

ASOS IFW V4.54 Firmware Upgrade ST Readiness Review

November 14, 2008

Operational Test Strategy

IFW Firmware V4.54 – *Corrects latent defect with IFW heater problems where sensor doesn't send "Failed" flag or System Log error message to ASOS*

- Brief ST to validate ASOS fix with failed and working IFW sensors. – November 2008
- Limited deployment to subset of operational ASOSs for 2 weeks before decision to deploy nationally.

IFW V4.54 Firmware

- ST Plan sent for ATRB and NWS regional headquarters review – Nov. 3
- Comments due Nov. 13
- Assumptions:
 - No SIT required based on previous tests results presented to ATRB
 - Test only at SFSC on ST0
 - No FAA Interface tests

IFW V4.54 Firmware (contd.)

- Prerequisites for ST
 - Approval of ST plan by ATRB/NWS Regions
 - ST Plan signed by Chief, Test and Evaluation Branch (W/OPS24)
 - Test Firmware and draft modification note #85 available
 - Certify ASOS test system (ST0) functioning properly use (ACU V2.79S/DCP V2.0 EPROMS and CL31 and ACU V2.79E/DCP V1.9 EPROMS with CT12K) For DCP1 and DCP2.

IFW V4.54 Firmware (contd.)

- **Prerequisites for ST (Contd.)**
 - Known Failed IFW sensor and a properly working IFW sensor are available.
 - Conduct ST “TRG “Kick off” meeting to ensure prerequisites are met to commence ST.

IFW V4.54 Firmware (contd.)

- **ST OBJECTIVES**

Verify:

- Draft NWS Engineering Mod Note #85
- ASOS is not negatively affected
- IFW sensor is not negatively affected
- Verify sensor output correctly sends “failed sensor” messages to ASOS when failed analog switch on thermistor is encountered, and ASOS generates proper diagnostics flag and SYSLOG message.