

depletion before to reaching cutoff conditions. Impact was 28 miles short of target.

28. 146, 16 Dec 58, Response Mode 4, Flight Phase 1: Although flight was considered a success, the main-engine fuel valve remained partially open for 14 seconds after MECO command was given. This resulted in a 6-mile overshoot.
29. 149, 30 Dec 58, Response Mode 2, Flight Phase 1: A momentary ground in the electrical system at liftoff caused the guidance system to assume control at this time rather than the planned 108.5 seconds. Guidance immediately commanded a maximum pitch rate to place the missile in its proper orientation for 108.5 seconds. By 22 seconds the missile has pitched through 46°. As it attempted to maintain stability, a reverse pitch subsequently developed, but by 46.4 seconds the missile was tumbling to the right. Destruct was sent at 52.5 seconds.
30. 128 (Able II), 22 Jan 59, Response Mode 4, Flight Phase 1.5: An electrical failure prevented second-stage (Aerojet General AJ10-42) separation and ignition.
31. 154, 30 Jan 59, Response Mode 4, Flight Phase 1: Improper propellant mixture and low thrust resulted in fuel depletion before cutoff conditions were reached.
32. 131 (Able II), 28 Feb 59, Response Mode 4, Flight Phase 2: Flight appeared normal until 195 seconds when all track was lost. As a result, the RSO sent cutoff at 218 seconds and destruct at 222 seconds.
44. 194, 29 June 59, Response Mode NA, Flight Phase 1.5: Flight was normal except that reentry vehicle did not separate and retro rockets did not fire.
45. 203, 21 July 59, Response Mode 3, Flight Phase 1: The liftoff pin failed to extract so the pitch and roll programs were not initiated. Missile was destroyed at 45 seconds at an altitude of about 18,000 feet.
52. 136 (Transit 1A), 17 Sep 59, Response Mode 4, Flight Phase 2.5: First and second stages performed normally until stage 2/3 separation. Failure of the stage-2 retro system apparently led to a collision of the stages. As a result, the third stage failed to ignite.
59. 254, 1 Dec 59, Response Mode 4T, Flight Phase 1: A hydraulic-system failure resulted in premature closure of the main-engine liquid-oxygen valve. The hydraulic-system pressure decayed almost linearly from 8 seconds to 146 seconds when missile control was lost. Impact was 322 miles short of target.
66. 257 (Transit 1B), 13 Apr 60, Response Mode NA, Flight Phase 1 and 5: The flight was a partial success although satellite was placed in a lower-than-planned orbit. MECO velocity was 315 ft/sec below normal. Noisy data rejected by the guidance computer resulted in pitch-plane steering errors and the unplanned orbit.