Boeing 777-236, G-VIIC

AAIB Bulletin No: 9/2004	Ref: EW/G2004/03/19	Category: 1.1
INCIDENT		
Aircraft Type and Registration:	Boeing 777-236, G-VIIC	
No & Type of Engines:	2 General Electric GE90-85B turbofan engines	
Year of Manufacture:	1997	
Date & Time (UTC):	28 March 2004 at 0317 hrs	
Location:	In the cruise between Barbados and London	
Type of Flight:	Public Transport (Passenger)	
Persons on Board:	Crew - 15	Passengers - 176
Injuries:	Crew - Nil	Passengers - Nil
Nature of Damage:	Nil	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	53 years	
Commander's Flying Experience:	13,729 hours (of which 3,884 were on type)	
	Last 90 days - 264 hours	
	Last 28 days - 93 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of the flight

Approximately three and a half hours into a scheduled flight from Barbados to London, a crew member noticed an unusual odour in the cabin. Two minutes later a toilet smoke warning sounded and smoke was seen emanating from beneath the door of toilet 'N'; located by the R4 door. Fire fighting equipment was gathered and the toilet door was partially opened revealing flames and smoke. A BCF fire extinguisher was discharged into the toilet compartment and the door closed. When the fire was confirmed as extinguished, the area was investigated. The source of the fire was found to be in a stowage area behind the toilet vanity mirror.

All three shelves of the stowage area were full of items required to service the toilet such as paper towels and tissue boxes. In the roof of the stowage area is a ballast assembly that was hot to the touch. In contact with this were some of the flammable materials including a charred pack of paper napkins. These were dampened with water and all paper items removed from the heat source. Acting on a request from the aircraft commander, another Boeing 777 captain, travelling as a passenger, attempted to trip the circuit breaker controlling the electrical supply to the ballast assembly. The circuit breaker, J8 on panel P320 named 'LAV LIGHTS RIGHT', was identified and tripped but the

lighting in toilet 'N' remained illuminated. Tripping of the 'LAV LIGHTS LEFT' circuit breaker was considered but dismissed and instead, the electrical supply to the ballast assembly itself was removed at the unit. The toilet was declared unserviceable for the rest of the flight.

Further Investigation

It was noted that next to the stowage unit, written in black felt tip pen, were the words 'Do not over stock, only 1 each item'. The company subsequently found this written in all toilets throughout their Boeing 777 fleet but they were unable to establish the source.

It was also noted that the correct circuit breaker to trip the power supply to this toilet's ballast assembly was named 'LAV LIGHTS LEFT', even though the toilet is situated on the right side of the aircraft. In addition to controlling the ballast power supply to the right toilets, this circuit breaker, ambiguously, also controls some services to the left toilets.

Follow-up action

As a result of this incident the company issued Red Notice RN03W/04 to all Boeing 777 Cabin Crew. This notice requires Cabin Crew, as part of their security check, to ensure that the upper shelf behind the mirror is not used for storage of any flammable material. During subsequent checks by Cabin Crew, flammable material has been discovered on the upper shelf and the company is currently designing a modification to physically prevent items from contacting the ballast assembly.