

EXECUTIVE SUMMARY

ABBREVIATED AIRCRAFT ACCIDENT INVESTIGATION MQ-1B, T/N 99-3058 53 NM SOUTHWEST OF JALALABAD AIR BASE, AFGHANISTAN 26 OCTOBER 2012

On 26 October 2012, at approximately 2222 hours Zulu time (Z), an MQ-1B remotely piloted aircraft, tail number 99-3058, impacted the ground 53 nautical miles southwest of Jalalabad Air Base (AB), Afghanistan, after completing a 20.4 hour surveillance mission. The mishap remotely piloted aircraft (MRPA) was forward deployed from the 432d Wing, Creech Air Force Base (AFB), Nevada (NV). The MRPA was operated by the 18th Reconnaissance Squadron, Creech AFB, NV. The MRPA and one air-to-ground Hellfire missile were destroyed on impact. The total damage to United States Government property was assessed to be \$4,600,000.00. There were no injuries or damage to other government or civilian property.

On 26 October 2012, at 0159Z, after normal preflight checks, the MRPA taxied and departed Jalalabad AB, Afghanistan. Handover from the Launch and Recovery Element to the Mission Control Element (MCE) was uneventful. At approximately 2200Z, the MCE completed their assigned surveillance mission and steered towards Jalalabad AB to return to base. At 2206Z, the Mishap Crew, which consisted of the Mishap Pilot (MP) and the Mishap Sensor Operator, received a Variable Pitch Propeller (VPP) servo high temperature caution message on the heads down display. This message was the first indication of a VPP problem. Eventually, the VPP failed in a manner that only allowed movement to a lower propeller pitch angle. While attempting to resolve the problem, the MP momentarily commanded the propeller pitch to an angle that produced reverse thrust. The system would not accept commands to a higher propeller pitch angle. Next, the MP shut down the engine to increase the glide distance due to the reverse thrust. The resulting loss of forward thrust prevented the MRPA from returning back to base or reaching a suitable landing location. Finally, the MP was directed to crash the MRPA, with the Hellfire missile attached, into the terrain because it would not be able to reach Jalalabad AB and there were no Forward Operating Bases nearby. The MP did as directed causing the MRPA to impact the terrain at 2222Z.

The Abbreviated Accident Investigation Board (AAIB) President found by clear and convincing evidence the cause of the mishap was a combination of a mechanical failure of the VPP servo motor and unnecessary movements of the propeller pitch control lever by the MP. Furthermore, the AAIB President found by a preponderance of evidence that incorrect and insufficient checklist guidance, reinforced by incorrect simulator training, were substantially contributing factors to the mishap.

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.