## **EXECUTIVE SUMMARY**

## AIRCRAFT ACCIDENT INVESTIGATION

## F-22A, T/N 06-4125 JOINT BASE ELMENDORF-RICHARDSON, ALASKA 16 NOVEMBER 2010

On 16 Nov 2010, at approximately 19:43:27 hours local time (L), an F-22A, tail number 06-4125, assigned to the 525<sup>th</sup> Fighter Squadron, 3<sup>rd</sup> Wing, Joint Base Elmendorf-Richardson (JBER), Alaska, impacted the ground during controlled flight approximately 120 nautical miles (NM) northeast of JBER. The mishap pilot (MP) did not attempt ejection and was fatally injured upon impact. The mishap aircraft (MA) was destroyed. There was no damage to private property. A damage cost of \$147,672,000.00 includes the total destruction of the MA along with its internal stores.

The mishap occurred on a 3-ship night opposed surface attack tactics training mission, during the return-to-base portion of the mission while the MP was attempting to rejoin with his flight lead. At approximately 19:42:18L, the MA experienced an engine bleed air leak malfunction. The MP began a descent and retarded the throttles to IDLE power. At 19:42:53L, the MA entered a 240 degree roll through inverted, and the nose down (ND) pitch attitude increased. At approximately 19:43:24L, the MP initiated a dive recovery. Three seconds later, the aircraft impacted the ground in a left bank at approximately 48 degrees ND at a speed greater than 1.1 Mach.

The board president found, by clear and convincing evidence, the cause of the mishap was the MP's failure to recognize and initiate a timely dive recovery due to channelized attention, breakdown of visual scan, and unrecognized spatial disorientation.

Additionally, the board president found, by preponderance of evidence, organizational training issues, inadvertent operations, personal equipment interference, and controls/switches were factors that substantially contributed to the mishap.

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, if any, may not be considered as evidence in any civil or criminal proceeding arising from the 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.