

**EXECUTIVE SUMMARY**  
**AIRCRAFT ACCIDENT INVESTIGATION**  
**F-16CJ, S/N 92-3901**  
**BALAD AB, IRAQ**  
**15 JULY 2007**

On 15 July 2007, at 1650 local time (L), an F-16CJ, S/N 92-3901, crashed on takeoff at Balad Air Base, Iraq. The Mishap Aircraft (MA), assigned to the 13th Fighter Squadron, 35th Fighter Wing, Misawa Air Base, Japan, was the lead aircraft of a flight of two, attempting to take off for a Close Air Support mission in support of Operation IRAQI FREEDOM. The newly installed nose gear tire catastrophically failed at 144 knots at or near the approach end cable, due to under inflation. The Mishap Pilot (MP) misanalyzed the auditory and physical sensations of the nose gear tire failure as an engine malfunction and took action with a heavyweight, high-speed abort. Once the nose gear tire failed, the wheel's rim disintegrated followed by a collapse of the nose gear assembly, after which the MP was unable to maintain aircraft control. The aircraft continued to skid down the runway toward two cargo aircraft holding short of the runway. Once clear of the cargo aircraft and prior to runway departure, the MP safely ejected and suffered no injuries. The MA then departed the runway, tumbled, and was completely destroyed. No other property damage or injuries to military personnel or civilians resulted from the mishap.

Maintenance personnel installed a new nose gear tire on the MA during the morning and took an improper pressure reading, documented at 1000L, resulting in an under-inflated nose tire. During the post tire change inspection, the tire change 7-level technician failed to identify the under-inflated nose tire. Following a shift change at approximately 1300L, it appears the MA's crew chief changed the time of the original tire pressure check to 1300L in the aircraft's forms, instead of performing another pressure check as directed. In a photo taken during a reenlistment ceremony at 1415L, the MA's nose tire appears to be under-inflated. The Production Superintendent signed the MA Exceptional Release at 1530L without noticing the under-inflated nose tire. The MP also failed to discover the under-inflated nose tire during his 1550L MA preflight. Shortly before the MP's takeoff, the end of runway maintenance crew failed to detect the under-inflated nose tire at 1629L. These inadequate inspections are attributed to complacency and overconfidence regarding a new nose tire, which caused several personnel to give the new nose tire less scrutiny as compared to a nose tire with several takeoffs and landings.

The AIB President determined clear and convincing evidence exists that this mishap was directly caused by the failure of an under-inflated nose tire on take off and the MP's misanalysis of the situation, which led to his abort decision. An inaccurate pressure check and a failure to take another pressure check as ordered caused the under inflation. Inadequate nose tire inspections by several personnel contributed to the under inflation cause. Similar indicators between tire failures and engine malfunctions, F16 simulator training, and a threat to personnel outside the base contributed to the MP's misanalysis cause and made his abort decision reasonable.

*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.*