

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION, F-15E, S/N 87-0186

334TH FIGHTER SQUADRON (FS), SEYMOUR JOHNSON AIR FORCE BASE (AFB),

NORTH CAROLINA

04 JUNE 2003

On 04 June 2003, at 2051Z/1651 local time, while performing a Basic Fighter Maneuvers (BFM) training mission, the mishap crew (MC) initiated ejection from the mishap aircraft (MA), F-15E, Serial Number 87-0186. The MC, a pilot and instructor pilot assigned to the 334 FS, Seymour Johnson AFB, North Carolina, ejected safely and were recovered by a local fire rescue team with only minor injuries. The MA was destroyed on ground impact in an unpopulated wooded area on a farmer's property.

There is clear and convincing evidence that the aircraft departed controlled flight due to a major flight control malfunction. A major defect in the right stabilator actuator, a result of improper depot level repair, caused the right stabilator to fail to a full 25-degree trailing edge up position which caused the MA to depart controlled flight and subsequently rendered the MA unrecoverable. Improper MA radome repairs were found that didn't cause the aircraft departure or render the aircraft unrecoverable, but were contributory to the MA spin.

The mishap engagement was a 9,000-foot offensive BFM set-up. At the start of the engagement the MC was established in a right hand turn, nose on (pure pursuit) position at 16,800 feet mean sea level (MSL), 420 knots. The MC called "fight's on", initiated an offensive break turn to 6.5 Gs, then continued to point at or slightly in front of the defending aircraft (pure to lead-pursuit) maintaining approximately 5.2 Gs. The angle of attack (AOA) increased as the airspeed decreased towards 320 knots. The aircraft departed controlled flight up and to the left at approximately 17,600 feet MSL, rapidly entering a left-hand, upright, flat spin. The mishap instructor pilot (MIP) took control of the aircraft and initiated spin recovery procedures in accordance with the spin recovery display (SRD) in the cockpit. The MA continued in a left-hand spin for six revolutions then recovered in a wings level, 30-degree nosedive, at 11,500 feet MSL. The MIP accelerated to 200 knots then gently applied 2 Gs in back pressure. The aircraft immediately re-entered a left hand spin.

The MC determined the aircraft was unrecoverable and initiated ejection at approximately 9,000 feet MSL. After the successful ejection the MC landed in a wooded area and sustained only minor injuries. The MA continued in a left-hand spin and was destroyed by ground impact and subsequent fire causing only minor damage to the farmer's property.

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 these conclusions or statements.