Date:	Wednesday 17 March 1982
Time:	08:10

Type:	Airbus A300B4-203
Owner/operator:	Air France
Registration:	F-BVGK
MSN:	070
Year of manufacture:	1979
Total airframe hrs:	9053 hours
Cycles:	3376 flights
Engine model:	General Electric CF6-50C2
Fatalities:	Fatalities: 0 / Occupants: 124
Other fatalities:	0
Aircraft damage:	Destroyed, written off
Category:	Accident
Location:	Sana'a International Airport (SAH) - Yemen
Phase:	Take off
Nature:	Passenger - Scheduled
Departure airport:	Sana'a International Airport (SAH/ODSN)
Destination airport:	Cairo International Airport (CAI/HECA)
Confidence Rating:	Accident investigation report completed and information captured

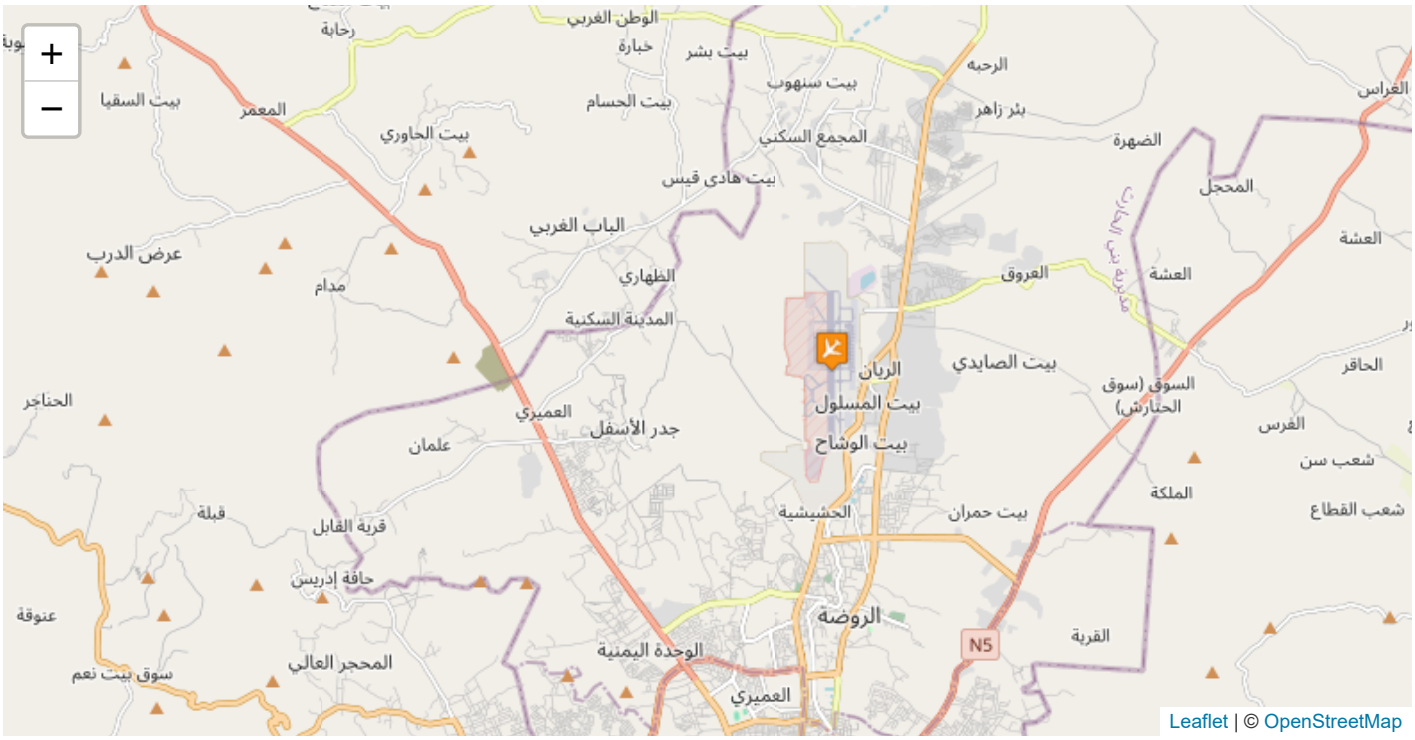
Narrative:
While travelling at 95 knots during takeoff from San'a International Airport, an explosion was felt, followed by shimmy and vibrations. The crew, thinking a tyre had exploded, aborted the takeoff. The explosion was in fact caused by an uncontained failure of the stage 1 HP compressor disk of the no. 2 engine. Debris punctured the fuel tank, causing a fire on the right hand side of the aircraft. The propagation of a low cycle fatigue crack on one of the embossments of the disk rim caused the disk fracture.

CAUSES: "The accident directly resulted from the uncontained explosion of a first stage high pressure turbine disk of the right hand engine. The propagation of a low cycle fatigue crack on one of the embossments of the disk rim was at the origin of the disk fracture.
This cracks, which existed before, had not been detected during the inspection conducted in the operator's workshops, according to the method defined by the manufacturer and in accordance with the requirements of the airworthiness authority. The investigations showed that it was necessary, not only to reduce the intervals between the inspections of these disks and conduct two independent sequential inspections, but also to modify the design and make sure they were

progressively replaced by the new type. It seems obvious that the limit life validation methods used at the time of the accident, were still insufficient, as far as the probability of non-detection of cracks was concerned."

Sources:

Location



Images:

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Revision history:

Date/time Contributor Updates