INCIDENT

Aircraft Type and Registration:	Boeing 757-28A, G-FCLA
No & Type of Engines:	2 Rolls-Royce RB211-535E4-37 turbofan engines
Year of Manufacture:	1996 (Serial no: 27621)
Date & Time (UTC):	11 October 2012 at 1620 hrs
Location:	Glasgow Airport
Type of Flight:	Commercial Air Transport (Passenger)
Persons on Board:	Crew - 8 Passengers - 231
Injuries:	Crew - None Passengers - 1 (Minor)
Nature of Damage:	None
Commander's Licence:	Airline Transport Pilot's Licence
Commander's Age:	57 years
Commander's Flying Experience:	16,000 hours (of which 12,000 were on type) Last 90 days - 227 hours Last 28 days - 88 hours
Information Source:	Aircraft Accident Report Form submitted by the commander and further information from the aircraft operator

Synopsis

Smoke and fumes entered the flight deck and cabin during passenger disembarkation. Both engines were shut down at the time but the Auxiliary Power Unit (APU)[1] was running. The aircraft commander ordered an evacuation of the passengers still on board. This was completed successfully, using a combination of escape slides and the normal disembarkation route. A faulty APU was identified as the source of the smoke and fumes. There was one minor injury.

History of the flight

The aircraft landed at Glasgow after a flight from Dalaman in Turkey. On board were 231 passengers and eight crew members. As the aircraft taxied to Stand 32, the flight crew started the Auxiliary Power Unit (APU), in accordance with normal procedures. It started normally and the aircraft continued to its allocated stand uneventfully. The passenger disembarkation process had begun, and the flight deck crew were occupied with normal post-flight activities, when the commander became aware of a strong smell. It was accompanied by a blue haze emanating from behind the instrument panel and the overhead circuit breaker panel.

Footnote

[1] The APU provides electrical power and air for the air conditioning system once the main engines are shut down.

External power had been connected and, at first, the commander thought the problem may be electrical in nature, although the smell and density of the haze suggested otherwise. There were no fire warnings or other abnormal cockpit indications. The commander opened the flight deck door and discovered that the smoke was not restricted to the flight deck, as he had thought, but that there was thick smoke in the forward passenger cabin, as well. The commander rapidly made his way to Doors 2[2], to contact the cabin crew who were there supervising disembarkation via the airbridge. The smoke was thicker in this area and the commander could see a significant number of passengers, mid-cabin, waiting to disembark; the rear cabin was obscured by the smoke. Passengers in the forward cabin had already disembarked.

The commander ordered that the aircraft be evacuated without delay and returned to the flight deck to shut down the APU and alert the emergency services. The cabin crew began evacuation procedures. The cabin crew at Doors 4 re-armed their doors and deployed both escape slides. Only the right hand slide was deployed at Doors 3 due to obstructions on the other side, and passengers continued to use the airbridge at Doors 2. Doors 1 were not used as the forward cabin was already empty.

The co-pilot left the aircraft via the airbridge and co-ordinated passengers evacuating directly onto the apron via the escape slides. When he was relieved by emergency service crews, he returned to the cabin to assist the evacuation. In the cabin, all the lavatory smoke alarms activated, adding to the noise inside, but the commander was aware of the evacuation instructions being shouted by the cabin crew. He walked back to Doors 3 to inspect the inflated slide there and check that the cabin had been evacuated. The smoke was still thick and acrid but did not seem to be intensifying.

Of the 231 passengers, approximately 60 evacuated via the slides, the rest by the airbridge. There was only one very minor injury. Once all the passengers had evacuated, the cabin crew also left the aircraft. They were followed by the flight deck crew, after a brief exchange with fire crews and engineers.

Engineering actions

The APU was identified as the source of the smoke and fumes in the cabin. Removal of the APU was planned for three days after the incident, following which it was to be returned to the manufacturer for a detailed examination. Meanwhile, it was declared inoperative and the aircraft was cleared for further flight, without its use, in accordance with the terms of the Minimum Equipment List.

Subsequent events

The aircraft departed the following morning for a flight to Tenerife South. On board were 241 passengers and eight crew members. With the APU inoperative, engine starts were carried out using a ground air source and cross-bleed air. No unusual smells were evident during the engine starts or while the aircraft was taxiing. However, the flight crew smelt a strong fuel/oil smell as engine thrust was increased for takeoff. The smell seemed to subside during the climb and both pilots, who were aware of the events the day before, were not unduly concerned.

As the aircraft reached its cruise altitude, both pilots started to feel unwell, with some light headedness and dizziness. They donned their oxygen masks, made a

Footnote

[2] Nomenclature for the doors was based on their relative positions inside the cabin, with Doors 1 being the most forward pair and Doors 4 the most aft pair.

PAN PAN call and initiated a diversion to Manchester. They began to action the Smoke and Fumes checklist from the Quick Reference Handbook but, with no smoke or fumes affecting the cabin (although a lavatory smoke detector did activate later prior to the approach to land) and both pilots feeling better, the checklist was discontinued at the first completion point. The aircraft landed safely at Manchester, after which both pilots were checked at a local hospital and later discharged. The aircraft underwent an engineering check and engine ground runs were carried out. No further faults were found and it was suspected that some residual oil may have remained in the conditioning or equipment cooling systems, after the previous day's incident and associated engineering activity.