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DR#105: C&V Software upgrade 3A Procedural Error Caused WAAS Service Outage GPS Week/Day: Week 1658 Day 5 (10/21/2011)

Discussion:

WAAS NPA and PA navigation services were lost on 10/21/2011 between 14:27 and 18:40 GMT. All WAAS GEO's began transmitting type 0 initialization messages at 484052 GPS TOW (14:27:17 GMT) after an improper C&V IGP mask update was commanded by the WAAS operator during software 3A cutover. The initialization messages commanded all users to stop using past WAAS data and recollect all new WAAS data, which prevented all navigation service in the WAAS service volume.

The WAAS GEO's continued to periodically output type 0 initialization messages until 498000 GPS TOW (18:20:00 GMT) after WAAS C&V was reset using the original version of operational software. WAAS PA navigation service was restored throughout the service volume at 18:40:20 GMT.

Conclusion:

The WAAS service outage on 10/21/2011 lasted approximately 4 hours and 13 minutes and was caused by an improper C&V IGP mask update. Software release 3A was successfully updated on the WAAS C&V after a review of WAAS cutover procedure.