

**EXECUTIVE SUMMARY**  
**AIRCRAFT ACCIDENT INVESTIGATION**  
**T-38A, SERIAL NUMBER (S/N) 70-1949**  
**560<sup>TH</sup> FLYING TRAINING SQUADRON (FTS), RANDOLPH AIR FORCE BASE (AFB), TX**  
**19 MARCH 2003**

On 19 March 2003, at approximately 1544 Central Standard Time (CST), the Mishap Aircraft (MA), a T-38A, S/N 70-1949, flown by a highly experienced instructor pilot in the rear cockpit, was cleared for a no-flap touch-and-go on runway 32R at Randolph AFB, Texas.

Immediately after a normal touchdown, the right main tire failed. The crew executed a high-speed abort on the runway and asked the tower to raise the BAK-15 arresting barrier.

The right main tire disintegrated near mid-field, and the aircraft shifted from slightly left to slightly right of the runway centerline. Nearing 2000 feet from the end of the runway, the crew determined they would not stop within the runway remaining and locked their shoulder harnesses in anticipation of engaging the BAK-15 barrier.

The combined effects of strong winds (19 knots left-to-right crosswind component), reduced rudder authority, and friction from the dragging right main wheel caused the aircraft to drift right during the last 1000 feet of roll out. Despite full left rudder deflection, differential braking, and intermittent use of nose wheel steering, the pilot could not regain directional control.

The aircraft departed the concrete portion of the runway at approximately 80 knots and continued over the asphalt portion of the overrun. The right main gear dropped off the hard surface into the dirt just before impact with the right BAK-15 support stanchion and concrete mounting pad.

The force of impact from the 5.5 inch steel pole ripped through the left side of the aircraft nose, front cockpit, and engine intake before stopping at the left wing root. As the stanchion breached the front cockpit, it forced the throttle quadrant into the left leg brace of the front seat. This contact overcame the seat locking mechanisms and forced the leg brace up, initiating an involuntary ejection for the front seat pilot.

At the time of ejection, the aircraft was 5-10 degrees nose low and banked 10-15 degrees to the right (the nose strut and right main landing gear were sheared off in the collision with the concrete support pad and barrier motor housing). Safe ejection parameters for the T-38A seat did not exist and the front seat pilot was fatally injured. The rear seat pilot stayed in the aircraft until it came to rest 83 feet from the BAK-15 support stanchion and escaped serious injury.

The aircraft was damaged beyond economical repair, with an approximate loss of \$3,471,930.00. The mishap took place adjacent to the runway on Randolph AFB, TX, and no private property was damaged in the mishap.

Clear and convincing evidence reveals that the cause of this accident was catastrophic failure and disintegration of the right main tire leading to loss of directional control at the end of a high-speed abort.

**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 of the United States or by any person referred to in those conclusions or statements.**