ACCIDENT INVESTIGATION COMMISSION
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Safety recommendation: AIC 16-R03/15-2028

Addressed to: Civil Aviation Safety Authority of PNG

Date issued: 2 June 2016

Investigation link: AIC 15-2028

Action status: Issued

Safety deficiency description

On 21 August 2015, at 02:47 (UTC)[1] a Fokker F27 Mk 050 (F50) registered P2-TAE (TAE) operated by Travel Air and a Bombardier DHC-8-102 (Dash 8) registered P2-MCW (MCW) operated by Airlines PNG, were involved in a breakdown of separation about 9.5 nm (17.5 km) northwest of Lae (Morobe Province).

During the Accident Investigation Commission's (AIC) investigation, the crew of MCW reported that shortly after they had levelled off at 8,000 ft and were above cloud, they received a traffic alert and collision-avoidance system[2] (TCAS) Traffic Alert (TA), followed by a Resolution Advisory (RA) instruction, and observed TAE descending to within 600 ft vertical separation with MCW. They took immediate (visual) avoidance manoeuvring action to avoid TAE, based on the RA instruction.

The crew of MCW reported the breakdown of separation serious incident to their operator on 22 August when they returned to Port Moresby, but did not report the serious incident to the Civil Aviation Safety Authority as required by the Civil Aviation Act Section 60. The operator sent a serious incident notification to CASA by email 4 days after the serious incident (and cc'd the email to the AIC). However, CASA did not forward a notification to the AIC as required by the Civil Aviation Act Section 62, but appears to have solely relied on the cc'd email from Airlines PNG rather than telephoning the AIC with such important information.

Due to the elapsed time between the breakdown of separation and the AIC being notified of the occurrence, the recorded TCAS data, Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR) data were overwritten, resulting in the data for the flight on 21 August 2015 no longer being available for the AIC's investigation. The AIC also sought to analyse the TCAS data to check the functionality and integrity of the TCAS system in TAE. Time and date data were not logged which further hampered the accuracy of the AIC's analysis of the TCAS data.

[1] The 24-hour clock, in Coordinated Universal Time (UTC), is used to describe the local time as specific events occurred. Local time in the area of the accident, Papua New Guinea Time (Pacific/Port Moresby Time) is UTC + 10 hours.

[2] Specific type of Airborne Collision Avoidance System.

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The Accident Investigation Commission (AIC) recommends, with respect to aircraft fitted with TCAS equipment *(Aircraft with a maximum all up weight of greater than 5,700 kg, under CAR 125 & 121 Ops; and aircraft fitted with Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR) equipment in accordance with CAR 125 & 121)* involved in a breakdown of separation incident where a TCAS Resolution Advisory (RA) is activated, that the Civil Aviation Safety Authority of PNG should require operators to:

1. Facilitate the aircraft's expeditious return to base or another suitable location where TCAS data download can be accomplished, and where the FDR and CVR can be quarantined for AIC collection for download and analysis at the AIC Flight Recorder Laboratory.
2. Notify the AIC of the operator's intention to download TCAS data before commencing the data download.
3. Download data from the TCAS as soon as possible after the incident and provide that data download to the AIC as soon as practicable.

Action requested

The AIC requests that the Civil Aviation Safety Authority of PNG (CASA) note recommendation AIC 16-R03/15-2028 above, and provide a response to the AIC within 60 days of the issue date, and explain (including with evidence) how CASA has addressed the safety deficiencies identified in the AIC investigation report AIC 15-2028.

DAVID INAU, ML

Chief Executive Officer