

388. 5003C AC-21 (OAO-B), 30 Nov 70, Response Mode 4, Flight Phase 2: Since the nose fairing failed to separate, Centaur did not have enough energy to make orbit. Payload impacted in Africa.
392. 5405C AC-24 (Mariner 8 Mars), 8 May 71, Response Mode 4T, Flight Phase 3: Mission requirements were not met. The Atlas boost phase was normal. Shortly after Centaur main-engine start, pitch stabilization was lost due to failure of the rate gyro or an electrical failure in the pitch channel of the flight control system. The vehicle began an accelerated nose-down tumbling motion that subsequently resulted in early and erratic main-engine shutdown due to propellant starvation.
397. SLV-3A (Agena), 4 Dec 71, Response Mode 4, Flight Phase 1: Sustainer engine turbine damage during engine start resulted in hot gas leaks and eventual failure of thrust-section hardware. Vehicle broke up at 87 seconds.
419. 5015D AC-33 (Intelsat IV F-6), 20 Feb 75, Response Mode 4T, Flight Phase 2: The Atlas booster-section electrical disconnect failed at booster staging. The harness was pulled apart, so flight-control avionics was unable to maintain vehicle stability. Missile appeared normal until the IP stopped at 200 seconds. Precautionary destruct was sent at 414 seconds.
420. 71F (AFSC), 12 Apr 75: Response Mode 4, Flight Phase 1: Although an abnormal overpressure occurred at the base of the missile 620 msec before liftoff, the vehicle appeared normal until about 45 seconds when sustainer manifold and fuel-pump pressures began dropping. By 61 seconds, both the sustainer and vernier engines had shut down. Booster engines continued thrusting until about 123 seconds when the IIP stopped moving and radar operator reported multiple pieces. The breakup apparently resulted from an external explosion in the flame bucket that damaged the thrust section. Destruct was sent at 303 seconds when missile elevation dropped to 5°.
432. 5701D AC-43 (Intelsat IVA F-5), 29 Sep 77, Response Mode 4T, Flight Phase 1: A leak in the booster hot-gas generator at 2.3 seconds resulted in a fire in the thrust section at 36.5 seconds. The vehicle went into a violent maneuver at 54.9 seconds, failing the structure. The Atlas exploded at 55.8 seconds, leaving the Centaur intact. The Centaur was destroyed by the RSO at 61.7 seconds.
457. 19F (NOAA-B), 29 May 80: Response Mode NA, Flight Phase 1: Failure of turbopump seal allowed fuel to enter the gear box resulting in 21% low thrust by the B1 booster engine. The payload was inserted into an abnormal orbit and the mission was lost.
460. 68E, 8 Dec 80: Response Mode 5, Flight Phase 1: Flight appeared normal until 102.7 seconds when the lube oil pressure on the B2 booster engine suddenly dropped. At 120.1 seconds, the engine shut down, followed 385 msec later by guidance shutdown of the B1 engine. The asymmetric thrust during shutdown