EXECUTIVE SUMMARY

ABBREVIATED AIRCRAFT ACCIDENT INVESTIGATION
MQ-1B, 07-3249, Republic of Djibouti
17 May 2011

On 17 May 2011, at approximately 0217L, an MQ-1B, Tail Number (T/N) 07-3249, deployed from the 49 Wing (WG) at Holloman Air Force Base (AFB), NM impacted the terrain during approach and landing in Djibouti. The mishap crew (MC), deployed from the 432 WG, Creech AFB, NV, were recovering the mishap remotely piloted aircraft (MRPA) on an early return from an operational mission in support of Operation ENDURING FREEDOM (OEF). The MRPA returned early due to a slow oil leak. The mishap pilot (MP) attempted to maneuver the MPRA to avoid clouds on the arrival and intercepted final approach course and glidepath. However, low clouds and high humidity in the Djibouti local area obscured both infrared sensors used by the crew to visually identify the runway environment at night. Additionally, inaccuracies in the LN100G Inertial Navigation System (INS)/global positioning system (GPS) altitude resulted in a commanded glidepath approximately 420 feet below the correct glidepath. On the approach to Djibouti from the west, the terrain slopes from approximately 50 feet above mean sea level (MSL) at the touchdown zone upwards to 300 feet above MSL at four nautical mile (NM) from the end of the runway on final approach. The MP initiated a go-around at approximately 20 feet above ground level (AGL) at 2.4 NM on final approach, but was too late to avoid impact. The MRPA and one Air-to-Ground Missile (AGM)-114 Hellfire missile onboard were destroyed on impact at a cost of $2,983,766. There was no other government or private property damage or injuries to civilians on the ground.

After a careful and complete investigation of this mishap, the AIB president found by clear and convincing evidence the following two causes of this mishap. First, inaccurate LN100G INS/GPS altitudes resulted in dangerously low glidepath indications; and second, the MC failed to recognize and correct the dangerous situation in time to avoid impact with the terrain. Additionally, the AIB president found from a preponderance of the evidence that low clouds and high humidity in the Djibouti local area and MP deviation from AFI 11-202, Volume 3, ACC SUP directed minimum approach altitudes significantly contributed to this accident.

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.