

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION T-37, SERIAL NUMBERS (S/N) 57-2320 & 58-1935 89 FLYING TRAINING SQUADRON (FTS), SHEPPARD AIR FORCE BASE (AFB), TX 20 DECEMBER 2002

On 20 December 2002, at approximately 0913 Central Standard Time (CST), the mishap aircraft (MA), two T-37s, S/N 57-2320 and S/N 58-1935, had a midair collision while on a T-37 Syllabus-directed Euro NATO Joint Jet Pilot Training (ENJJPT) formation training sortie in the Sheppard 2 military operating area (MOA). Following the midair collision, mishap crew 1 (MC1) performed a gear-up landing on runway 33L at Sheppard AFB in 57-2320. Mishap crew 2 (MC2) successfully ejected and MA2 impacted the ground and was destroyed. The crew on the two-seat MA1 included the mishap instructor pilot (MIP), an Italian Major assigned to the 89 FTS, 80 Flying Training Wing, Sheppard AFB, Texas, and the mishap student pilot (MSP) an Italian Second Lieutenant assigned to the 89 Operational Support Squadron, 80 Flying Training Wing, Sheppard AFB Texas. The damage to MA1 was valued at 155,600.00 dollars. The crew on the two-seat MA2 included the mishap instructor pilot (MIP), a USAFR Major assigned to the AFRC, 10 AF, 340 Flying Training Group, 97 FTS, 80 Flying Training Wing, Sheppard AFB, Texas, and the mishap student pilot (MSP) a German First Lieutenant assigned to the 89 Operational Support Squadron, 80 Flying Training Wing Sheppard AFB Texas. MA2 was destroyed upon impact with the loss valued at 1 million dollars. The impact area was in a wheat field, the site has been thoroughly cleaned of debris, and to date, no claims for damage to private property have been filed as a result of this mishap.

Clear and convincing evidence demonstrated that the cause of this accident was:

(1) MA2 broke out of formation and MA1 was unaware of the breakout. While MA2 believed they made a radio call, it does not appear to have transmitted outside the cockpit. Because MA2 was on MA1's left wing, MIP1 was unable to adequately visually monitor his wingman due to limited cross-cockpit visibility. Therefore MA1 was unaware that his wingman had broken out and was no longer flying off of lead.

(2) MIP2 failed to project lead's flight path and ensure adequate separation with the breakout. MA2 executed a gentle breakaway with no significant power change. At the point MA2 broke out, MA1 was still increasing his left bank, continuing his lazy-eight maneuver. This combination kept the two aircraft in relatively close proximity, yet neither crew had sight of the other. After approximately 70 degrees of turn, MIP2, believing that he had achieved adequate separation with MA1, directed MSP2 to roll out of bank to look for lead. This roll out, combined with lead's continuing descent and decreasing bank, resulted in their collision.

Other factors contributing to the mishap were the lack of a procedural requirement for lead to acknowledge the wingman's breakout call, the visibility limitations of the T-37's side-by-side seating arrangement, and MIP2's complacency with a routine practice breakout maneuver.

Under 10 U.S.C. 2254(d) any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.