EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION F-16C, SERIAL NUMBER (S/N) 84-1311 309th FIGHTER SQUADRON (FS), LUKE AIR FORCE BASE (AFB), ARIZONA 16 JUNE 2000

On 16 June 2000, at approximately 0751 Mountain Standard Time (MST), the mishap aircraft (MA), an F-16C, S/N 84-1311 crashed on the Tohono O'odham Indian Reservation, approximately 13 miles South West of Sells, Arizona. The mishap pilot (MP), a lieutenant assigned to the 309th FS, 56th Fighter Wing, Luke AFB, Arizona, was on a basic operational training course syllabus air combat maneuvers (ACM) sortie as number two of a three-ship flight. The MP ejected safely, sustaining minor cuts and abrasions. The MA was destroyed upon impact with the loss valued at \$19,131,324.33. The impact area was in a remote desert area, the site has been thoroughly cleaned of debris, and to date, no claims for damage to private property have been filed as a result of this mishap.

Shortly before impact, the MA engine quit. The MP attempted an airstart, but the engine did not restart. The engine remained in a stagnated condition. Upon reaching minimum ejection altitude, the MP ejected from the MA.

Clear and convincing evidence showed the mishap aircraft (MA) engine quit due to the mishap pilot (MP) inadvertently shutting off the throttle. The MP did not correctly follow Airstart Critical Action Procedures (CAPS), including achieving technical order recommended airstart airspeed or engaging the jet fuel starter (JFS). The MP ejected when he reached minimum ejection altitude. There were three occasions in the sequence of events where this mishap could have been avoided:

- Had the MP not inadvertently shut off the engine, airstart would not have been needed.
- The MP did not perform the fourth step in his Airstart CAPS, Airspeed As Required. Required minimum airstart airspeed was 250 knots, and the MP had less than 200 knots throughout most of his airstart attempt. Maintaining 250 knots airspeed would have given the engine a chance to airstart without the need for the jet fuel starter (JFS).
- The MP did not perform the sixth step in his Airstart CAPS, JFS Start 2 When Below 20,000 Feet And 400 Knots. The flight lead directed the student not to use the JFS. Using the JFS reduces the minimum required airstart airspeed down to 170 knots for maximum endurance airspeed. Starting the JFS would have given the engine a chance to airstart with the airspeed below 200 knots.

There were two categories of factors directly contributing to this accident: human factors and cockpit/crew resource management (CRM), and two categories of factors indirectly contributing to this accident: training and supervision.

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 of the United States or by any person referred to in those conclusions or statements.