

94.3 seconds. A thrust-section fire before 20 seconds apparently failed the lube oil system, which led to cessation of propellant flow.

156. 131D LV-3A/Agema B (Bargain Counter), 17 Dec 62, Response Mode 4T, Flight Phase 1: Mission failed because of an Atlas hydraulic failure. Missile lost stability at 77.5 seconds, then rolled clockwise, pitched down and yawed left before breaking up at about 80.5 seconds.
157. 64E (Oak Tree), 18 Dec 62, Response Mode 4T, Flight Phase 1: The B2 engine failed at 37.1 seconds as a result of lubrication loss to the pinion gear. Booster engine shutdown resulted in a violent rolling yaw maneuver that caused missile breakup followed by an explosion at about 38 seconds.
158. 160D (Fly High), 22 Dec 62, Response Mode 4, Flight Phase 2: Due to noisy data, range safety limits in the automatic cutoff system were exceeded, causing generation of an all-engines-cutoff signal. As a result, the vernier engines were cut off about 10 seconds early, and the reentry vehicle was about 12.3 miles short.
159. 39D (Big Sue), 25 Jan 63, Response Mode 4, Flight Phase 1: Propulsion system performance was unsatisfactory after 78 seconds, when booster engine performance started to decay. Booster engines shut down shortly after this, probably as a result of excessive heating in the gas-generator regulator. The sustainer operated normally until at least 106 seconds, with shutdown occurring sometime between 106 and 126 seconds. Breakup occurred about 300 seconds. Missile apparently impacted about 100 miles downrange.
164. 102D (Tall Tree 3), 9 Mar 63, Response Mode 5, Flight Phase 1: A flight-control malfunction occurred at about 15 seconds at the start of the pitch program. The missile pitched excessively, reaching 310° and an altitude of 5,000 feet at 33.5 seconds when it broke up. Debris impacted close to pad.
166. 64D (Tall Tree 1), 15 Mar 63, Response Mode 4T, Flight Phase 2: A sustainer hydraulic-system failure at 83.5 seconds resulted in loss of sustainer engine control by 86 seconds and loss of vernier control at 99 seconds. Missile control was maintained by the booster engines until booster cutoff, when lack of sustainer and vernier control caused the missile to roll clockwise, pitch up, and yaw left. Sustainer thrust decayed at 131 seconds, and the missile began tumbling at 136.6 seconds. Missile self-destructed at 146 seconds with impact point about 600 miles downrange.
168. 193D (Leading Edge), 16 Mar 63, Response Mode 4T, Flight Phase 2: Loss of B2 pitch feedback signal at 103.5 seconds resulted in loss of vehicle stability. Missile tumbled, then self-destructed at about 270 seconds.
169. 83F (Kendall Green), 21 Mar 63, Response Mode 4, Flight Phase 2.5: A defective solder joint apparently led to two instances of erroneous velocity computations in