maintain thrust. Thrust imbalance resulted in tumbling, followed by fuel starvation, and early thrust termination.

284. 208D (Crab Claw), 3 May 66, Response Mode 4T, Flight Phase 1: High engine-compartment temperatures were first noted at 41 seconds. The sustainer pitch-actuator feedback-loop failed open at 136 seconds, a few seconds before planned BECO. The flight appeared normal to the safety officer until about this time when roll and pitch rates increased. The IIP apparently stopped about 155 seconds, although General Dynamics reported that vehicle stability was not lost until 216 seconds. Shutdown of sustainer and vernier engines occurred at 235 seconds. Suspected cause of malfunction was excessive heating in the boat-tail section.

287. SLV-3 (GTA-9), 17 May 66, Response Mode 5, Flight Phase 1: Vehicle became unstable when B2 pitch control was lost at 121 seconds. Loss of pitch control resulted in a pitch-down maneuver much greater than 90°. Guidance control was lost at 132 seconds. After BECO, the vehicle stabilized in an abnormal attitude. Although the vehicle did not follow the planned trajectory, SECO (at 280 seconds), VECO (at 298 seconds), and Agena separation occurred normally from programmer commands.

294. 96D (Veneer Panel), 10 Jun 66, Response Mode 4, Flight Phase 2.5: The reentry vehicle undershot the target by 20 miles when the vernier engines shut down early. Failure was caused by an abnormal decay of control-bottle helium pressure.

298. 58D/ABRES (Stony Island), 13 July 66: Response Mode NA, Flight Phase 3: Flight was regarded as a success, although one of two OV's failed to orbit when it impacted the structure door which had not been opened.

300. 149F (Busy Ramrod), 8 Aug 66, Response Mode 4, Flight Phase 2: The sustainer engine shut down 27 seconds early due to fuel depletion caused by an unfavorable ratio of propellant usage during the booster stage. Verniers burned to fuel depletion.

306. 194D (AC-7), 20 Sep 66, Response Mode NA, Flight Phase 5: Atlas Centaur performance was normal, but Surveyor spacecraft lost stability on the way to the moon.

308. 115F (Low Hill), 11 Oct 66, Response Mode 4, Flight Phase 1: The missile was normal till about 85 seconds when it appeared to lose thrust and breakup. Several major pieces impacted 32 to 40 miles downrange near the intended flight line.

310. 174D (AC-9), 26 Oct 66, Response Mode NA, Flight Phase 2: Although Atlas pressurization system anomaly caused decaying sustainer engine performance and early SECO, no mission objectives were compromised.