EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION
F-16C, S/N 89-2102
31ST FIGHTER WING, AVIANO AIR BASE, ITALY
24 MARCH 2009

On 24 March 2009 at approximately 1506 hours local time (L), an F-16CM fighter aircraft, S/N 89-2102, experienced an engine flame out approximately 20 nautical miles south of Aviano Air Base, Italy. The mishap aircraft (MA) was assigned to the 510th Fighter Squadron (FS), 31 Fighter Wing (FW), based at Aviano Air Base, Italy. The mishap pilot (MP) was assigned to the 510 FS, 31 FW, Aviano Air Base, Italy. The MP jettisoned his external wing tanks approximately seven nautical miles south of Aviano Air Base, Italy and accomplished a successful flame out landing on runway 05. One wing tank impacted a storage structure connected to an occupied dwelling causing significant damage to the structure and its contents as well as damage to the surrounding environment. The other wing tank impacted a road in very close proximity to two occupied and two unoccupied dwellings causing damage to the dwellings and the surrounding environment. No personnel were injured, the tanks were destroyed and aircraft damage was confined to the engine and its components.

The mishap sortie began as the second sortie of a day, pit and go during the MP's four-ship flight lead certification with the Squadron Commander as the wingman and instructor pilot (IP). After leveling the aircraft at 16000 feet mean sea level (MSL) and on an air traffic control (ATC) vector to the working airspace, the MP experienced a sudden loss of thrust. He immediately pointed the aircraft at Aviano Air Base and maintained level flight to establish optimum gear up glide speed of 250 knots. The MP assessed that he was at the outer edge of glide range. When directed by his IP and after visually confirming that the aircraft was over a sparsely populated area, he jettisoned his wing tanks and slowed the aircraft to the new optimum gear up speed of 235 knots. He maintained his heading and configuration until he determined that he had sufficient energy to maneuver the aircraft to align the aircraft with runway 05. He configured the aircraft on short final using normal gear extension procedures and accomplished an uneventful roundout, flare and touchdown approximately 2000 feet beyond the approach end of runway 05.
After engaging the arresting cable, the MP accomplished the critical action procedures for fuel leak on the ground, and emergency ground egress

The sudden loss of thrust was the result of fuel starvation caused by a massive fuel leak at the connection between the fuel/oil cooler fuel discharge outlet and the main fuel tube. The seal at this connection failed because technical orders regarding this connection were not properly followed by the engine maintenance personnel who performed and verified the maintenance.

By clear and convincing evidence, the cause of the mishap was failure to perform maintenance in accordance with established technical orders.

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 statements.