72 and 73 seconds, and a final explosion occurred at 74 seconds. Impact was about 8 miles downrange and one mile crossrange.

76. 8E, 24 Jan 61, Response Mode 5, Flight Phase 2: Missile stability was lost at about 161 seconds, some 30 seconds after BECO, probably due to failure of the servo-amplifier power supply. The sustainer engine shut down at 248 seconds, and the vernier engines about 10 seconds later. Impact occurred 1316 miles downrange and 215 miles crossrange.

77. 70D (LV-3A)/Agena A (Jawhawk Jamboree), 31 Jan 61, Response Mode NA, Flight Phase 2: Flight was considered successful although loss of rate lock at 222 seconds caused slightly erratic steering during the last 20 seconds of Atlas sustainer thrusting flight and failure of vehicle to pitch over during the vernier solo period.

80. 13E, 13 Mar 61, Response Mode 4, Flight Phase 2: Sustainer main fuel valve remained in the full open position throughout flight, resulting in fuel depletion and premature shutdown of sustainer engine at 251 seconds.

81. 16E, 24 Mar 61, Response Mode 4, Flight Phase 1.5: Due to depletion of helium-bottle pressure, booster section failed to jettison, leading to fuel depletion and impact far short of target.

82. 100D (Mercury 3), 25 Apr 61, Response Mode 3, Flight Phase 1: Flight was terminated at 40 seconds by RSO when vehicle failed to perform roll and pitch-over maneuvers, apparently due to failure of the autopilot programmer. The malfunction was attributed to a plastic coating on the connector pins within the programmer, causing an open circuit. Major debris impacted about 1800 feet downrange and 6100 feet crossrange left.

86. 27E (Sure Shot), 7 June 61, Response Mode 4, Flight Phase 1: Apparent combustion instability caused an explosion and missile destruction 3.86 seconds after liftoff.

87. 17E, 22 June 61, Response Mode 4, Flight Phase 1: Missile destroyed itself at 101.5 seconds due to failure of flight-control system. Pitch rate was about 1.55 times normal. Just before breakup at 66,000 feet altitude, missile had pitched over almost 90° due to higher than normal pitch rate, producing excessive heating and aerodynamic loads. At breakup, flight path was nearly horizontal. Impact was about 64 miles downrange.

93. 111D(Ranger-1), 23 Aug 61, Response Mode NA, Flight Phase 4: The Agena achieved a normal parking orbit. Flight continued normally until Agena second burn. During the restart sequence the fuel valve failed to open so only oxygen was pumped into the thrust chamber. Apogee of final orbit was only slightly above the normal circular parking-orbit altitude.