

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

**F-15C, S/N 79-0070
TYNDALL AIR FORCE BASE, FLORIDA
13 NOVEMBER 2008**

On 13 November 2008, an F-15C, serial number (S/N) 79-0070, assigned to the 95th Fighter Squadron, Tyndall Air Force Base, Florida, experienced an anti-skid brake failure on a full stop landing, engaged the departure end arresting cable and departed the end of the paved surface beyond runway 13R. The mishap aircraft (MA) came to rest in a ditch 53 ft beyond the paved surface, and the mishap pilot (MP) egressed the aircraft without injury. The mishap resulted in damage to the MA valued at \$1.25 million and other damages to the airfield and environmental cleanup totaling approximately \$37,000. There was no damage to private property.

The mishap occurred on a 4-ship air-to-air training mission. After takeoff, the MA's landing gear would not retract due to a malfunction in the landing gear system's wiring, which prevented the MP from flying the remainder of the planned mission. The MP decided to fly three practice approaches for proficiency while reducing fuel to a safer weight for landing. Shortly before landing, the MP incorrectly assessed he had fuel trapped in the external fuel tank. The applicable checklist directed landing at an angle of attack corresponding to an airspeed approximately 20 knots faster than normal, which increased the required landing distance. After landing and attempting to aerobrake, the MP lowered the aircraft nose and applied the brakes. The MA's anti-skid brakes did not respond due to an electrical short in the wiring; however, other braking systems were available but not attempted by the MP. The MA engaged the barrier at the end of the runway. The weight and speed of the MA exceeded the capabilities for the barrier, resulting in the MA dragging the barrier over 1,000 ft, continuing past the end of the paved surface, over an earthen berm, and into a shallow ditch.

The Accident Investigation Board (AIB) President found by clear and convincing evidence that the mishap was caused by a compounding sequence of analysis and assessment errors by the MP.

Additionally, the AIB President found by substantial evidence three factors contributed to the mishap. First, the failure of two wires in separate wire bundles attached to the right main landing gear significantly contributed to the mishap by preventing the landing gear from retracting leading to a condition where fuel did not transfer from the external tank, and causing a failure of the anti-skid brake system. Second, a lack of positive interaction or intervention by the Supervisor of Flying contributed to the mishap by not adequately assisting the MP in determining an appropriate course of action. Third, the presence of an earthen berm and shallow water drainage ditch directly adjacent to the end of the runway 13R paved surface contributed to the mishap by increasing the amount of damage sustained to the MA.

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 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.