of the disposal of old CT-12K ceilometers after OT&E and at deployment. Ed Berkowitz has used an outside contractor for the removal of old equipment in the past that was in compliance with all NOAA disposal requirements.

Related to V2.79X/V3.01 ST:

Action Item 54 (5/14/09) OPEN: Assigned to OPS24. Khien Nguyen will write the V3.01 System Test (ST) Plan, and coordinate ST at SFSC, WSH, US. NAVY SPAWARSYSCEN, and possibly a USAF site in Hurlbert Field, FL. This includes organizing resources to perform the ST test, assuring that data sets to test the IFW QC logic algorithm and other V3.01 changes are run and that the ST schedule is written in the test plan and provided to each site participating in ST.

The following new V2.79X/V3.01 ST Action Items were assigned during the May 21, 2009 TRG meeting:

Action Item 62 (5/21/09) OPEN: Assigned to Walt Jameson and Son Nguyen. Walt, with help from WR HQ (Son Nguyen) will use the information that he has gathered on this problem to generate an OTR and send it to Gary Alessi (W/OPS22) for inclusion in the ASOS OTR database.

Related to OT&E for OID/VDU Thin Client Logistics Replacement:

Action Item 45 (5/7/09) CLOSED: Assigned to W/OPS24. Joe Fiore will send an e-mail to the NWS Regional Focal Points asking if the ESA and ET's listed in the thin client OT&E test plan remain the same. OPS24 will then send out an email to the ESA's/ET's, NWS site focal points, and NWS regional focal points with a copy of the original thin client test plan, and a copy of the ATRB presentation. **COMPLETED**

The following new OID/VDU Thin Client Logistics Replacement Action Items were assigned during the May 21, 2009 TRG meeting:

Action Item 63 (5/21/09): Assigned to W/OPS24. Khien Nguyen will contact the US Navy SPAWARSYSCEN in Charleston, SC to make sure that the line driver test (power boost) of the "daisy chained" VDU's has been completed.

Action Item 64 (5/21/09) OPEN: Assigned to W/OPS12. OPS12 will track the status of the reprogramming of the configuration files for the 50 OID thin clients between the Thin Client vendor and NLSC. This will remain open until the pre-requisites for OT&E are complete.

The next OT&E TRG meeting will be scheduled for **Thursday, May 28, at 2 pm EDT** to provide a status report on OT&E activities. There will only be an audio conference call. Please use the following information to dial into the meeting:

Telephone: 1-866-685-1879

Password: 8259362#