

## **EXECUTIVE SUMMARY**

### **AIRCRAFT ACCIDENT INVESTIGATION**

**F-16C, T/N 87-0347  
HOMESTEAD AIR RESERVE BASE, FLORIDA  
15 JANUARY 2008**

On 15 January 2008, at approximately 1839 Eastern Standard Time an F-16C aircraft, tail number (T/N) 87-0347 departed Homestead Air Reserve Base (ARB), Florida (FL) to conduct a night training mission using night vision goggles (NGVs). Approximately 38 minutes after takeoff the mishap aircraft (MA) impacted the Gulf of Mexico 126 nautical miles west, southwest of Homestead ARB. The mishap pilot (MP) ejected successfully from the MA and was recovered by a US Navy helicopter. The MP sustained minor injury to his left knee during ejection. He received medical attention at a local civilian hospital and was released. The MA was destroyed upon impact and the mishap caused no injuries or known damage to private property. However, north of Miami, FL two individuals sustained minor abrasions from MA debris that washed-up on the shore.

The MA was based at Homestead ARB, assigned to the 93d Fighter Squadron (93 FS), 482d Fighter Wing (482 FW). The mishap occurred within the lateral boundaries of Warning Area 174B (W-174B) west of Key West, FL.

The flight lead and MP coordinated three defensive engagements against a four-aircraft flight of F-16s from the 93 FS. The MP executed a 90 degree left turn, beam maneuver, the MA descended rapidly in a steep left bank, nose down attitude; he lost a discernible horizon and became disoriented. The MP did not recognize the position of the aircraft in relation to the horizon (attitude) and despite multiple attempts could not recover the MA.

The MP was current, experienced and qualified for the mission. All MA maintenance personnel were trained, experienced and qualified. A thorough review of maintenance procedures revealed no problems or adverse trends which could have contributed to the accident.

The Accident Investigation Board president found by clear and convincing evidence, the cause of the mishap was the MP's failure to recognize and recover from spatial disorientation in a timely manner due to inadequate instrument cross check. Additionally, sufficient evidence indicates that the nighttime over-water environment, use of NVGs, and weather conditions limited the visible horizon, substantially contributing to the mishap event.

*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 those conclusions or statement*