

EXECUTIVE SUMMARY

ACCIDENT INVESTIGATION BOARD

MQ-1B PREDATOR, S/N 02-003090 NORTHEAST OF JOINT BASE BALAD, IRAQ 22 FEBRUARY 2009

On 22 February 2009, at approximately 1235 Greenwich Mean Time (GMT), an MQ-1B Predator remotely-piloted aircraft, serial number 02-003090, impacted the ground in an unpopulated region of Iraq while conducting a combat support mission for Operation IRAQI FREEDOM. The mishap remotely-piloted aircraft (MRPA) was forward deployed from the 432d Air Expeditionary Wing, Creech Air Force Base, Nevada. A North Dakota Air National Guard aircrew from the 119th Wing, 178th Reconnaissance Squadron based at Hector International Airport (IAP), Fargo, North Dakota (ND) was flying the MRPA at the time of the mishap. The MRPA was destroyed on impact. The estimated cost of aircraft damage is \$4,456,200. There were no ground injuries and there was no known damage to other government or private property.

After normal maintenance and pre-flight checks, the MRPA taxied and departed for its mission. The launch occurred without incident and control of the aircraft was passed from the Launch and Recovery Element at Joint Base Balad, Iraq to the Mission Control Element (MCE) at Hector IAP, ND. Within the MCE, control of the MRPA passed between four successive aircrews, and the mission continued without any observed incident or malfunction for over 8 hours. The fourth crew, the mishap crew (MC), consisting of a pilot and a sensor operator, assumed control of the MRPA at approximately 1200 GMT. At the time of the mishap, the MRPA was flying a pre-programmed mission over a classified area in Iraq. The MRPA had been in this orbit for over 1.5 hours prior to the mishap. At 1225 GMT, the MC experienced a lost link condition with the MRPA. A lost link condition refers to a situation in which the Predator aircraft cannot transmit or receive data or commands from any control element via satellite or line of sight communications. The MC was unable to recover the communications link with the MRPA. At approximately 1235 GMT, the MRPA impacted the ground and was destroyed.

The Accident Investigation Board President determined, by clear and convincing evidence, that the cause of this mishap was an electrical failure within the Primary Control Module (PCM). This failure caused the aircraft to lose all communications capability. This failure simultaneously triggered pre-programmed flight termination commands, which placed the MRPA in an unrecoverable spin and ultimately resulted in the MRPA impacting the ground. Because the wreckage was not recovered in its entirety, the AIB did not have access to the PCM and was therefore unable to determine the root cause of the PCM failure.

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.