

Preliminary Report on GFS Helicopter Accident Released

In accordance with the Hong Kong Civil Aviation (Investigation of Accidents) Regulations, an Inspector's investigation is in progress to determine the circumstances and causes that relate to the accident on the Eurocopter EC155B1 helicopter of the Government Flying Service over Tung Chung Pass, Lantau Island, near Hong Kong International Airport on August 26, 2003.

A Civil Aviation Department spokesman today (September 25) said: "The preliminary report contains facts relating to the accident as determined up to the time of issue and must be regarded as tentative.

"More in-depth investigation and analysis work remain to be done before a conclusion can be drawn on what caused the accident. The final report is expected to be completed within one year."

"This preliminary report is published for general information," he added.

The following is the content of the full preliminary report:-

Chief Inspector of Accidents
Accident Investigation Division
Civil Aviation Department
46th Floor
Queensway Government Offices
66 Queensway
Hong Kong

25 September 2003

Accident Bulletin 1/03

Aircraft type:	Eurocopter EC155B1
Registration:	B-HRX
Year of manufacture:	2002
Number and type of engines:	2 Arriel 2C2 turbines
Date and time of accident:	26 August 2003 at 22:32 hours local time (14:32 UTC)
Place of accident:	Tung Chung Pass, Lantau Island, near Hong Kong International Airport

Nature of Accident:	The helicopter departed at 22:29 from Hong Kong International Airport, having been tasked with a Casualty Evacuation (CASEVAC) mission. The helicopter took the route across the high ground of Lantau Island via the Tung Chung Pass. After three minutes into the flight the helicopter impacted with terrain while crossing the Pass and was destroyed.	
Type of flight:	CASEVAC	
Persons on board:	Crew: Two	Passengers: nil
Fatalities:	Two	
Commander's licence:	Airline Transport Pilot's Licence	
Commander's age:	34 years	
Commander's experience:	3,900 hours (of which 150 were on type)	
Other crew:	One air crewman	
Sources of information:	Site investigation and interviews	

EC155B1 Accident - 26 August 2003

All times are in local time

1. On the late evening of 26 August 2003, a Eurocopter EC155B1 helicopter operated by the Hong Kong Government Flying Service (GFS) departed at 22:29 from the Hong Kong International Airport (HKIA), having been tasked with a CASEVAC mission to pick up a patient from Cheung Chau. The helicopter took the route across Lantau Island (highest point 3,066 feet above mean sea level (AMSL)) via Tung Chung Pass (approximately 1,100 feet AMSL).
2. Approximately three minutes after take-off, at 22:32, whilst in level flight the helicopter impacted with terrain at an elevation of 1250 feet AMSL that sloped gently upwards both ahead and to the west of the Pass. The combined Cockpit Voice and Flight Data Recorder (CVFDR) ceased to record at this point of time. The helicopter fuselage continued travelling forward in close ground contact for a further 50 metres. Main rotor blades were severed within the first few metres through contact with small trees and rocks, and the underbelly and right side of the fuselage were damaged substantially.
3. As the terrain falls away moderately sharply at the end of the 50 metre run, the helicopter became airborne again and travelled a horizontal distance of approximately 100 metres whilst falling through a vertical height of some 100 feet before impacting with terrain for a second time in a nose high attitude at an elevation of 1150 feet AMSL. The main body of the wreckage finally came to rest after travelling forward for a further 30 metres. The pilot and the air crewman were killed.

There was no post-impact fire.

4. The flight was conducted under Special Visual Flight Rules, which require the pilot to remain clear of cloud and in visual contact with the surface. At the time of the accident the weather at HKIA (the cloud base was around 1200 feet and visibility was 10 km) was within GFS limits for single pilot operations at night.

5. Recordings from the CVFDR gave no indication of any aircraft system failures during the flight and no emergency call was made by the crew. Neither Air Traffic Control nor the GFS received any distress call from the helicopter.

6. Examination of the wreckage trail indicated that substantial damage was inflicted on the aircraft, in particular the main rotor blades, within the first few metres after initial impact. At the point of the second impact there was much debris from the tail fenestron and the antenna of the Automatically Deployable Emergency Locator Transmitter (ADELT) installed at the tail of the helicopter, suggesting a touchdown in a nose high attitude.

7. The take-off weight of the helicopter was 3,843kg, approximately 1,000 kg below the maximum approved gross weight for the EC155B1 helicopter (4,850kg). The aircraft was within both longitudinal and lateral centre of gravity limits.

8. The pilot held a current Airline Transport Pilot's Licence (Helicopters and Gyroplanes) and a valid Class One medical certificate. He had 3,900 hours of operating experience. The pilot's conversion to the EC155B1 helicopter type was conducted in Hong Kong during January and February 2003, by technical and flying instructors from Eurocopter, the helicopter manufacturer. His initial Licensing Flight Test and Operator Proficiency Check were carried out on 6 February 2003. The pilot was in current flying practice on both the AS332L2 Super Puma and EC155B1 as aircraft commander.

9. The Chief Inspector of Accidents has ordered an Inspector's Investigation into the cause of the accident in accordance with the Hong Kong Civil Aviation (Investigation of Accidents) Regulations. The investigation is being conducted by the Hong Kong Civil Aviation Department with the participation of investigators from the Bureau d'Enquetes et d'Analyses pour la Securite de l'Aviation Civile of France. The Air Accidents Investigation Branch of the United Kingdom was requested to assist in the retrieval of data from the CVFDR of the accident helicopter.

10. The accident investigation team conducted interviews with a number of

pilots who were airborne at around the time of the accident, the police and fire crews who were first to attend the scene of the accident, Air Traffic Control officers on duty at the time and members of the GFS.

11. During the course of the investigation, should safety recommendations be considered necessary, they will be promulgated to the parties concerned before the report is published.

This Bulletin contains facts relating to the accident as determined up to the time of issue. The information must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

End/Thursday, September 25, 2003

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