EXECUTIVE SUMMARY

ABBREVIATED AIRCRAFT ACCIDENT INVESTIGATION

MQ-1B, T/N 07-3204
Jalalabad Air Base, Afghanistan
5 June 2011

On 5 June 2011, the mishap remotely piloted aircraft (MRPA), an MQ-1B Predator T/N 07-3204, was flying an operational mission supporting Operation Enduring Freedom. The MRPA was assigned to the 432d Wing but was being flown by the 20th Reconnaissance Squadron (20 RS) out of Whiteman AFB, Missouri. The MPRA was presumed to have crashed northeast of Jalalabad Air Base (AB) after flying 19.5 hours of a tasked surveillance mission. There are no known injuries and there was no known damage to other government or private property. The estimated loss is valued at $4.4M and includes the MRPA and one Hellfire missile.

After normal maintenance and pre-flight checks, the MRPA taxied and departed Jalalabad AB at approximately 1648Z on 4 June 2011. The Launch and Recovery Element at Jalalabad AB accomplished an uneventful hand-off to the Mission Control Element (MCE) at Whiteman AFB at 1702Z. On 5 June 2011, at 12:18Z, 19.5 hours into flight, the MCE lost satellite link with the MRPA. At that time the MRPA was supporting troops on the ground who were in contact with the enemy, and was flying in clouds near convective activity. The last known position of the MRPA was approximately 60 nautical miles northeast of Jalalabad Air Base in a mountainous area that is known for the rapid development of thunderstorms. The MRPA's datalogs showed that it was in controlled flight and that all systems, to include the engine and datalink, were operating normally right up until the time of the loss of the satellite link. Subsequent intermittent data updates showed that the MRPA was out of control and descending rapidly. The MRPA was not found and was presumed to have crashed in a remote mountainous area of Afghanistan before it could complete its emergency return-to-base profile.

The Abbreviated Accident Investigation Board president found by clear and convincing evidence that hazardous weather and, specifically, a lighting strike during the MRPA's sortie, caused the loss of communications and subsequent crash. Historical weather data showing the high potential for the rapid development of hazardous weather in the MRPA's operating area, weather forecasts on the day of the mishap, satellite imagery showing the rapid development of thunderstorms, witness statements, and the analysis of the MRPA's datalogs indicated "several factors that were the characteristics of a lightning strike as determined by analysis and prior lightning strike events" all support this conclusion.