

SERIOUS INCIDENT

Aircraft Type and Registration:	Boeing 757-256, G-ZAPX	
No & Type of Engines:	2 Rolls-Royce RB211-535E4-37 turbofan engines	
Year of Manufacture:	2000 (Serial no: 29309)	
Date & Time (UTC):	13 December 2013 at 1720 hrs UTC	
Location:	On approach to Freetown-Lungi Airport, Sierra Leone	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 7	Passengers - 145
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	41 years	
Commander's Flying Experience:	5,300 hours (of which 700 were on type) Last 90 days - 100 hours Last 28 days - 40 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further investigations by the AAIB	

Synopsis

The aircraft commenced a VOR approach from above the nominal glidepath and with excess speed. The pilots attempted to establish the aircraft on the correct path but, at 500 ft, the approach was unstable and EGPWS "SINK RATE" and "PULL UP" warnings were generated. The aircraft landed from the approach.

History of the flight

The aircraft was on a passenger flight from London Gatwick Airport to Freetown Lungi Airport in Sierra Leone, and was cleared to intercept the final approach track on the VOR approach for Runway 30. The pilot reported that he had to request descent on more than one occasion before being cleared to descend to 2,000 ft¹ to commence the approach. As the aircraft turned onto the final approach track, it was above the ideal profile and above the correct approach speed, and consequently had significant excess energy. The crew saw the runway and assessed that the aircraft was high so the pilot extended the landing gear at 185 kt, disconnected the autopilot and commenced a descent with a high rate of descent in an attempt to regain the correct profile. The crew selected flap when the speed

Footnote

¹ Altitudes were obtained from the Quick Access Recorder (QAR) data that was made available to the investigation. The altitudes are corrected for QNH and therefore represent the assessed readings on the pilots' altimeters. The airport elevation at Freetown is 84 ft.

allowed. They selected partial speed brake at 1,450 ft and fully deployed it at 1,000 ft. Below 1,000 ft the average rate of descent was approximately 1,500 ft per min.

At 500 ft, an EGPWS “SINK RATE” alert sounded, followed at 350 ft by an EGPWS “PULL UP” alert that lasted for 6 seconds. The pilot stated that, at the time of the “PULL UP” alert, the aircraft was close to the normal profile so he elected to continue the approach to land. At 500 ft, the aircraft CAS was 155 kt (22 kt above V_{REF}^2) and the rate of descent was approximately 1,900 feet per minute. The landing flap selection was made at 290 ft and the aircraft speed reduced to 148 kt at touchdown with full speed brake still deployed. The rate of descent was in excess of 1,000 ft per min until the aircraft was below approximately 150 ft.

The commander stated that it was clear that the approach was unstable and that he should have flown a go-around.

Safety action

As a result of this incident, the operator has amended its procedures to include a call by the pilot monitoring (PM) at 500 ft radio altitude. If the approach is stable then the PM will call “500 stable” and the approach may continue. If the PM assesses that the approach is not stable, a call of “500 Go-Around” is made and the PF must execute this manoeuvre immediately.

Footnote

² Reference landing speed.