

EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION
MQ-1B, T/N 03-3121BALAD AB, IRAQ
2 JUNE 2008

On 2 June 2008, at 2310 local (L) Balad time, an MQ-1B aircraft, tail number 03-3121, impacted the ground 2 km northwest of Balad Air Base (AB), Iraq, 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 332 Air Expeditionary Wing, launched the Mishap Remotely Piloted Aircraft (MRPA) from the Launch and Recovery Element at Balad. Upon impact, the MRPA was damaged beyond economical repair. The estimated cost of aircraft damage is \$4.05 Million. There were no injuries and there was no damage to government or private property.

After normal maintenance and pre-flight checks, the MRPA taxied and departed at approximately 2300L (local time). Approximately 11 minutes into flight, as the MRPA was passing an altitude of 3,800 feet, the MSO observed a "Battery - leaking current" indication for both batteries and notified the MP. Before the MP could execute the appropriate emergency checklist, both MP and MSO observed a total loss of telemetry and video signal—an indication of a "lost link" condition. Concurrently the MP and MSO observed amperage readouts of approximately 217 amps (normal is 65-70). The MP also noticed a "flight computer - volts low" indicator. Due to the nature of the emergencies, the MP initiated the Emergency Checklist for aircraft lost link. The mishap crew also contacted Air Traffic Control who notified the mishap crew that they had lost the MRPA on radar. In order to rule out Ground Control Station (GCS) failure, the mishap crew relocated to another GCS to attempt to establish link with the aircraft, but was unsuccessful. The wreckage was subsequently discovered by other aircraft and destroyed for security reasons.

The Accident Investigation Board President determined, by clear and convincing evidence that the cause of the mishap was an aircraft electrical system overload. Furthermore, he concluded the failure of the Number 2 Alternator was a substantially contributing factor. This led to a failure in the Primary Control Module, including the flight computer. A loss of the flight computer would have led to engine shutdown or loss of aircraft control resulting in the subsequent crash of the aircraft.

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.