EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION
F-16CG, TAIL NUMBER (T/N) 89-2099
35th FIGHTER SQUADRON (FS), KUNSAN AIR BASE (AB), REPUBLIC OF KOREA
14 MARCH 2006

On 14 March 2006, at approximately 0919 Korea Local Time, the mishap aircraft (MA), an F-16CG, T/N 89-2099 crashed off the coast of the Republic of Korea, approximately 20 miles southwest of Kunsan AB, Korea. The mishap pilot (MP), a captain assigned to the 35th Fighter Squadron, 8th Fighter Wing, Kunsan AB, Korea, was on a basic fighter maneuver (BFM) continuation training (CT) sortie as lead of a two-ship flight. The MP ejected safely, and was uninjured. The MA was destroyed upon impact, with the loss valued at $19,730,000.00. The MA aircraft impacted in the ocean approximately 20 nautical miles southwest of Kunsan AB. The US Navy recovered the majority of the wreckage through a salvage operation, and to date, no claims for damage to private property have been filed as a result of this mishap.

Shortly before impact, the MA went out of control. The MP attempted to regain control of the MA, but the MA stayed out of control. The MP ejected from the MA.

Clear and convincing evidence showed the MA went out of control based on a chain of failures in the MA flight control system (FLCS). During the fifth BFM engagement, the MA experienced an ISA ALL FAIL. The FLCS was not reset. During the fifth and sixth BFM engagements, the MA experienced a Branch D FLCS COMPUTER FAIL and a FLCS AOS FAIL. During the seventh BFM engagement, when the MA was in a low speed regime, the MA experienced a Branch C FLCS COMPUTER FAIL, which, combined with the preceding Branch D failure, forced the MA into a Dual FLCS Branch Failure situation. The combination of the ISA ALL FAIL and the Dual FLCS Branch Failure caused the loss of any input to the horizontal tails. Without any pitch input, and with the MA already at a low speed, the MA went into a deep stall and out of control. The MP ejected when he reached 1,760 feet above the water. Although the chain of FLCS malfunctions caused the MA to go out of control, there is clear and convincing evidence the MP had at least three opportunities to recognize and correct the FLCS malfunctions, keeping the MA from ever getting to an out of control situation; however, the F-16CG Dash 1 does not give pilots the information or guidance necessary to handle the combination of this mishap chain of events. There were three factors contributing to this accident: technical order guidance, the phase of flight, and human factors.