

“CL31 Replacement with ASOS ACU V2.79X, DCP V2.0 EPROM, and IFW Sensor Firmware V4.54” “Wrap up” OT&E Test Review Group Meeting

August 20, 2009

ATTENDEES:

NWS:

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

WFO Blacksburg, VA
WFO Wilmington, OH
WFO Gaylord, MI
WFO Jackson, KY
WFO Norman, OK
WFO Cheyenne, WY
WFO Phoenix, AZ
WFO Spokane, WA
WFO Hilo, HI

NWS Regional Headquarters:

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

National Weather Service Headquarters:

John Monte – W/OST11
Joel Williams W/OST/11
Joyce Dickerson – W/OST11 (ABSENT)
Greg Dalyai – W/OPS12
Joseph Devost – W/OPS12
Mickey Renegar – W/OPS12 (ABSENT)
David Mannarano – W/OPS22 (ABSENT)
Richard Parry - W/OPS22
Chet Schmitt – W/OPS22
Peggy Hoch – W/OPS23 (ABSENT)
Hak Kim – W/OPS23

Kevin Conaty – AOMC
Tony Weiss -AOMC
Beth McNulty – W/OS23
Laura Cook – W/OS7
Fred Hauschildt – W/OPS14 (ABSENT)
Jennifer Dover – W/OPS22
Brian Rice – SAIC SFSC (ABSENT)
Barbara Childs – SAIC SFSC
Khien Nguyen – W/OPS24 (ABSENT)
Harry Tran – W/OPS24
Joseph Fiore – W/OPS24 (OT&E Test Director)
Jerald Dinges – W/OPS24 (Moderator)

National Weather Service Training Center

Bob Retzlaff - Kansas City, MO (ABSENT)

National Reconditioning Center (NRC)

Mark Russo – Kansas City, MO

NWS Employees Organization (NWSEO) Representative:

Chris Kornkven –WFO Milwaukee, WI

FAA:

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

DOD - U.S. Navy:

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

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

DOD - U.S. Air Force:

William (Mac) Lawrence
Ricky Keil (ABSENT)

The twenty-fourth and final CL31 ceilometer replacement Operational Test and Evaluation (OT&E) “Wrap Up” Test Review Group (TRG) status meeting was held by audio conference call on Thursday, August 20, 2009. Jerry Dinges, moderator, convened the meeting with a “roll call” (See above list of attendees).

After roll call, Jerry asked the TRG if there were any changes to the minutes from the August 13th TRG meeting. There were no changes to the minutes. The minutes from the August 13th TRG meeting were ratified, and will be posted on the W/OPS24 website:

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

Jerry stated upfront because there was a lot to discuss, he would follow a strict agenda designed to keep the meeting moving forward. Jerry stated the purpose of the “wrap up” meeting was to have the OT&E test director provide a summary (in PowerPoint Presentation) of CL31 Ceilometer Replacement OT&E and the IFW V4.54 firmware upgrade both in conjunction with V2.79X ACU software and V2.0 EPROMS. Jerry stated the AOMC (Kevin Conaty) would also speak about the AOMC ASOS trouble ticket analysis of pre-OT&E versus during OT&E. Jerry also stated each region would be allowed to express their concerns on issues seen during OT&E, and how this might affect their decision to proceed to national deployment of the CL31 sensor.

Jerry said the two important decisions to come from the “wrap up” OT&E TRG meeting would be: 1) the TRG votes whether to proceed to national deployment of the CL31 sensor in conjunction with the ASOS ACU V2.79X and DCP V2.0 EPROMS; and 2) the TRG votes whether to field V2.79X ACU software in conjunction with IFW V4.54 firmware upgrade (i.e., a separate but related OT&E which has been ongoing at the 21 OT&E sites since mid-June 2009).

First Joe Fiore (OT&E test director) gave a PowerPoint presentation on the summary and status of CL31 OT&E (which was distributed to the entire TRG prior to the meeting). Joe reviewed the OT&E purpose, summary, test objectives, and Test Trouble Reports (TTR’s) written during the OT&E. An important part of this presentation was an explanation of graphs (prepared and provided by Jennifer Dover of W/OPS22 SFSC) comparing SYSLOG errors at OT&E sites before OT&E versus SYSLOG errors from the OT&E sites during OT&E (after the CL31 became the stand-alone operational ceilometer).

Joe stated the overall trend for the SYSLOG errors tracked prior to OT&E and during OT&E was either down or remained the same. Two sites which had large increases in SYSLOG messages during OT&E, GDP and GEG, had known issues, which were extensively analyzed by W/OPS23, WOST11, W/OPS12, W/OPS22, NRC, and W/OPS24 during OT&E. The problems with the SIO card errors at GDP have been fixed. Problems at GEG continue to be analyzed. A “band pass” filter was recently sent to the FAA Technician at Spokane, WA (FedEx tracked as delivered to Spokane at 10:09 AM on 8/20/09) so he could install this filter on the FAA SAWS system at GEG. It is believed the SAWS might be interfering with radio communications on the ASOS at GEG. Once the filter is installed, GEG, W/OPS23, and W/OST11 and others will see if the filter reduces the SIO transmission card errors that have been seen at GEG. Jerry Kranz (FAA) will contact the FAA technician at Spokane to see if they have received the “band pass” filter.

During the presentation Kevin Conaty (AOMC) reported on the independent analysis of AOMC trouble tickets that was performed by AOMC. This spreadsheet and graph was sent to the TRG just prior to this meeting. Kevin stated there was no significant difference (increase in the number of ASOS trouble tickets) before OT&E and during

OT&E. Kevin also stated there would be no increase in the workload for the AOMC or the ASOS ET's if the CL31 is deployed nationally. Kevin finally stated the CL31 ceilometer should proceed to national deployment.

During the discussion on the graphs comparing the SIO card errors prior to OT&E with those during OT&E, Greg Dalyai (W/OPS12) stated OPS12 had performed an independent analysis (and did a SYSLOG sort) on the DCP and SIO card transmission errors prior to OT&E to those seen during OT&E. W/OPS12 found no increase in trend between the SIO card errors before OT&E compared to those seen during OT&E. Greg stated W/OPS12 believes the CL31 should proceed to national deployment.

The other topic of concern was the bird activity and "false cloud" reports seen at OKC. The following paragraphs (*in italics*) are taken from the August 13th TRG meeting minutes, and summarize these issues at OKC:

The next topic was on the bird intrusion into the bottom of the CL31. John asked the TRG if they would like to see plumbers putty added to the opening in the bottom of the CL31 to prevent birds or other insects from getting into the CL31 rather than using wire mesh to keep the bird out of the bottom of the CL31. The TRG said that this was a good idea, and could be an option for ET's when they install the CL31. A note about this will be added into Mod Note 92. Bing Huang (FAA) said that there were no reported issues of bird intrusion into the bottom of ceilometers on their AWOS's. Jerry Kranz (FAA) said that some of the AWOS sites that have CL31's reported that rodents bit through the cables running up the outside of the CL31. Jerry Kranz will send John Monte a picture of these cables to see if the cables for the CL31's on the ASOS are similar to those on the AWOS. John Monte asked Jerry Kranz to find out approximately how many AWOS sites experienced this problem.

Then the issue of birds causing "false clouds" at OKC was discussed. The consensus among TRG members was that this issue of bird creating "false clouds" would not stop the deployment of the CL31. However, WSH and OKC will continue to investigate this bird issue and "false clouds" with OKC (OST11, OPS22, and OPS12). A history of some of the proposed activities (from the August 13 TRG meeting minutes) follows: OKC reported that there not been any false reports since (except a brief period of "false hits" from the CL31 at OKC on August 7th). John Monte agreed to look at the raw CL31 data from the primary and back up CL31 at OKC from August 6-8, 2009 to perform further analysis on this "false cloud" issue from bird either jumping back and forth over the CL31 window or looking into the CL31 window. Dan Lester (NWS CR) and Kevin Murray (NWS ER) suggested that a motion sensitive camera be sent to OKC for them to mount near their CL31 to see if they could get visual evidence of the bird activity on the CL31. Jeff Engel (ESA OKC) agreed that this was a good idea. Dan Lester sent a motion sensitive camera to OKC for them to install on their ASOS near the CL31 to see if they could get visual confirmation of bird activity around the CL31. Ron Heatherdale (Navy) said that the Navy has had some luck using the "whirly-bird" bird deterrent device to help scare birds away from the ASOS and CL31's. Ron sent OKC (Jeff Engel) a "whirly-bird" bird deterrent device to install near the CL31 at OKC.

In summary, the following items will be tracked by OST11 with support from OPS22, OPS12, and WFO Norman, OK personnel with regard to the bird issue and “false cloud reports at OKC:

- 1) A wildlife camera has been installed at OKC for WFO Norman staff to document bird activity on or around the CL31,
- 2) John Monte suggestion of putting putty in the opening of the bottom of the CL31 to prevent small bird, rodent, insect intrusion, will be included in Mode Note 92,
- 3) John Monte's will submit the final report on the bird abatement study performed at SFSC, which will most likely include a recommendation to take off the rods used on the existing CL31 bird abatement device,
- 4) WFO Norman installed the “whirly bird” abatement supplied by the Navy to see if it helps deter birds from the CL31
- 5) John Monte will study raw CL31 data from OKC (August 6-8) to analyze the false reports of low clouds and generation of SPECIs.

After the presentation, the TRG members voted on whether to proceed to national deployment of the CL31. Each region was given the opportunity to express their concerns about issues seen during OT&E, and how that would affect national deployment of the CL31, before their vote. The major concern (expressed by the NWS Central Region Headquarters) involved the resolution of the SIO card transmission errors in the future. The Central Region voted “yes” to proceed to OT&E, but they wanted to make sure to be cautious with the deployment of the CL31 by installing a only a few CL31’s in their region in a given month. As a result of these concerns a new action item was assigned to W/OPS12, W/OPS23, W/OST11, and NRC to study the SIO card errors issue, and work on a standard configuration for ASOS sensors on the DCP to help alleviate these SIO card errors as a parallel project during the CL31 deployment. Hak Kim (W/OPS23) suggested since SIO card transmission errors are a “nuisance” to the NWS ET’s, perhaps the SIO card transmission errors could be consolidated and only reported once a day at 6 AM (like the TREND page updates). Many people agreed this was a good idea, and perhaps should be included as a future “RC” for ASOS.

Results (in Table form) of the TRG members vote on the question: “Should the CL31 sensor proceed to national deployment” in conjunction with ASOS ACU V2.79X and DCP V2.0 EPROMS?” as follow:

TRG Members

Name/Organization	Function	National Deployment of CL31? (Vote)
Jerald Dinges (W/OPS24)	Test Review Group Chair	-
Joseph Fiore (W/OPS24)	Test Director	Y
Greg Dalyai (W/OPS12)	Maintenance Branch	Y

Bing Huang (ATO-T)	FAA Focal Point	Y
Tim Rutkoski (W/ER41) Matt Ferrell (ER RMS) (filling in)	Eastern Region ASOS Focal Point	Y
Lewis Harrington (W/SR41)	Southern Region ASOS Focal Point	Y
Bob Brashears (W/CR43) (Dan Lester (CRH) (filling in)	Central Region ASOS Focal Point	Y
Son Nguyen (W/WR4) Joe Lachaez (WRH) (filling in)	Western Region ASOS Focal Point	Y
Jim Jones (W/AR42) Don Bolton (WRH) (filling in)	Alaska Region ASOS Focal Point	N
John Bush (W/PR1)	Pacific Region ASOS Focal Point	Y
Christopher Kornkven (WFO MKE)	NWS Employee Organization Focal Point	Y
Kevin Conaty (W/CIO12)	AOMC	Y
Richard Parry (W/OPS22)	NWS HQ (ASOS)	Y
Ron Heatherdale (U.S. Navy)	SPAWARSYSCEN	Y
William "Mac" Lawrence (U.S. Air Force)	USAF	Y

13 of the 14 TRG members voted “Yes” to the question, and one TRG member (The NWS Alaska Region Headquarters) voted “No” to the question.

Next, the ATRB (NCAR was the only ATRB member that was not present at the meeting) voted. The results of the vote by the ATRB members follow in table format:

ATR B Members

Name/Organization	Function	National Deployment of the CL31? (Vote)
Jerald Dinges (W/OPS24)	ATR B Chair/Primary	--
Joseph Fiore (W/OPS24)	DOC/NWS Secretariat/Alternate Chair/Primary	-
Khien Nguyen (W/OPS24)	DOC/NWS Secretariat Alternate	-
Dave Mannarano (W/OPS22)	DOC Primary	-
Tom Townsend (W/CR1)	DOC Alternate	Y
Bing Huang (FAA- ATO-T)	FAA Primary	Y
Tugen Kieu (FAA–ATO-W)	FAA Alternate	-
William Lawrence (USAF contractor HQ AFWA/A8PA)	USAF Primary	Y

Todd Allen (USAF YE-3)	USAF Alternate	-
Gerald "Wayne" Knight (SPAWARSYSCEN)	US Navy Primary	-
Ronald Heatherdale (SPAWARSYSCEN)	US Navy Alternate	Y
Roy Rasmussen (NCAR)	NCAR Primary	not present
Scott Landolt (NCAR)	NCAR Alternate	-

After the vote, 4 of the 5 ATRB members voted "Yes" to the question, and one ATRB member (NCAR) was not present at the meeting.

Since the consensus (13 of 14 TRG members) of the TRG with NWS ARH the dissenting vote and the majority of ATRB members (4 of 5 with NCAR not present) was to proceed to national deployment of the CL31 in conjunction with ASOS ACU V2.79X and DCP V2.0 EPROM, Jerry Dinges will send a formal letter to the Chairman of the ASOS configuration Control Board (ACCB) stating the TRG and ATRB recommendations.

The final part of the "wrap up" meeting for the CL31 was a brief presentation by Joe Fiore on the status of the parallel OT&E for V2.79X ASOS software in conjunction with IFW V4.54 firmware upgrade conducted since mid-June at all 21 OT&E sites. Joe reported the 11 sites operating with IFW V4.54 firmware along with ASOS ACU V2.79X software have not experienced any problems to date. Joe reported no TTR's were written during this OT&E.

The TRG voted on whether to field the V2.79X software in conjunction with IFW V4.54 firmware. The results of the vote by the TRG in table format follow:

TRG Members

Name/Organization	Function	Field V2.79X software with IFW 4.54 firmware (Vote)
Jerald Dinges (W/OPS24)	Test Review Group Chair	-
Joseph Fiore (W/OPS24)	Test Director	Y
Greg Dalyai (W/OPS12)	Maintenance Branch	Y
Bing Huang (ATO-T)	FAA Focal Point	Y
Tim Rutkoswki (W/ER41) Matt Ferrell (ER RMS) (filling in)	Eastern Region ASOS Focal Point	Y
Lewis Harrington (W/SR41)	Southern Region ASOS Focal Point	Y

Bob Brashears (W/CR43) (Dan Lester (CRH) (filling in)	Central Region ASOS Focal Point	not present
Son Nguyen (W/WR4) Joe Lachaez (WRH) (filling in)	Western Region ASOS Focal Point	Y
Jim Jones (W/AR42) Don Bolton (WRH) (filling in)	Alaska Region ASOS Focal Point	Y
John Bush (W/PR1)	Pacific Region ASOS Focal Point	Y
Christopher Kornkven (WFO MKE)	NWS Employee Organization Focal Point	Y
Kevin Conaty (W/CIO12)	AOMC	Y
Richard Parry (W/OPS22)	NWS HQ (ASOS)	Y
Ron Heatherdale (U.S. Navy)	SPAWARSYSCEN	Y
William "Mac" Lawrence (U.S. Air Force)	USAF	Y

13 of 14 TRG members were present. All those present voted "yes" to field the V2.79X software with IFW V4.54 firmware. The results of the ATRB vote on this question in table format follow:

ATRB Members

Name/Organization	Function	National Deployment of the CL31? (Vote)
Jerald Dinges (W/OPS24)	ATR B Chair/Primary	--
Joseph Fiore (W/OPS24)	DOC/NWS Secretariat/Alternate Chair/Primary	-
Khien Nguyen (W/OPS24)	DOC/NWS Secretariat Alternate	-
Dave Mannarano (W/OPS22)	DOC Primary	-
Tom Townsend (W/CR1)	DOC Alternate	Y
Bing Huang (FAA- ATO-T)	FAA Primary	Y
Tugen Kieu (FAA-ATO-W)	FAA Alternate	-
William Lawrence (USAF contractor HQ AFWA/A8PA)	USAF Primary	Y
Todd Allen (USAF YE-3)	USAF Alternate	-
Gerald "Wayne" Knight (SPAWARSYSCEN)	US Navy Primary	-
Ronald Heatherdale (SPAWARSYSCEN)	US Navy Alternate	Y
Roy Rasmussen (NCAR)	NCAR Primary	not present
Scott Landolt (NCAR)	NCAR Alternate	-

4 of 5 ATRG members voted “yes” to field the V2.79X software with IFW V4.54 firmware, with NCAR not present.

Since the consensus (13 of 14 TRG members) of the TRG and the ATRB members (4 of 5 with NCAR not present) was to field V2.79X software with IFW 4.54 firmware, Jerry Dinges will send a formal letter to the Chairman of the ASOS configuration Control Board (ACCB) stating the TRG and ATRB recommendation.

The following is the accounting for each action items from the previous TRG meetings. This meeting is the “wrap up” TRG meeting for the CL31 OT&E, the action items have been rearranged. All CLOSED Action Items are listed first and the OPEN action Items (and new Action Items) are listed last:

- a. Action Items 8 (03/09/09), 79 (6/11/09), 84 (6/18/09), 85 (6/18/09), 93 (7/1/09), 109 (7/23/09), 119 (7/30/09), 120 (8/13/09), 122 (8/13/09), 123 (8/13/09), 124 (8/13/09), 125 (8/13/09), 126 (8/13/09), 128 (8/13/09), 129 (8/13/09) were **CLOSED**.
- b. Action Items 17 (3/19/09), 35 (4/16/09), 43 (5/7/09), 63 (5/21/09), 121 (8/13/09), and 127 (8/13/09) remain **OPEN**.

The specifics for each action item follow:

Related to CL31 OT&E The OPEN Action Items have been moved to the END of the list of Action Items after the CLOSED Action Items and have been renumbered stating at Number 1. New Action Items Assigned during the “wrap up” TRG meeting will be numbered in sequence following the existing open action items.

The following Action Items written during the CL31 OT&E TRG have been CLOSED:

Action Item 8 (03/09/09) - CLOSED: 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. **COMPLETE**

Action Item 79 (6/11/09) CLOSED: Assigned to OPS24. Jerald Dinges will ensure a recommendation in the OT&E test report state, the Maintenance Branch (W/OPS12) establish a “tech tip” documenting a recommended port assignment scheme for sensors contacted through the SIO card on ASOS. New Action: Jerry will coordinate and lead a

meeting between W/OPS24, W/OPS23, W/OPS22, W/OPS12, and W/OST11 to discuss this topic next week

STATUS: This action item is closed and will be merged with a new action item assigned to OPS12, OPS24, OST11, and the NRC to investigate standardization of the ASOS sensors on the SIO cards, in attempt to help address the SIO card transmission errors (TTR 216) that have existed on ASOS for quite some time.

Action Item 84 (6/18/09) CLOSED: Assigned to regional focal points and OT&E sites. The regional focal points and field sites (sites with temporary mounts) that ordered and received additional SIO, A/D cards, power control modules, and Fiber Optic Modems for OT&E need to remove them from their respective DCPs at the conclusion of the OT&E and return them for credit to clear the due-in.

STATUS: Joe Fiore will ask the ESA's at the sites that had temporary mounts to make sure they have turned in the parts back to NLSC for the temporary mounts for credit on "due ins."

Action Item 85(6/18/09) CLOSED: Assigned to OPS24 and OPS12. Joe Fiore will work with Joe DeVost to collect all comments received from the OT&E ETs on both NWS Engineering Modification Note #80 and #92 and send them to all the ASOS OT&E ESAs and ETs so they can see what comments have been noted during the OT&E during the installation phase of the new Vaisala CL31 and the associated ASOS ACU firmware and DCP EPROMs. **COMPLETE**

Action Item 93 (7/1/09) CLOSED: Assigned to W/OPS24 and W/OST11 a comparison of the "baseline" SYSLOGs and the SYSLOGs after the CL31 became the stand-alone ceilometer will be performed by W/OPS24 and W/OST11. **COMPLETE**

Action Item 109 (7/23/09) CLOSED: Assigned to WFO Midland, TX and WFO Spokane WA and their respective NWS southern and western regional headquarters ASOS focal points. The WFO Midland agreed to ask WFO Amarillo, TX if they were willing to switch the Guymon, OK (GUY) CL31 sensor for the GDP CL31 sensor. During the meeting, the WFO in Midland (GDP) contacted the WFO in Amarillo (GUY), and they agreed to meet in Amarillo to swap the CL31 sensors next Tuesday, July 28th. WFO Midland will include Lew Harrington (SR Focal Point) in any correspondence on the status of this switch. The WFO in Spokane, WA (GEG) agreed to ask the WFO in Portland, OR (HIO) to see if they could swap the CL31's. Son Nguyen (WR Focal Point) and Joe Lachacz (WR) are coordinating the swap of the CL31's between GEG and HIO with the ESA's at GEG and HIO. The swap of the CL31 between GEG and HIO should occur next week. **COMPLETE**

STATUS: Joe Fiore will contact the ESA in Portland to ask him to ship the extra CL31 ceilometer to NRC (Gordon Dunley) so NRC can have a CL31 in their test lab during CL31 deployment. Joe Fiore sent an email (and left a voice message) with Bill Flieder (ESA Portland, OR) on 8/21/09 in regards to this action item. **COMPLETE**

Action Item 119 (7/30/09) CLOSED: Assigned to John Monte (W/OST11) and Hak Kim (W/OPS23). GEG is the now the only site that continues to have chronic SIO card problems. John Monte and Hak Kim will concentrate their efforts and work with GEG next week to help resolve their SIO card errors.

STATUS: This action item will be merged with a new action item #1 assigned to OPS12, OPS24, OST11, and the NRC to investigate standardization of the ASOS sensors on the SIO cards, in attempt to help address the SIO card transmission errors (TTR 216) that have existed on ASOS for quite some time.

Action Item 120 (8/13/09) CLOSED: Assigned to OPS24. Jerry Dinges will contact Jeff Earl EPM meeting secretariat to put on the next OPS1/EPM conference call Joe Lachez's (NWS WR) suggestion that the question on whether "to have the AOMC clear fail counts and \$ at OT&E sites during OT&E." **COMPLETE**

Action Item 122 (8/13/09) CLOSED: Assigned to the FAA. Jerry Kranz will send John Monte a picture of the cables running up the side of the CL31 of the FAA CL31's to see if the cables for the CL31's on the ASOS are similar to those on the AWOS. John Monte asked Jerry Kranz to find out approximately how many AWOS sites experienced this problem of rodents chewing the cables on the outside of the CL31's. **COMPLETE**

STATUS: Jerry Kranz (FAA) reported that only two of the FAA AWOS sites experienced this problem, so the action is closed.

Action Item 123 (8/13/09) CLOSED: Assigned to OST11. John Monte will coordinate with SFSC personnel the task to examine the TREND page for the 21 OT&E sites during OT&E to help analyze the problems at GEG. **COMPLETE**

STATUS: John Monte reported that The TREND analysis was done for the 21 OT&E sites this week along with the normal SYSLOTG analysis, and that there was no correlation between the TREND page and the SIO card transmission errors.

Action Item 124 (8/13/09) CLOSED: Assigned to W/OST 11. John Monte will let Vaisala know they need to make sure the DB-9 connectors (and all connections) on the CL31 are tightened down before they are shipped from the factory. **COMPLETE**

STATUS: Vaisala tightens down all connections as part of their factory procedures before shipment, and the CL31 crates are inspected for the same things at NRC before they are shipped to the field. NRC and Joel Williams (W/OST11) will let Vaisala know if there is a problem with the crating of the CL31's.

Action Item 125 (8/13/09) CLOSED: Re-assigned to W/OPS12. W/OPS12 will determine what the standard configuration for the sensors on the ASOS SIO cards should be. W/OPS12 will work with NRC (Mark Russo) to determine this standard sensor configuration on the SIO cards.

Action Item 126 (8/13/09) CLOSED: Assigned to AOMC. Kevin Conaty will perform an analysis of the ASOS trouble tickets generated at the 21 OT&E sites before and during OT&E to help determine if there is a significant increase in AOMC trouble tickets since OT&E began.

STATUS: This action item will be merged with a new action item #1 assigned to OPS12, OPS24, OST11, and the NRC to investigate standardization of the ASOS sensors on the SIO cards, in attempt to help address the SIO card transmission errors (TTR 216) that have existed on ASOS for quite some time.

Action Item 128 (8/13/09) CLOSED: Assigned to Dan Lester. Dan agreed to send a motion sensitive camera to OKC for them to install on their ASOS near the CL31 to see if they could get visual confirmation of bird activity around the CL31. **COMPLETE**

Action Item 129 (8/13/09) CLOSED: Assigned to Ron Heatherdale. Ron agreed to send OKC (Jeff Engel) a “whirly-bird” bird deterrent device to install near the CL31 at OKC. **COMPLETED**

STATUS: Ron Heatherdale shipped the “whirly-bird” bird deterrent to OKC for delivery on 8/21/09.

The following new action items were assigned during the “warp up” CL31 TRG meeting on August 20:

Action Item 1: OLD Action Item 17 (03/19/09) – OPEN: Re-Assigned to W/OPS22 and W/OS7. W/OPS22 will coordinate the policy and procedure for disposal of the old CT12K sensors after deployment of the CL31 sensors. The disposition of the remainder of the CT12Ks will be in accordance with procedures defined by OPS12.

STATUS: OPS22 provided each region and WFO a document that gives instructions on where to send their old CT-12K sensors (emailed on 8/21/09). OPS22 will also re-issue the CL31 deployment schedule to the NWS regions, and WFO’s. OPS12 is adding a few edits to the appendices of the Mod Note for this topic. OPS22 reported that they would talk in detail about plans for disposal of the old CT-12K ceilometers during Deployment Readiness Review Meetings, which will be held immediately after the ASOS Coordination Meetings (ACM) meetings in the future. Update (8/26/09): OPS12 reported that all costs associated with the shipment of requested assets to NLSC and any costs incurred with the disposal of un-needed CT-12K assets is expected to come out of regional budgets.

Action Item 2: OLD 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: W/OPS24 is almost finished with a draft version of the “Lessons Learned” document for CL31 OT&E, and will pass this draft onto NWS HQ for review once it is complete. After NWS review, it will be sent to the NWS regional focal points, FAA focal point, U.S. Navy focal point, and U.S. Air Force focal point for review. Once these groups have reviewed the “Lessons Learned” document, it will be made available to the WFO’s, and ASOS ET’s. A “Lessons Learned” section will also be included in the CL31 OT&E final report.

Action Item 3: OLD Action Item 43 (5/7/09) OPEN: Assigned to W/OPS12. Joe Devost and Greg Dalyai will coordinate with the field on 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: W/OPS12 reported the latest solar winds program is available for download from the solar winds TFTP website frequently. Chris Kornkven (WFO Milwaukee, WI) reported sometimes ETs’ laptops cannot access this website due to firewall restrictions. W/OPS12 stated there was a work around for this problem. W/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. OPS12, the IT security group at WSH, the NWS regions, and the individual WFO’s will address this action item.

Action Item 4: OLD Action Item 121 (8/13/09) OPEN: Assigned to OPS12. Joseph DeVost will add a statement (as an option) to NWS Engineering Mod Note #92 to have “plumbers putty” added to the opening in the bottom of the CL31 to prevent birds or other insects from getting into the CL31 rather than using wire mesh to keep the bird out of the bottom of the CL31.

STATUS: Joe Devost will add this note to Mod Note 92.

Action Item 5: OLD Action Item 127 (8/13/09) OPEN: Assigned to W/OST 11. John Monte will look at the raw CL31 data from the primary and back up CL31 at OKC from August 6-8, 2009 to perform further analysis on this “false cloud” issue from bird either jumping back and forth over the CL31 window or looking into the CL31 window.

STATUS: Once Khien Nguyen returns from emergency family leave, John Monte will obtain the raw CL31 data from OKC that Khien has been collecting, and will analyze the data.

The following new action items were assigned at the “wrap up” CL31 TRG Meeting on 8/20/09:

Action Item 6 (8/20/09): Assigned to W/OPS12, W/OPS23, W/OST11, and the NRC. As a result of the positive vote to proceed the national deployment of the CL31 and the recommendation of the NWS Central Region Headquarters to proceed cautiously (in small increments) with the deployment of the CL31 sensors, these groups will investigate

the “standard configuration” of ASOS sensors in the future to help analyze and investigate the critical TTR (216) on SIO card transmission errors that was written during CL31 OT&E. There were several good suggestions made by the team already, and this work will be a high priority task in the near future.

Action Item 7 (8/20/09): Assigned to Jerry Kranz (FAA). Jerry will call the FAA ET in Spokane, WA to ask when he will install the band pass filter on the SAWS system at Spokane. A theory is that noise from the SAWS system is corrupted the GEG ASOS radio communications, which maybe a cause (or may be contributing to) the SIO card transmission errors seem at GEG. (related to TTR 216)

Action Item 8 (8/20/09): Assigned to W/OPS24. Joe Fiore will contact the ESA at Portland, OR (HIO) to let him know that he should ship the extra CL31 sensor that they have at HIO to NRC (attention: Gordon Dunley) so NRC can have a CL31 in their lab during national deployment of the CL31.

Action Item 9 (8/20/09): Assigned to OST11 with support from OPS22, OPS12, and WFO OKC. Representatives from WSH (led by OST11) will continue to investigate the bird activity and “false cloud” reports seen at OKC and develop a action plan based upon follow-up reports on the following assigned activities: A wildlife camera has been installed at OKC for WFO Norman staff to document bird activity on or around the CL31; WFO Norman installed the “whirly bird” abatement supplied by the Navy to see if it helps deter birds from the CL31; John Monte suggestion of putting putty in the opening of the bottom of the CL31 to prevent small bird, rodent, insect intrusion, will be included in Mode Note 92 by OPS12; and, John Monte's submission of a final report on the bird abatement study performed at SFSC, which will most likely include a recommendation to take off the rods used on the existing CL31 bird abatement device.

The Action Items Related to V3.01 ST were moved into a separate document for V3.01 ST.

The Action Items Related to OT&E for OID/VDU Thin Client Logistics Replacement were moved into the minutes for the Thin Client OT&E.