

EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION

MQ-1B, T/N 06-3169
KANDAHAR AB, AFGHANISTAN
12 JUNE 2008

On 12 June 2008, at 0203 local (L) Kandahar time, an MQ-1B aircraft, tail number 06-3169, impacted the ground six miles south of Kandahar Air Base (AB), Afghanistan, while participating in a combat support mission in support of Operation ENDURING FREEDOM. It was forward deployed from the 432d Wing, Creech AFB, Nevada. An aircrew from the 62d Expeditionary Reconnaissance Squadron (ERS), 451st Air Expeditionary Group (AEG), launched the Mishap Remotely Piloted Aircraft (MRPA) from the Launch and Recovery Element at Kandahar. Upon impact the MRPA was damaged beyond economical repair. The estimated cost of aircraft damage is \$3,849,481. There were no injuries and there was no additional damage to government or private property.

All maintenance and preflight activities were normal, and the aircraft took off at 0152L. Approximately ten minutes after takeoff, the MRPA experienced uncommanded and erratic flight control movements and the Multi-Spectral Targeting System (MTS) unexpectedly powered down. These malfunctions were accompanied by aural warning tones and the display of at least eight warnings in the warning section of the command screen on the pilot and sensor operator heads down display (HDD). The Mishap Pilot was unable to regain control of the MRPA, and it departed controlled flight and impacted the ground in an unpopulated area six miles south of Kandahar AB. The wreckage was subsequently destroyed by Explosive Ordnance Disposal personnel for security reasons.

The Accident Investigation Board President determined, by clear and convincing evidence, the cause of the mishap was a faulty connection between the Primary Control Module (PCM) and W160 cable's P01 connector. The faulty cable connection caused numerous bus node communication failures that resulted in intermittent commanding of flight control surfaces, loss of control of the aircraft, and impact with the ground shortly after takeoff. The PCM and W160 cable's P01 connector were not recovered due to subsequent destruction of the wreckage by Explosive Ordnance Disposal. Therefore, no determination could be made regarding the cause of the faulty connection between the PCM and W160 cable's P01 connector.

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.