

547650

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

QF-4E DRONE, S/N 67-0320

HOLLOMAN AIR FORCE BASE, NEW MEXICO

3 OCTOBER 2001

On 3 October 2001 at 0732 local, a QF-4E, S/N 67-0320 crashed at Holloman AFB, NM. The QF-4E, assigned to the Det 1, 82 ARTS, 53 WG, Holloman AFB, was part of a live-fire test mission.

Mission planning and required briefings with all participants were conducted on 2 October 2001. Aircraft preparations, preflight and engine start were uneventful. It was planned that the mishap drone would execute an automatic takeoff (ATO) using the automatic flight control system (AFCS). During takeoff roll the mishap aircraft began to experience slight but increasing negative and positive pitch oscillations. These pitch oscillations continued as the mishap aircraft commenced rotation, pitching up initially to 14.5 degrees nose high and then pitching down to -20.3 degrees nose low, ultimately causing the aircraft to impact the runway.

No one was injured in the accident. The mishap drone was totally destroyed upon impact and the post-crash fire. There was damage to the runway, the wreckage was contained within the airfield boundary.

The primary cause of the mishap was the incorrect installation of the tri-axis rate gyro which provides pitch, roll and yaw rate information to the AFCS executing the ATO.

*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.*