

EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION

RQ-1L, S/N 96-3023

INDIAN SPRINGS AIR FORCE AUXILIARY FIELD, NEVADA

14 SEPTEMBER 2000

On 14 September, at 0835L (1535 Zulu), an RQ-1L, S/N 96-3023, crashed on federal rangeland 7 NM north-northeast of Indian Springs AFAF, NV. The RQ-1L, assigned to the 15th Reconnaissance Squadron, 57th Wing, Indian Springs AFAF, was conducting a combined continuation training and laser characterization mission. The pilot, instructor sensor operator, and the two sensor operators, all of the 15 RS, were not injured in the mishap. There were no injuries to any ground personnel or any significant property damage.

Shortly before impact, the mishap pilot inadvertently activated the "Program AV EEPROM" menu option, which dumped the RAM memory in the UAV's Primary Control Module, clearing the preprogrammed data, including weight, frequencies, tail number and IFF squawk. As a result, the RQ-1L lost the C-band data link connection with the ground control station (GCS). Instead of transitioning to a stable, lost-link profile, the aircraft entered a stalled condition, resulting in ground impact approximately three minutes later. The UAV was totally destroyed upon impact with the loss valued at \$3,700,000. The UAV impacted on federal range property.

The primary cause of this mishap, supported by clear and convincing evidence, was the mishap pilot's activation of the "Program AV EEPROM" menu option during flight. As a result of habit developed over time and a sense of being rushed, the pilot failed to verify the menu page and options to ensure he was hitting the correct key before entering a command. A contributing factor in this mishap is the basic design of the Predator control system. First, the menu system in the GCS allows a crewmember to place the aircraft in hazardous conditions without any warning or verification that the keystroke made is the correct or intended entry. Second, the Primary Control Module (PCM) default values for weight and lost link altitude created a condition that led to aircraft impact.

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.