

INCIDENT

Aircraft Type and Registration:	Boeing 767-31K, G-TCCB	
No & Type of Engines:	2 General Electric Co CF6-80C2B7F turbofan engines	
Year of Manufacture:	1997 (Serial no: 28865)	
Date & Time (UTC):	14 September 2013 at 1500 hrs	
Location:	Shortly after departure from Manchester Airport	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 11	Passengers - 320
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Oven insert	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	44 years	
Commander's Flying Experience:	10,340 hours (of which 8,200 were on type) Last 90 days - 200 hours Last 28 days - 75 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquires by the AAIB	

Synopsis

Whilst airborne, shortly after the rear galley ovens had been switched on, a strong acrid burning smell was noticed emanating from the No 3 oven. The oven was switched off and associated circuit breakers opened. As the acrid smell became more intense a fire extinguisher was discharged into the oven and the aircraft diverted safely.

The oven meal insert tray was damaged and too big for the oven. The oven pin, which prevents the insert tray from touching the exposed elements at the back of the oven, was also found to be bent. This allowed the oven insert to contact the exposed heating elements of the oven.

History of the flight

The aircraft was on a scheduled flight from Manchester Airport to Antalya Airport Turkey. About 10 minutes after takeoff the cabin crew switched on the ovens in the rear galley. Approximately three minutes later they noticed a strong acrid burning smell emanating from No 3 oven. The oven was switched off and associated circuit breakers opened. The cabin crew informed the Senior Cabin Crew Manager (SCCM) who then briefed the commander, adding that fire fighting had not yet been initiated.

The acrid smell became more intense and the cabin crew saw "wispy white smoke"

emanating from the sides and top of the oven. A fire extinguisher was discharged into the oven on two separate occasions and the SCCM informed the commander that fire fighting had been initiated. On being advised that the acrid smell and smoke was not decreasing the commander declared a PAN, completed the '*Smoke, Fire or Fumes*' checklist and initiated a diversion to East Midlands Airport.

Prior to landing, having ascertained that the intensity of the smoke was no longer increasing, the commander briefed the SCCM that following a normal landing the aircraft would be stopped on the runway as a precaution. The landing was uneventful, with the Rescue and Fire Fighting Service (RFFS) in attendance. After consulting the SCCM and the RFFS the commander positioned the aircraft onto the taxiway where it was stopped and shut down. The RFFS boarded the aircraft using ladders at the rear left door and secured the oven and galley area. The oven was removed by the RFFS; no evidence of burning on, in or around it was evident. The aircraft was then towed to stand where the passengers disembarked. There were no injuries.

Aircraft ovens and meal insert trays

The oven meal insert trays are controlled and installed into the aircraft's ovens by an independent ground services company. The inserts come pre-loaded with the passengers' meals for the flight.

The compartment and wiring of oven No 3 was inspected on G-TCCB. No smoke or fire damage was evident. However, the oven pin, which prevents the insert from touching the exposed elements at the back of the oven, was found to be bent. This allowed the oven insert to contact the exposed heating elements of the oven.

All the aircraft's other ovens were operated at their maximum heat for 20 minutes after which no smells or smoke were observed. Air extraction grilles above the ovens were found to be blocked with dust, and were subsequently cleaned. The oven insert tray, found to be in a bad state of repair and misshapen, was probably the initiator for the smoke.

As a result of this incident the operator checked all ovens and meal tray inserts on its UK fleet. One oven was found unserviceable, and several insert trays were found to be distorted and were replaced.

Two types of ovens were fitted to the operator's Boeing 767s (B767) with one being 11 mm narrow than the other. After testing with a serviceable, but slightly dented insert tray, it was discovered that the trays could be loaded easily into the larger oven, and with force into the narrower oven.

Safety actions

The operator has identified a new insert which will be compatible with both of their B767's ovens.