

BR757 Occurrence Investigation Executive Summary

On February 26, 2011, EVA Airways Corporation (EVA Air) flight 757 scheduled passenger flight, an Airbus A330-203 airplane, registration number B-16303. The aircraft was a passenger flight scheduled takeoff from Hangzhou Xiaoshan Airport at 2120 to Taoyuan International Airport. The aircraft took off at 2122 local time; there were 2 flight crew, 8 cabin crewmembers, and 135 passengers on board. Before take-off the flight crew acknowledged that the visibility at the destination on 1900 was 1,500 meter with fog, the forecast visibility from 2000 to 2300 is 2,220 meter with fog and had tendency to get lower due to fog. The flight crew did discuss the visibility issue and remind each other should continually monitor the weather condition.

The aircraft landed at Taoyuan International Airport Runway 06 at 2249, during landing roll, the left main gear veered off the runway temporarily. The aircraft had no damage after the flight crew stopped the aircraft first on the runway and then on the taxi way to check the aircraft condition. All passengers on board were safe in this occurrence.

The ASC launched investigation according to Aviation Occurrence Investigation Act after the occurrence. Parties to the investigation are the Civil Aeronautics Administration, Ministry of Transportation and Communications (CAA), Taoyuan International Airport Corporation and EVA Airways.

The draft Investigation Report was accomplished on August 7, 2011 and sent to the parties for review after the preliminary review by the Council Meeting on October 25, 2011. The final investigation report was

published after approval by the ASC council members on March 30, 2012, at the 152th Council Meeting.

The investigation report included 11 conclusions and 9 recommendations state as below:

Findings Related to Probable Causes

1. The flight crew might loss of visual reference temporarily during approach and flare due to encounter low-level clouds and local fog, which induced the aircraft drift to the left and touched down at the left of the runway centerline. That leaded the aircraft veered off the runway during landing roll even the flight crew tried to correct the situation.
2. The flight crew did not well prepared with the weather condition change at the landing phase.
3. The threat of the weather change was known by the flight crew, but they did not make the go around decision while they found the visual reference was not sufficient at the decision height during final approach.

Findings Related to Risk

1. The low-level clouds and local fog were the operational risk for the aircraft approach and landing.

Other Findings

1. The certificates of flight crew were in accordance with Civil Aviation Regulations.

2. There is no evidence showing that the flight crew was affected by any alcohol or medication during that flight.
3. There is no evidence showing that the aircraft maintenance and airworthiness has related to this occurrence.
4. If the centerline runway light is considered to install on runway 06/24, should be effective in strengthening the visual reference for flight crew to line up the runway before landing.
5. The Taoyuan international airport runway approach lighting system does not comply with the specification of annex 14 ICAO.
6. The Taoyuan airport runway approach lighting systems, runway edge lights, runway threshold lights and runway end lights only provide with a loop circuit failure monitoring and warning real-time automatic monitoring system, but not comply with the specification requirements while the consecutive single lamp are not applicable, the system could function automatically and immediately notify the control tower and maintenance units.
7. The aircraft should takeoff and Landing against the wind in general. The major consideration of runway in use is selecting the most suitable runway direction for the aircraft takeoff and landing. The contents of: 「Runway assignment considered of the tailwind restriction」 between AIP and ATMP are conflict; In addition, it does not comply with the principle of the paragraph 7.2(Selection of runway in use) of ICAO Doc 4444.

Safety Recommendations

To EVA Airways

1. Reinforce the trainings to flight crew's acknowledgement, situation awareness, operation and handling to sudden change in visibility and request flight crew to conduct immediate go-around when the visual reference is not clear during final approach.

To Taoyuan International Airport Company

1. Review the feasibility to install runway centerline light on Runway 06/24 to enhance visual reference for flight crew to maintain the aircraft at the runway centerline during approach.
2. Set up runway approach lighting systems specified in ICAO Annex 14 to meet the international standards.
3. Reinforce the real time monitoring, failure warning and reporting function of the airport lighting facilities at Taoyuan Airport.

To Civil Aeronautics Administration, Ministry of Transportation and Communications

1. Supervise EVA Air to reinforce the trainings to flight crew's acknowledgement, situation awareness, operation and handling to sudden change in visibility and request flight crew to conduct immediate go-around when the visual reference is not clear during final approach.
2. Supervise Taoyuan International Airport Corporation to conduct the feasibility to install runway centerline light on Runway 06/24 to enhance visual reference for flight crew to maintain the aircraft at the runway centerline during approach.

3. Supervise Taoyuan International Airport Corporation to conduct the runway approach lighting systems specified in ICAO Annex 14 to meet the international standards.
4. Supervise Taoyuan International Airport Corporation to set up real time monitoring, failure warning and reporting function of the airport lighting facilities at Taoyuan Airport.
5. Recommend re-examine the adequateness and necessity of 9 knots tailwind runway takeoff and landing limitation at Taiwan's airports.