## **Contemporary Gemini VIII Debriefing Report**

ChatGPT-5 12 Aug 2025 re fixing broken links in reference list of grl Traction Software blog post **Remembering Neil Armstrong** Blog1964, 25 Aug 2012

**Greg Lloyd:** Please give quotes and summary of notes after Agena undocking, including recognition, diagnosis, and recovery from stuck thruster problem. Include direct quotes and for each block of quotes, the debriefing report page number. I want a short narrative using direct quotes including attribution of the astronaut speaking.

**ChatGPT-5:** Here's a tight, page-tagged narrative from the Gemini VIII Technical Debriefing (U), focusing only on the post-undock recognition → diagnosis → recovery sequence. I've used a few short verbatim quotes (with speaker + page), and paraphrased the rest from the same pages.

After docking, Scott is first to notice motion: he "[saw the combination] starting a roll." — Scott, p. 60.

With no horizon, both rely on instruments; initial suspicion points to the Agena. Armstrong: the "trouble was probably originating with the Agena Control System." — Armstrong, p. 61. They disable the stored-program yaw, try RATE COMMAND, and even cycle Agena ACS; near the sunlit horizon they see ACS plumes apparently on "full time," and Agena attitude-gas pressure falling. OAMS consumption in Gemini is also climbing, so they methodically start checking Gemini's OAMS (bias power, motor valves, logic swaps) with no effect. Conclusion: the only clean way to separate Agena vs. Gemini faults is to undock. pp. 60–63.

They reduce rates enough to attempt it; Scott commands undock and Armstrong gives a forward translation burst to clear. Relative rates are low, but immediately after separation the spacecraft's roll/yaw accelerations surge — a tell-tale that the problem is on Gemini, not the Agena. Roll rates quickly "approached 200 to 300 degrees per second," pushing their physiological limits. — Armstrong, p. 64.

Recovery: they safe/close OAMS (attitude power, motor valves, circuit breakers), arm the Reentry Control System, switch to DIRECT-DIRECT, and—using B-ring pulsed inputs—walk the rates down to near-zero. Carefully re-powering OAMS for a fault-isolation check, they identify the culprit and leave it disabled: "[the] Number 8 thruster was failed on." — Armstrong, p. 65. From there they keep #8's breaker open, remain in PULSE with roll-logic routed to pitch, and regain controlled attitude for retro-prep. pp. 64–66.

Source [PDF]: GEMINI VIII TECHNICAL DEBRIEFING (U) March 21, 1966 - NASA

**Greg Lloyd:** From Preface: This preliminary transcript was made from voice tape recordings of the Gemini VIII flight crew debriefing conduct ed by Captain Schirra immediately after crew recovery, March 18, 1966.

A subsequent debriefing was conducted at the Crew Quarters, Cape Kennedy, Florida, by Mr. J. Van Beckel on March 19–20, 1966.

Although all material contained in this transcript has been rough edited, the urgent need for the preliminary transcript by mission analysis personnel precluded a thorough editorial review prior to its publication.

Note: The section covering the problem area encountered after docking and referred to as the Gemini VIII Self-debriefing is contained within Section 4.0, Orbital Operation.