# EXECUTIVE SUMMARY

## AIRCRAFT ACCIDENT INVESTIGATION

**MQ-1B, T/N 06-3165**
**ALI AB, IRAQ**
**2 MAY 2008**

On 2 May 2008, at 0104 GMT, an MQ-1B aircraft, tail number 06-3165, impacted the ground approximately 45 NM east of Ali Air Base (AB), Iraq, while participating in a combat support mission in support of Operation IRAQI FREEDOM. It was forward deployed from the 432d Wing, Creech AFB, Nevada. An aircrew from the 111th Reconnaissance Squadron based at Ellington Field, TX (Air National Guard), attached to the 15th Reconnaissance Squadron at Creech AFB, NV, was flying the Mishap Remotely Piloted Aircraft (MRPA) at the time of the mishap. Upon impact, the MRPA was damaged beyond economical repair. The estimated cost of aircraft damage is $3.828 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 for a twenty hour mission. The MRPA flew the mission without observed incident for over 18.7 hours. During the MRPA's return to base, the MRPA experienced several cycles of the nose dipping. Consequently, the Mishap Pilot (MP) disengaged the auto-pilot function and began flying manually. Shortly after assuming control, the MP was alerted that the engine had failed. The crew initiated emergency procedures for engine failure. The engine would successfully restart for approximately 15 seconds, but then cease operations for 45 seconds. Because of the repeated failures, the MRPA was losing altitude necessary to successfully land at Ali Air Base. On approximately the third engine failure, the mishap crew experienced a "lost link" condition with the MRPA. By this time, altitude was now under 4,000 feet and the aircraft was still approximately 45 NM from Ali AB. The MRPA recovered link and lost link approximately two more times. The mishap crew determined that the aircraft was not recoverable and configured the aircraft for a controlled hard landing in accordance with applicable directives. The MRPA impacted the ground at 0104 GMT.

The Accident Investigation Board President determined, by clear and convincing evidence that the cause of the mishap was a failure of the Ignition Module. The intermittent failure of the Ignition Module caused several significant uncommanded reductions in engine speed, resulting in reduced power production and several lost link conditions. These failures ultimately resulted in the aircraft impacting the ground.

**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.**