

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

F-15C, T/N 78-0498
KADENA AIR BASE, JAPAN
17 JANUARY 2006

On 17 January 2006, at 0959 local time, an F-15C aircraft, tail number (T/N) 78-0498, impacted the water 51 nautical miles east of Kadena Air Base (AB), Japan, while participating in a training mission. The mishap pilot (MP) ejected safely from the aircraft and was recovered from the Pacific Ocean by rescue forces. The mishap aircraft (MA) was based at Kadena AB, Japan, and assigned to the 44th Fighter Squadron, of the 18th Wing, to provide rapidly deployable, combat-ready air superiority to defend the mutual interests of the United States and Japan. The mishap occurred within the lateral boundaries of Warning Area 173 (W-173) east of the island of Okinawa, Japan. W-173 is specially designated airspace restricted from use by non-military air and sea traffic when scheduled for military training. The MA was completely destroyed upon impact, and the mishap caused no damage to private property.

Thirty-one minutes after takeoff, the MP heard a loud bang and felt the MA shudder. The MP received multiple right engine overheat and fire warnings. He correctly applied the necessary emergency procedures. After the MP shut down the right engine, he noted the flight controls were not responding normally and the MA began to exhibit a right rolling tendency. The MP steadily moved the control stick left to maintain level flight. When the MP reached the limit of available left stick movement, the aircraft rolled to the right and slightly nose down. The MP corrected back to level flight from this first uncommanded roll by adding left rudder. When the MA again rolled to the right despite the MP holding full left inputs, he assessed that the MA's right roll could not be stopped, and he ejected. Both U.S. and Japanese rescue forces responded to the search and rescue site. The MP was successfully hoisted into the first helicopter to arrive and transported to a nearby military hospital for examination. He suffered only minor injuries.

The MP has performed exceptionally well throughout his career, winning a number of awards for his flying and instructor ability. The MP's actions during the mishap sequence were focused, precise and appropriate; his actions did not contribute to the mishap. All maintenance personnel who worked on the MA were well-trained, experienced and qualified. A thorough review of maintenance procedures revealed no problems or adverse trends which could have contributed to the accident.

The AIB president did not find clear and convincing evidence to determine the root cause of this mishap. The AIB president found sufficient evidence to conclude that a right engine failure, which was not contained within the engine case, substantially contributed to the mishap. Engine parts piercing the right engine case, or extremely hot air (exceeding 400° C), or both, damaged critical flight control systems, causing the aircraft to enter an unstoppable right roll.

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 the accident, 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.