

## **EXECUTIVE SUMMARY**

### **AIRCRAFT ACCIDENT INVESTIGATION**

**F-16C, S/N 85-1555 & F-16C, S/N 86-0260**

**181<sup>st</sup> FIGHTER WING, INDIANA AIR NATIONAL GUARD, HULMAN  
FIELD, INDIANA  
17 MAY 2004**

On 17 May 2004 at 1827 Zulu (1327 local time), F-16C, S/N 85-1555 Mishap Aircraft (MA 1) flown by Mishap Pilot 1 (MP 1), call sign Rove 1 and F-16C, S/N 86-0260 Mishap Aircraft (MA 2) flown by Mishap Pilot 2 (MP 2), call sign Rove 2 collided in midair, destroying both aircraft. The aircraft were part of a local daytime 4 (Rove Flight) versus 2 (Apex Flight)(similar air) Offensive Counter Air (OCA) sortie at Red Hills MOA (Military Operating Area) to be followed by a Basic Surface Attack (BSA) mission at Atterbury Range. MA 1 and MA 2 collided during the air-to-air phase of the mission, near the completion of a tactical four-ship turn, at approximately 20,000 feet MSL (Mean Sea Level). MP 1 suffered fatal injuries as a result of the collision. MP 2 ejected safely. The mishap pilots were assigned to the 113<sup>th</sup> Fighter Squadron, 181<sup>st</sup> Fighter Wing in Terre Haute, Indiana. Both Mishap Aircraft and debris impacted in the vicinity of Oaktown, Indiana, approximately 40 miles Southwest of Terre Haute. The total estimated value of both destroyed aircraft as configured at the time of the mishap is \$39,738,384.52.

While completing a four-ship Tactical 180-degree turn prior to commencing the second OCA scenario, MA 2 struck the formation lead, MA 1. Based on post accident technical analysis, there is clear and convincing evidence that the right external fuel tank and right lower strake of MA 2 impacted the cockpit and radome area of MA 1. The collision shattered the canopy of MA 1, fatally injured MP 1 and ruptured MA 2's right external fuel tank, igniting and destroying both aircraft. There is clear and convincing evidence that the collision was caused by MP 2's momentary loss of situational awareness. MP 2's situational awareness was redirected while he was conducting an on board weapons inventory state check requested by MP 1 approximately half way through the 180-degree turn. During this check, MP 1 descended and reduced his airspeed. There is substantial evidence that MP 1's failure to maintain flight contract parameters in the turn substantially contributed to the mishap. Analysis of computational data of altitude, airspeed, rates of turn and cockpit simulations referenced against voice recordings indicate that, following the weapons check, MP 2 acquired Rove 3 as lead (thinking this aircraft was MA 1). MP 2 did not realize he had lost track of MA 1 since he perceived Rove 3 as MA 1. He then completed the remainder of the turn based on Rove 3, resulting in the mid-air collision with MA 1.

*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 by the United States or by any person referred to in these conclusions or statements.*