

SERIOUS INCIDENT

Aircraft Type and Registration:	Boeing 737-8K5, G-FDZY
No & Type of Engines:	2 CFM56-7B27E turbofan engines
Year of Manufacture:	2011 (Serial no: 37261)
Date & Time (UTC):	10 January 2017 at 0821 hrs
Location:	Bournemouth Airport, Dorset
Type of Flight:	Commercial Air Transport (Passenger)
Persons on Board:	Crew - 7 Passengers - 177
Injuries:	Crew - None Passengers - None
Nature of Damage:	Three fan blades damaged
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	42 years
Commander's Flying Experience:	11,672 hours (of which 7,868 were on type) Last 90 days - 168 hours Last 28 days - 54 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The left engine ingested a bird as the aircraft took off and the crew diverted to London Gatwick for an uneventful, overweight precautionary landing.

History of the flight

As the aircraft was rotated for takeoff the left engine ingested a bird, which was later identified as a seagull. A change to the engine sound was heard and the indicated engine vibration increased, accompanied by light airframe vibration. Takeoff thrust was maintained without engine limits being exceeded.

The crew levelled the aircraft at 4,000 ft amsl to assess the situation and requested a return to Bournemouth to hold. They informed ATC of the birdstrike and asked for the runway to be inspected.

With the aircraft in level flight, the vibration reduced and the engine was operating within allowable parameters. The crew liaised with the aircraft operator by radio and decided to divert to London Gatwick, which has a longer runway than Bournemouth. The time in the hold was used to brief the crew and passengers, burn fuel to reduce the landing weight and consult the Quick Reference Handbook; the '*High Engine Vibration*' checklist was reviewed to pre-empt an increase in vibration in the event of a go-around. It was apparent that engine vibration worsened if power was increased, so the crew decided to perform a precautionary

overweight landing using FLAP 15. Landing performance was confirmed satisfactory and the crew briefed on flare technique, stopping and selecting non-standard FLAP 1 in the event of a go-around.

A PAN call was made when the diversion was initiated and the crew briefed Gatwick ATC that they intended to vacate the runway and stop to allow the fire service to examine the engine and brakes. The crew informed the cabin crew and passengers that they were diverting to Gatwick and explained the expected order of events on the ground.

The landing was uneventful and, after the fire service had completed an external check of the aircraft, it was taxied to a parking stand with the left engine shut down. Three fan blades were damaged by the birdstrike. The engine was subsequently repaired on-wing.