**EXECUTIVE SUMMARY**
**UNITED STATES AIR FORCE**
**AIRCRAFT ACCIDENT INVESTIGATION**

**A-29, T/N 13-2015**
**MOODY AFB, GA**
**6 MARCH 2017**

On 6 March 2017, at approximately 1432 hours local time (L) the Mishap Aircraft (MA), an A-29B, T/N 13-2015, assigned to the 81st Fighter Squadron, 14th Flying Training Wing, Moody Air Force Base, Georgia, crashed during a close air attack (CAA) student flight and impacted the ground approximately 1.5 nautical miles (NM) northwest of the Homerville Airport. The Mishap Instructor Pilot (MIP) and Mishap Student Pilot (MSP) ejected safely, with the MIP sustaining injury during the ejection. The MA was destroyed on impact with minor damage to approximately one acre of private property. Damage to government property is estimated at $17,772,729.

The mishap occurred during a CAA syllabus sortie (flight) as part of the Afghan A-29B training course. The MA was number two of a two-ship formation with the MSP in the front seat and the MIP in the back seat. The MA experienced a Power Management System (PMS) fault early in the sortie profile, and after consultation with Top-3 leadership, the mission proceeded. Approximately one hour later, the propulsion system suddenly malfunctioned, significantly reducing propeller speed (Np), driving the propeller blades toward the feathered position, and increasing engine torque above limits. The MIP immediately initiated the Compressor Stall checklist; however, he exited that checklist after he established aircraft control and assessed the engine was not stalled. The MIP then took action to trouble shoot the propulsion system malfunction and restore normal operation; cycling the PMS system from Auto to Manual, then back to Auto, and later placing it in Manual for the remainder of the flight without any apparent effect on aircraft performance. The MIP quickly decided to divert to the nearest field at Homerville in an attempt to make a straight-in landing. The MIP continued to balance throttle inputs with engine limits seeking maximum performance from the aircraft until he commanded ejection at approximately 300 feet above ground level. The MA crashed approximately 1.5 NM from the Homerville airport, 5 minutes and 26 seconds after the propulsion system malfunction.

The Accident Investigation Board (AIB) found by a preponderance of the evidence the MA loss was caused by a propulsion system malfunction that dramatically reduced thrust. The MA retained some degree of thrust, but was incapable of sustaining level flight. It additionally found visibility restrictions from the rear cockpit and task oversaturation to be substantially contributing factors. The initial heading flown to allow the MIP to visually acquire Homerville and the ensuing task saturation resulted in a longer ground track than intended. Although analysis of recorded flight data and subsequent flight simulation is not conclusive, it suggests it was possible to reach the field for a very limited period of time if the aircraft flew on a straight line to Homerville.