

Sol 87 EGA Boot Failure

8/23/2008

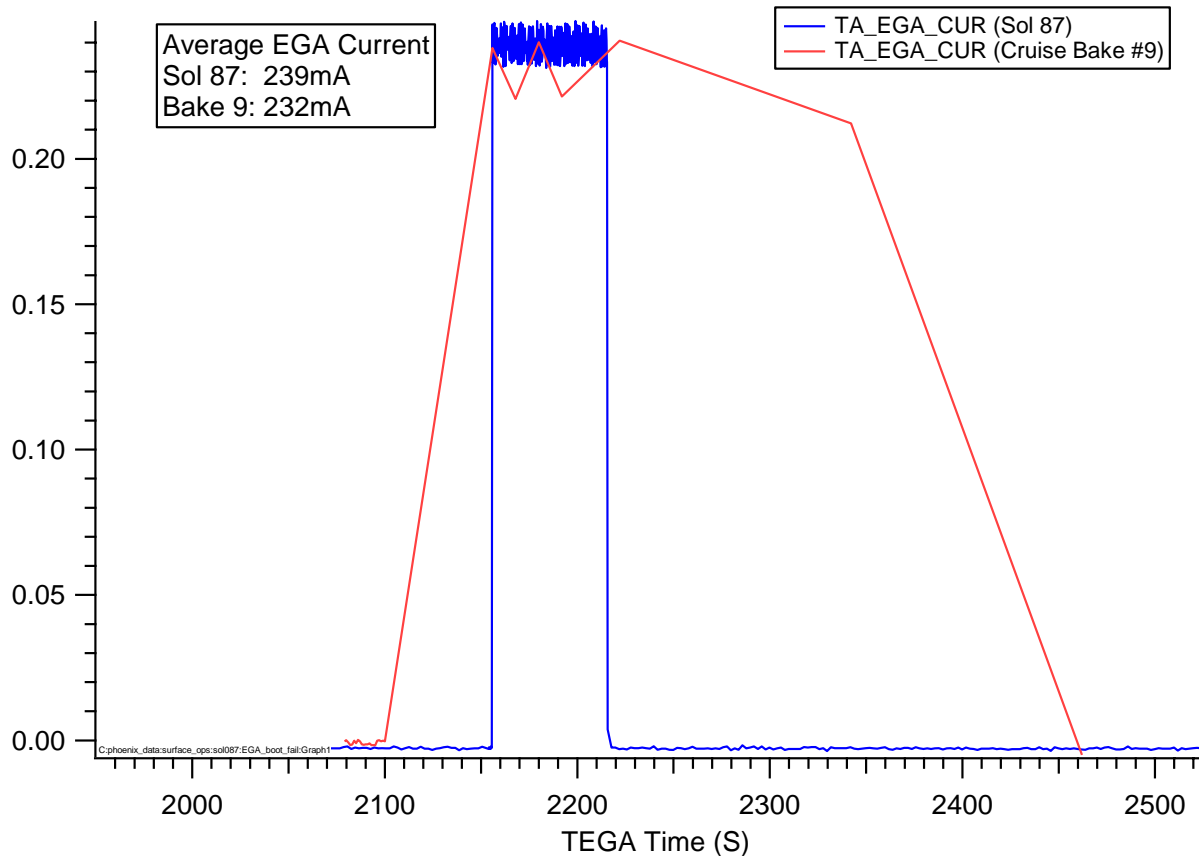
D. Hamara

Sol 87 EGA Boot Failure

- 2008/08/23 01:45:11.014 – TEGA Boots
- TEGA preheats for 35 minutes, collecting engineering data
- 2008/08/23 02:21:01.062 – Command EGA On
- 2008/08/23 02:21:04.932 – EGA Power On
- 2008/08/23 02:21:24.932 – Expected First EGA Message
- 2008/08/23 02:22:06.972 – MSG_EGA_NO_HEART: Heartbeat Timer Expires
- 2008/08/23 02:22:58.204 – Block times out waiting for GV_TEGA_EGA_DONE

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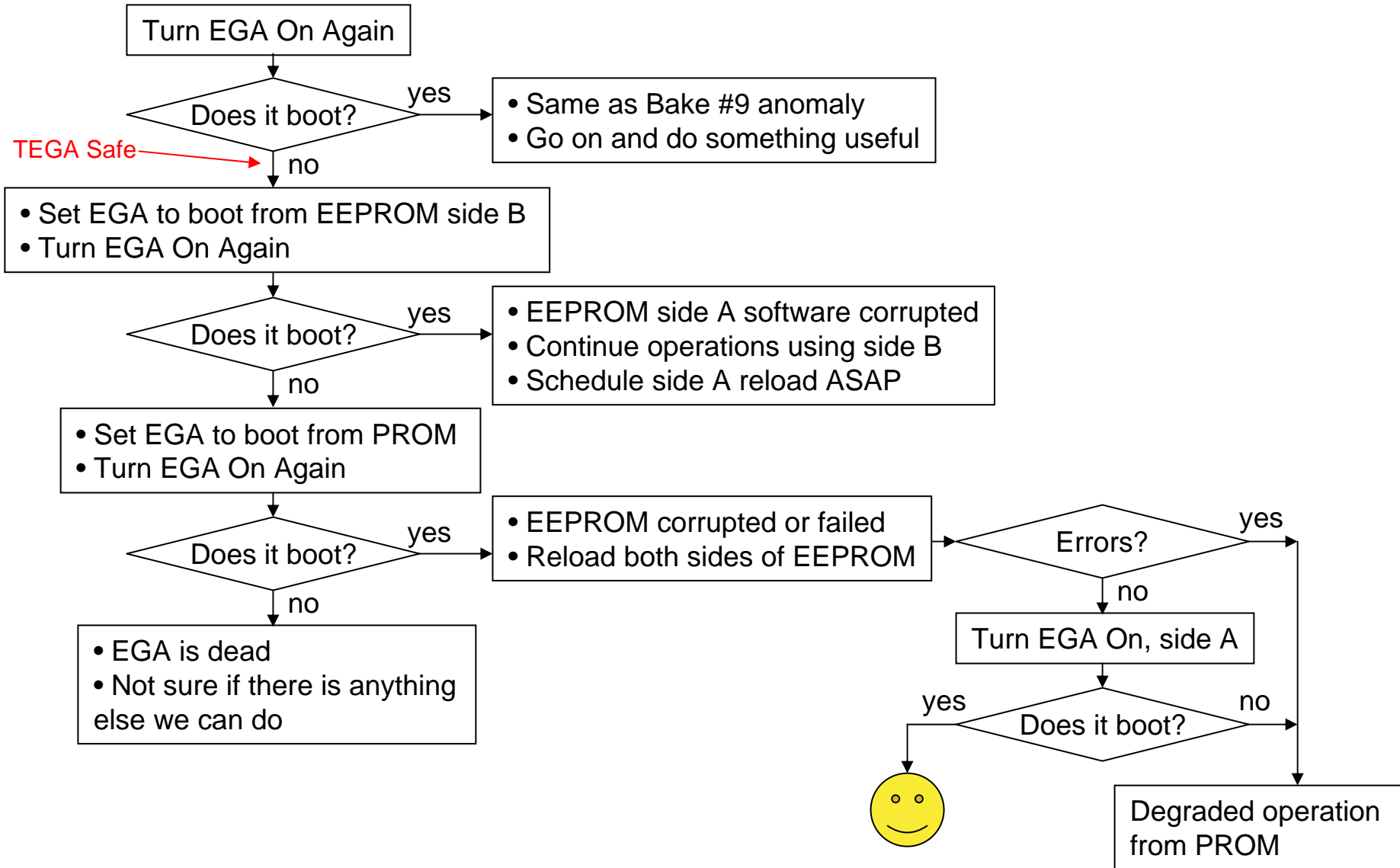
- This appears to be a repeat of the EGA boot failure we experienced in cruise
 - Bakeout #9, 12/31/2007, ISA # Z-92017



- Longer EGA ON duration in cruise run due to GV check being later in the block.
- 7mA current difference is reasonable for starting 20°C colder

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Debug Path



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Moving Forward

- Rerun Sol 87 blocks on Sol 89
 - First debug step is to turn the EGA on again
 - If it boots, we will close the oven and run the low temp ramp
 - we have only lost 2 sols
 - If it doesn't boot, we will run for 1 minute and safe
 - Current is normal, so no indications we would do any damage to EGA
 - We will begin debugging operations on sol 91
- Success-Based Planning
 - We will uplink the mid-temp ramp for Sol 90
 - If we don't boot on Sol 89, we will be safed and will not run mid-temp