

**WAAS Technical Report**  
**William J. Hughes Technical Center**  
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*Author(s): Choon Ooi*

***DR# 24: Multiple POR Geo gaps after 2 POR GUS switchovers.***  
***GPS Week/Day: Week 1359 Day 1 (1/23/2006)***

**Discussion:**

On week 1359 day 1, POR had 2 GUS switchovers at GPS time 157964 (19:42:45 GMT) and 170805 (23:26:46 GMT) followed by 13 gaps. The times and lengths of all the gaps including the switchovers are listed in table 1.

Table 1: POR Gaps

Start Time	Stop Time	Lengths of gap
157963	157977	13 (Switchover)
170801	170826	24 (Switchover)
170826	170853	26
170854	170867	12
170868	170889	20
170889	170894	4
170894	170906	11
170907	170914	6
170914	170928	13
170929	170946	16
170947	170978	30
170978	171041	62
171042	171044	1
171066	171066	4
171199	171208	8

At the first switchover while STA-B switched from primary to faulted, Brewster was selected as the primary GUS from backup, followed by 8 Type 0 messages. From faulted STA-B continued the switches to maintenance, unknown, maintenance, verification and finally to backup at GPS time 160018 (20:26:59 GMT).

With the second switchover, STA-B was being switched back to primary GUS while Brewster went to backup from primary. Only 1 Type 0 message being received after the second switchover at GPS time 170826 (23:27:7 GMT). No other messages being received from any receiver after that for the next 26 seconds. POR continued to lose messages from time to time for the next 350 seconds where a total of 13 message gaps were created as a result. ZLA is the selected C&V source for the entire day.

## **Conclusion**

After the first switchover when STA-B was faulted and Brewster was the primary GUS, there were no interruptions in the messages being received until the next switchover.

After the second switchover when STA-B was being switched back as the primary GUS, all receivers lost track of POR from time to time until after approximately 400 seconds later when everything was back to normal.