

**EXECUTIVE SUMMARY**  
**AIRCRAFT ACCIDENT INVESTIGATION**  
**MQ-1L "PREDATOR," S/N 01-003079**  
**AT INDIAN SPRINGS AIR FORCE AUXILIARY AIR FIELD**  
**ON 22 SEPTEMBER 2004**

On 22 September 2004, at approximately 1213 Local Pacific Daylight Savings Time, an MQ-1L Predator, Remotely Piloted Aircraft (RPA), serial number 01-003079, 11th Reconnaissance Squadron, 57th Wing, Nellis Air Force Base, Nevada, experienced a hard landing and subsequently departed Runway 26 at Indian Springs Air Force Auxiliary Airfield while conducting a training mission supporting student sensor operator (SSO) qualification. There were no injuries or fatalities from the accident. Upon impact, the mishap RPA (MRPA) was damaged beyond field level repair. Other than the damage to the aircraft, valued at \$2,883,977, there was no significant damage to government or private property.

The MRPA had been inspected prior to takeoff and had been flying for approximately 3 hours and 12 minutes when the mishap pilot (MP) began an approach to a touch-and-go landing. A touch-and-go landing occurs when an aircraft briefly touches the runway then immediately takes off without stopping. The MP arrested the descent of the MRPA (flared) approximately 15 feet above the runway. The MRPA's airspeed decreased below that required to control the aircraft, and the MRPA rapidly dropped to the runway. The MRPA landed hard, and the MP began to execute a go-around; however, the MRPA bounced again before the third and final runway impact. The impact sequence damaged landing gear and flight control components. The MRPA then slid straight for approximately 1,000 feet before veering left. The MRPA continued to skid off the prepared surface, and the MP discontinued the go-around attempt. The MRPA came to rest 52 feet from the edge of the runway, 4,340 feet from the approach threshold.

The primary cause of this accident, supported by clear and convincing evidence, was the failure of the MP to correct a high flare in time to prevent a hard landing. The hard landing and subsequent bounces resulted in failure of the landing gear and flight control components from which the MP was unable to recover. The MP continued a go-around attempt after the MRPA became unflyable, resulting in runway departure. Five significant factors, supported by substantial evidence, contributed to this accident: (1) the MP failed to correct an unstable short final approach that exceeded published command criteria for a go-around; (2) the mishap SSO and mishap instructor sensor operator failed to provide corrective calls for excessive airspeed and vertical speed deviations; (3) a decreasing performance windshear caused the MRPA to lose 7 knots of airspeed late in the flare; (4) the MP failed to reduce aircraft power to prevent departing the runway; and (5) the Predator's lack of sensory cues contributed to the MP's decision to continue a go-around attempt after the MRPA had become unflyable.

*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 an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.*