

EXECUTIVE SUMMARY

AIRCRAFT MISHAP INVESTIGATION MQ-1B, T/N 08-3229, SOUTHERN CALIFORNIA LOGISTICS AIRPORT 20 April 2010

On 20 April 2010, at 1057 local time (PDT), a remotely piloted aircraft (RPA), MQ-1B tail number 08-3229 (“RPA 08-3229,” “RPA,” “aircraft,” or “mishap aircraft”), impacted the ground at Southern California Logistics Airport (KVCV, the former George AFB) in Victorville, California. The aircraft and one inert Hellfire training missile were a total loss. Damage to government property was estimated at \$3,743,211.00. The crash did not result in any injuries to people, but did result in minor damage to non-military property (a runway light).

After normal maintenance and pre-flight checks, the mishap crew began conducting launch and recovery training at KVCV with RPA 08-3229. The aircraft was piloted remotely by a student aircrew from the 3rd Special Operations Squadron (3 SOS), Cannon Air Force Base, New Mexico, under the supervision of an instructor aircrew from 163rd Reconnaissance Wing (163 RW), California Air National Guard. The student and instructor crews were physically located at KVCV. The student crew was experienced in Mission Control Element operations and was qualifying in Launch and Recovery Element (LRE) operations in anticipation of a deployment. Approximately 50 minutes into the mission, the mishap aircrew was conducting a touch-and-go landing on runway 17 when the RPA experienced a sudden loss of lift due to low airspeed likely exacerbated by gusting wind conditions. This caused the RPA to descend suddenly to a hard landing on the left landing gear. The ground reaction force on the left landing gear exceeded the design load limit for the gear, causing it to break. Subsequently the left wingtip dragged on the ground and caused the aircraft to depart the prepared surface. The RPA came to rest approximately 300 feet from the initial touchdown location, after completing a left 180 degree turn. The fuselage broke into two main sections, and numerous smaller parts were liberated from the aircraft.

The Mishap Investigation Board President determined, by clear and convincing evidence, that the main cause of the mishap was failure of the student pilot and instructor pilot to recognize that the aircraft’s speed was too low for the weather conditions at KVCV. The most significant contributing factor was the mishap pilot’s experience level and lack of preparatory training. Other significant factors were MQ-1 LRE Instructor Pilot training program deficiencies, poor pilot to vehicle interface, and unexpectedly difficult wind conditions. Investigation also revealed a manufacturing flaw, an inverted element, in the landing gear box, but there was insufficient evidence to determine whether the flaw contributed to the mishap.

Under 10 U.S.C. 2254(d), any opinion of the mishap investigators as to the cause of, or the factors contributing to, the mishap set forth in the mishap investigation report may not be considered as evidence in any civil or criminal proceeding arising from the mishap, 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.