

3 February 2014  
FOIA reference: F0001776

Dear XXXX

I am writing in respect of your recent request of 6 January 2014, for the release of information held by the Civil Aviation Authority (CAA).

Your request:

*“Can you provide me with information on the number of reported engine stall/compressor failure incidents reported to the CAA for the period August 2011 - November 2011.*

*Also can you provide me with the number of lightning strike incidents reported to the CAA for the same period”.*

Our response:

In assessing your request in line with the provisions of the Freedom of Information Act 2000 (FOIA), we are able to provide the information below.

Incident reports are provided to the CAA under the terms of the Mandatory Occurrence Reporting (MOR) scheme, as described under Article 226 of the Air Navigation Order 2009 (ANO). Each report made is reviewed and, where appropriate, further investigation carried out and action taken.

We have searched the UK CAA MOR database for the following occurrences regardless of aircraft type or operation and have provided an excel summary of those reports:

1. Engine stall/surge or reports involving compressors for the period 1 August 2011 to 30 November 2011;
2. Any report which involves lightning strikes for the period 1 August 2011 to 30 November 2011.

We have however, removed identifying information from these reports as this information is exempt from disclosure under section 44 (1) (a) of the FOIA.

**Civil Aviation Authority**

Section 44 (1) (a) of the FOIA provides that information is exempt information if its disclosure is prohibited by, or under, any enactment. Under Section 23 of the Civil Aviation Act 1982, information which relates to a particular person (which includes a company or organisation) and has been supplied to the CAA pursuant to an ANO is prohibited from disclosure (a copy of this exemption can be found enclosed).

In addition, the CAA has previously confirmed to you that it holds a MOR relating to a Thomas Cook Airlines flight routing from Montego Bay to Manchester on 4 September 2011. We can neither confirm or deny whether that report meets either of the criteria you have specified in this request as to do so could reveal information about a particular organisation which is exempt from release under Section 44 (1) (a) for the reasons explained above. Under Section 44 (1) (c), the duty to confirm or deny does not arise if the confirmation or denial would reveal information that is exempt under Section 44 (1) (a).

If you are not satisfied with how we have dealt with your request in the first instance you should approach the CAA in writing at:-

Mark Stevens  
External Response Manager  
Civil Aviation Authority  
Aviation House  
Gatwick Airport South  
West Sussex  
RH6 0YR

[mark.stevens@caa.co.uk](mailto:mark.stevens@caa.co.uk)

The CAA has a formal internal review process for dealing with appeals or complaints in connection with Freedom of Information requests. The key steps in this process are set in the attachment.

Should you remain dissatisfied with the outcome you have a right under Section 50 of the Freedom of Information Act to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner's Office  
FOI/EIR Complaints Resolution  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF

[www.ico.gov.uk/complaints.aspx](http://www.ico.gov.uk/complaints.aspx)

Should you wish to make further Freedom of Information requests, please use the e-form at <http://www.caa.co.uk/foi>.

Yours sincerely

Rick Chatfield  
Information Rights and Enquiries Officer

## **CAA INTERNAL REVIEW & COMPLAINTS PROCEDURE**

- The original case to which the appeal or complaint relates is identified and the case file is made available;
- The appeal or complaint is allocated to an Appeal Manager, the appeal is acknowledged and the details of the Appeal Manager are provided to the applicant;
- The Appeal Manager reviews the case to understand the nature of the appeal or complaint, reviews the actions and decisions taken in connection with the original case and takes account of any new information that may have been received. This will typically require contact with those persons involved in the original case and consultation with the CAA Legal Department;
- The Appeal Manager concludes the review and, after consultation with those involved with the case, and with the CAA Legal Department, agrees on the course of action to be taken;
- The Appeal Manager prepares the necessary response and collates any information to be provided to the applicant;
- The response and any necessary information is sent to the applicant, together with information about further rights of appeal to the Information Commissioners Office, including full contact details.

**Freedom of Information Act: Section 44**

(1) Information is exempt information if its disclosure (otherwise than under this Act) by the public authority holding it-

- (a) is prohibited by or under any enactment,
- (b) is incompatible with any Community obligation, or
- (c) would constitute or be punishable as a contempt of court.

(2) The duty to confirm or deny does not arise if the confirmation or denial that would have to be given to comply with section 1(1)(a) would (apart from this Act) fall within any of paragraphs (a) to (c) of subsection (1).

**Section 23 of the Civil Aviation Act is such a statutory prohibition. Accordingly, the obligations of the CAA to comply with Section 23 are unaffected by the Freedom of Information Act.**

*Under Section 23, information supplied to the CAA in connection with its regulatory functions and which relates to a particular individual or organisation must not be disclosed by the CAA unless such disclosure is authorised by one of the exceptions contained in Section 23 itself.*

File	Date	Aircraft Category	Location of event	Headline	Narrative
201109363	05/08/2011	Airplane	Frankfurt	A320 struck by lightning during push back lost complete comms. One ground crew member injured. Emergency personnel contacted. Engineering also contacted to perform lightningstrike inspection.	Headset man injured. Pushback cancelled and a/c towed back on stand.
201109444	06/08/2011	Airplane	Leeds Bradford (LBA)	Lightning strike just prior to the top of descent, causing air conditioning pressurisation valve malfunction. Cabinaltitude climbed to 7000ft. Flight continued. Lightning strike during descent. A/c inspected after landing, VHF antenna found with burn mark and two static dischargers damaged on LH wing.	Slight damage to nose cone and cargo pod.
201109588	12/08/2011	Airplane	En Route		During descent whilst avoiding weather in the vicinity ofthe aerodrome, a lightning strike was encountered. All systems indicated normal and no burning smells present. Approach was continued without incident. Engineering inspection on stand revealed scorch marks to LH forward fuselage and door 1L.
201110162	26/08/2011	Airplane	Liverpool	Lightning to left side of flight deck and door 1L.	During the take-off run a lightning strike was observed to hit the far end of the runway, illuminating a Cb immediately in the path of the a/c. Rejected take-off initiated at 110kts per SOP and ATC informed. A/c exited runway and Brake Cooling chart consulted, resulting in a required cooling time of 35mins. During the waiting time the weather became worse resulting in further delay.
201110305	31/08/2011	Airplane	Lyon	High speed RTO due to lightning strike on runway. While avoiding some Cbs during initial approach in level flight, a flash and sound of lightning impact heard by both pilots.	Lightning strike inspection carried out and two static dischargers found damaged.
201110451	03/09/2011	Airplane	En Route		
201111307	17/09/2011	Airplane	Manchester (MCT)	Lightning strike to RH side of radome during approach. Engineering inspection revealed minimal damage.	Following fuselage inspection, it was noted that there were seven temporary fasteners fitted, but a further six fasteners that had burn marks but the fasteners had not been replaced. Also noted were two areas that had been blended in the LH static ports critical area. These two blends were not shown in the a/c damage chart and the damage had notbeen completely removed. No record of rework could be found. The temporary fasteners that were installed were dome headed, but no washers were fitted over the countersinks in the skin as called for in the SRM.
201111864	28/09/2011	Airplane	Lyon	Lightning strike damage to LH fuselage.	
201112697	02/10/2011	Airplane	En Route	Lightning strike to starboard nose section of fuselage. Minor paint damage to nose plus erosion on static wicks. Leaving 6000ft in climb avoiding weather, a/c sustained lightning strike to area below windshield. A/c systems checked all OK. Some damage found during inspection on ground.	
201113404	26/10/2011	Airplane	En Route		

## Flat

File Number	Date	Aircraft Category	Location of Occurrence	Headline	Narrative
201109320	06/08/2011	Helicopter	Norwich	Engine surged during hover with nr1 engine barrier filterwarning.	Barrier filter warning went to 5 bars on lift off, with surge sounds coming from compressor. Barrier filter removed. Compressor assembly visually inspected for freedom of movement iaw 72-00-32 rev 13. All found satisfactory. Barrier filter replaced.
201109505	12/08/2011	Helicopter	Beachy Head	MAYDAY declared and forced landing carried out after a loud 'bang' which was followed by a high frequency 'whirring' sound.	As seagulls were present, pilot initially decided a majorbirdstrike had occurred, impacting the tail rotor. MAYDAY declared. Another company a/c confirmed that the tail rotor was intact. A flat field was chosen as a suitable landing location. Just before touchdown another 'bang' occurred. Run-on landing carried out and normal shutdown carried out. Two company vehicles attended a/c and MAYDAY cancelled. CAA Closure: After engine shutdown, the rotor assembly was found to be seized due to the failure of a 2nd stage axial compressor blade. Secondary damage incurred to adjacent blades and vanes. The failure of the 2nd stage compressor blade is believed to have been initiated by corrosion pitting stress risers and propogated by fatigue at the blade root area. Due to low utilisation, the compressor had not been overhauled for 29 years, although it was in compliance with OEM manufacturers recommended overhaul periods.
201112024	02/10/2011	Airplane	En Route	During climb, EACAM caution 'Eng 2 compressor vane fault'. A/c returned.	Every time that power was increased, the caution illuminated.

201112953	15/10/2011	Airplane	Manchester (MCT)	<p>Take-off rejected at approximately 100kts due to a loud bang and a/c vibration. ATC report of fire/smoke. After fire service inspection, a/c returned to stand.</p>	<p>Engineering inspection found significant damage to nr2 engine. CAA Closure: A preliminary report into the cause of the incident from the manufacturer describes the primary cause as being due to a previous birdstrike. This led to a high cycle fatigue crack propagation in two blades within the stage 4 'booster' (compressor) section. The cracks propagated from the root area of the leading edge, leading to the liberation of one of the two blades. The engine will be repaired as necessary to return it to service. The operator has procedures in place to both report and investigate birdstrike events.</p>
201113583	29/10/2011	Helicopter	Welshpool	<p>Nr2 engine failure in the hover.</p>	<p>approx three times and a popping sound was heard, immediately followed by the torque split alarm. Nr2 Tq needle was dropping, as was N1 and N2. A/c landed and nr2 engine shut down. The TOT on nr2 engine was 900+deg C and paramedics on board both reported seeing flames and glowing embers around the engine exhaust. Pilot operated both extinguishers in turn as the origin of the fire could not be determined. Subsequent inspections revealed a catastrophic failure of the nr2 engine compressor assembly in the area of the axial compressor stage 6. Engine replaced. CAA Closure: The initial probable cause of the compressor failure was deemed to be FOD, given that the other modes of failure, corrosion and erosion, could not be identified in the compressor assembly. The FOD turned out to be a small piece of locking wire, thought to have been swept up from the engine decking in the post event clean-up. Subsequent OEM investigations concluded that there was a FOD induced failure of a compressor blade. Continuation training has been revised to include a section relating to the importance of minimising FOD and promoting second inspections prior to cowling closure.</p>

Flat

201113983	08/11/2011	Airplane	En Route (Highland)	Sparks reported from LH engine during flight.	Passenger reported seeing sparks emitting from LH engine exhaust during flight. No abnormal indications observed inflight deck, however cabin crew reported unusually loud engine noise throughout flight. A ground run at maximum power was carried out which revealed further evidence of sparks. Engineers suspect dirty compressor. P1 decided not to operate any further flights with a/c in this condition.	
201114212	15/11/2011	Airplane	London-Heathrow - LHR (Greater)	PAN declared due to right engine surge. Single engine approach flown and manual landing carried out. Emergency services in attendance.	Right engine surge diagnosed upon initial descent. Abnormal vibration was present and engine control indications displayed. Engine considered suspect so a PAN was declared. Precautionary single engine approach was flown and a Flap 20 manual landing was carried out successfully. Right engine shutdown on taxi-in.	