

US safety agency cites 'metal fatigue' in Boeing 777 incident

March 6 2021



Boeing regional headquarters in Arlington, Virginia: US air safety regulators have confirmed that metal fatigue was a factor when a Boeing 777 engine caught fire and rained debris on houses below last month

A key US safety regulator said Friday initial investigations confirm metal fatigue was a factor in last month's scare when a Boeing 777

engine caught fire and rained debris on houses below.

But the National Transportation Safety Board (NTSB) said it has not reached a final conclusion on the causes of the incident involving Pratt & Whitney engines.

The United Airlines flight to Hawaii returned to Denver soon after disembarking after the engine caught fire and began breaking apart.

No one was hurt in the incident, but the episode raised questions about maintenance on the jets.

The NTSB update confirmed fan blades in the engine had broken off, and said "the fracture surface was consistent with fatigue."

That confirms the agency's initial finding of [metal fatigue](#), a weakening of the material due to stress after repeated use.

The NTSB said maintenance data for the blade with the [fatigue](#) fracture showed it had experienced 2,979 cycles—a takeoff and landing—since its last inspection, meaning it was a long way from its next inspection which is required every 6,500 trips.

The agency is continuing its investigation and sent the damaged fan blade "to the metallurgical laboratory at Pratt & Whitney for further examinations led by a senior NTSB metallurgist."

Following the latest incident, Boeing 777s with the same [engine](#) were grounded worldwide, and the Federal Aviation Administration (FAA) ordered inspections of all Pratt & Whitney engines similar to the one that broke apart.

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