

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

F-16C T/N 92-003886

N4633.3 E15631.4

22 July 2012

On 22 July 2012 at approximately 1109 hours local time (L), an F-16C tail number 92-003886, assigned to the 14th Fighter Squadron, 35th Fighter Wing, Misawa Air Base, Japan, experienced a loss of thrust from the engine that the mishap pilot (MP) could not correct. The MP safely ejected from the aircraft and was recovered without injury. The mishap aircraft (MA) crashed into the Pacific Ocean approximately 750 miles northeast of Misawa Air Base, Japan and was destroyed. There was no damage to private property. The estimated loss to the United States government is \$32,610,492.34.

The mishap occurred on a deployment sortie from Misawa Air Base, Japan to Eielson Air Force Base, Alaska to participate in exercise RED FLAG-Alaska. The MP was number three of a four-ship formation of F-16s. The pre-mission briefing, arrival to the aircraft, ground operations, take off, departure, rejoin with the tanker aircraft, and four air to air refueling were uneventful. The weather for departure and en-route was visual meteorological conditions. In straight and level flight at 25,000 feet mean sea level (MSL), 310 Knots Calibrated Airspeed (KCAS) the MA experienced a loss of thrust with a corresponding roll back of engine RPM. The MP established a minimum descent profile and attempted to restore thrust using F-16 checklist procedures. The pilot could not restore thrust and ejected from the aircraft at 2,300 feet MSL.

The board president found, by clear and convincing evidence, the cause of the mishap was an un-commanded closure of the main fuel shutoff valve (MFSOV). The main fuel shutoff valve in the closed position stops fuel from reaching the engine and thus the engine stopped producing thrust. By a preponderance of evidence, the board determined the MA experienced a partial closure of the MFSOV for over three minutes, which limited the thrust of the engine to sub-idle RPM of 70%, and then fully closed after three minutes at which time the engine rolled back to jet fuel starter assisted RPM of 20% until impact. The board could not determine with reasonable certainty the reason for the un-commanded closure of the MFSOV, due to the loss of several vital pieces of evidence. Specifically, the wreckage of the cockpit fuel control panel, fuel control wiring harness from the cockpit to the engine and other associated fuel system components were not recovered from the ocean floor, and the Crash Survivable Data Unit was crushed by extreme water pressure.

Under 10 U.S.C. § 2254(d) the opinion of the accident investigator 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.