

OT&E PLAN
For the
ASOS CL31 Ceilometer
Replacement, V2.79S ACU
Software and V2.0 EPROMS

Presented to the
ASOS Test Review Board
NWS/OPS24

November 14, 2008



OUTLINE

- Purpose
- Prerequisites
- Test Strategy
- Operational Risk Reduction
- Schedule



OT&E PURPOSE

Validate:

- Proposed CL31 ceilometer as a replacement for the operational CT12K ceilometer
- Supporting ASOS firmware V2.79S and DCP V2.0 EPROM
- Logistics process
- Maintenance strategy
 - 90-day preventative
 - Corrective (if needed)

OT&E Prerequisites

- ST has been successfully completed (no critical problems) (OPS24)
- The temporary mount for the test ceilometer installed at the designated OT&E sites (OPS24, OST11, and field)
- Draft NWS Mod Note 92 and 80 are available to the NWS ET (CD and email) at each OT&E site. (OPS12)



OT&E Prerequisites

- ASOS ACU firmware V2.79S is delivered by CD to the ET's responsible for installing the CL31 ceilometer (OPS24 and OPS12)
- ASOS DCP V2.0 EPROMS for the OT&E sites are in stock at NLSC (OPS12)



OT&E Prerequisites

- Requisite CL31 hardware and spares are in stock at NLSC (OPS12)
- Inventory list of all items with ASN's is created for ETs to validate upon receipt of the "initial issue" shipment. (OPS12 and OST11)
- Draft Vaisala CL31 Ceilometer Technical (User) Manual is provided to the ET's (OST11)

OT&E Prerequisites

- Determine LRU's required for logistical support of the ceilometers during OT&E. (OPS11)
- OT&E plan is signed by the OOS, Director, FSOC (OPS24)
- An OT&E TRR and an OT&E “kick-off” meeting has been conducted (OPS24)



OT&E Test Strategy

- “initial issue” CL31 from NLSC
- Install V2.79S software and V2.0 DCP EPROMS
- 1st part of OT&E: Install CL31 as test sensor on temporary or spare mount, CT12K operational sensor
- Concurrent CL31 to CT12K Met Comp Evaluation (8 OT&E sites)



OT&E Test Strategy

- DP by ATRB: results of CL31 to CT12K Met Comp Evaluation – Jan/Feb 2009
- After DP: switch CL31 to operational sensor, CT12K test sensor for 2nd part of OT&E
- Install CL31's at PHX (back up) and CMH (met disc)



OT&E Test Strategy

- Annotate any changes required to the Mod Notes
- Complete the OT&E questionnaire and provide to Site Focal Point
- Focal Points will forward changes/questionnaire to Test Director
- Reporting/documenting of any problems (NWS-TTR)



OT&E Operational Risk Reduction

- ET's will retain the CT12K ceilometers and previous versions of ACU firmware and DCP EPROMS locally until OT&E is complete



OT&E Schedule

- Will Run for at least 90-days after installation (NWS ET's) is complete at each site
- If OT&E is successful: CL31 will remain in place as operational ceilometer following the conclusion of the OT&E
- IF OT&E is successful: the NWS ET's will be instructed to ship the old CT12K's back to NRC

