



ENGINEERING BULLETIN

Bulletin Number: 13-001

Date Created: December 2, 2013

Engineering Change: Upgrade West Coast Xpert, XDark, and 9210 Data Collection Platforms to Xpert OS v2.10.0.4 During Annual Inspections

System: Sutron Xpert Family of Data Collection Platforms

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Approved by MSCS on December 19, 2013

Background Information:

A problem has been identified with Xpert OS v2.8.0.3 where the affected system appears to be functioning normally but fails to log data internally. This is especially problematic for stations that are relied upon for post-event tsunami analysis as the 15-second data are not available by any means except manual download and are not known to be missing until they are needed. Once found, these data gaps have been as long as a full year.

Xpert OS v2.10.0.4 was developed to address this bug and has been thoroughly tested and provisionally approved for operational use. Xpert OS v2.13.0.2 is currently undergoing testing and will hopefully be approved for operational use at all stations in mid-to-late 2014. Due to the frequency of seismic events in the region and the ongoing requirement for 15-second data from these stations, the missing data issue with v2.8.0.3 has been particularly egregious at West Coast, Alaska, and Pacific Island stations over the past few years.

Because of the repeated inability to provide 15-second data when requested it has been determined that it is not feasible to wait until v2.13.0.2 has been fully tested and approved to resolve the missing data issue with v2.8.0.3 at West Coast, Alaska, and Pacific Island stations so a rollout of v2.10.0.4 is necessary at these locations in the interim. Once fully tested and approved a superseding Engineering Bulletin will be issued to require upgrade to v2.13.0.2 at all Xpert DCPs throughout the CO-OPS fleet of instrumentation.

Directive:

The Measurement Systems Configuration Subcommittee (MSCS) has established that all West Coast, Alaska, and Pacific Island Xpert systems running Xpert OS v2.8.0.3 must be upgraded to Xpert OS v2.10.0.4 during the next regularly scheduled site visit. This directive supersedes all previous guidance on Xpert operating system upgrades. If a user is uncertain how to perform an upgrade, please contact the Seattle Instrument Lab at SIL@noaa.gov or 206.526.6915 for additional guidance.

Note: Before performing the upgrade, all station specific files should be copied off to an external laptop and all FlashDisk log file sizes should be verified to be standard per Engineering Bulletin 09-003. If the log files are larger than specified it is possible that the FlashDisk will not be able to accommodate the necessary files to perform the upgrade and the upgrade will fail. If this inadvertently occurs, or you run into other problems during the upgrade that require technical support, please contact the Seattle Instrument Lab.