Chief Inspector of Accidents
Accident Investigation Division
Civil Aviation Department
Civil Aviation Department Headquarters
1 Tung Fai Road
Hong Kong International Airport
Lantau, Hong Kong

Source of Information:

Serious Incident Bulletin 4/2017

Octivité incident d'action 1/2017	
Aircraft Type:	Boeing 747-87UF
Registration:	N856GT
Year of Manufacture:	2011
Number and Type of Engines:	Four General Electric GEnx-2B67 turbo-fan engines
Date and Time of Incident:	24 September 2017 at approximately 1545 hours UTC (2345 hours local time)
Place of Incident:	The airspace over the high ground at Lo Fu Tau of the Lantau Island
Nature of Incident:	Controlled flight into terrain only marginally avoided
Type of Flight:	Scheduled Public Transport
Persons on Board:	Crew: 4 Passenger: 0
Fatalities:	Nil
Serious Injuries:	Nil
Pilot-in-Command's Licence:	Airline Transport Pilot's Licence
Pilot-in-Command's Experience:	31,970 hours (of which 1,100 hours were on type)
Crew Composition:	Four flight crew in the flight deck and nil cabin

crew

Investigation

Aircraft Serious Incident – 24 September 2017 (Atlas Air Boeing 747-87UF Registration Mark N856GT)

(All times are in UTC. Hong Kong time is UTC+8 hours.)

- 1. On 24 September 2017, an Atlas Air, Inc. Boeing 747-87UF freighter aircraft, registration mark N856GT, operated from Hong Kong International Airport (VHHH) to Ted Stevens Anchorage International Airport (PANC). The flight was operated under wet-lease by Cathay Pacific Airways Limited with flight number CPA 86.
- 2. The Pilot-in-Command acted as the Pilot Flying (PF) while one of the First Officers acted as the Pilot Monitoring (PM). Another operating First Officer was in the cockpit observer seat during the departure. The flight was cleared by the Air Traffic Control (ATC) to depart VHHH from Runway 07R via the RASSE 1E RNAV Standard Instrument Departure (SID).
- 3. At time 1544 hours, shortly after the aircraft took off from Runway 07R, the aircraft deviated to the right of the published SID track and headed towards the high ground at Lo Fu Tau of the Lantau Island. At time 1545 hours, the ATC informed the flight crew that the aircraft was off track and instructed the crew to turn left to resume the RASSE 1E SID. Shortly afterwards, the ATC informed the flight crew of terrain to the right of the aircraft and instructed the crew to expedite the climb to 5,000 feet.
- 4. At approximately 2,000 feet, the Enhanced Ground Proximity Warning System (EGPWS) on board the aircraft was triggered with Mode 2A visual and aural warning "Terrain, Terrain; Pull Up" annunciated. In response, the PF reacted and the aircraft turned left away from the high ground. The aircraft evaded the high ground by approximately 670 feet. Subsequently, the aircraft re-established the SID track at approximately time 1546 hours and continued without further incident. There was neither injury to personnel nor damage to the aircraft involved and no other air traffic was affected.
- 5. The meteorological aerodrome weather report for VHHH at time 1547 hours indicated that the wind was from 110 degree at 12 knots. The visibility was 10 km, with few clouds at 1,500 feet and scattered clouds at 2,800 feet. The temperature was 30 degrees Celsius with dew point at 25 degrees Celsius. Neither low level windshear nor turbulence warning was reported around the time of the incident.
- 6. The Chief Inspector of Accidents ordered an investigation into the circumstances and cause of the serious incident in accordance with the requirements of Annex 13 to the International Civil Aviation Organization (ICAO). The National Transportation Safety Board (NTSB) of the United States of America, representing the State of Registry, the State of the Operator, the State of Design and the State of Manufacture of the aircraft, was informed.

- 7. The investigation team has requested Atlas Air, Inc. to provide all relevant aircraft data for investigation purpose and to arrange the flight crew for interview. ATC radar and weather information were also collected for investigation purpose.
- 8. The investigation team is conducting detailed analysis of all the data and information received in order to determine the circumstances and cause leading to the incident. During the course of the investigation, should any safety recommendation be necessary, it will be promulgated immediately.

23 October 2017

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