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Safety recommendation: AIC 19-R14/18-1004

Addressed to: Air Niugini Limited

Date issued: 10 April 2019

Investigation link: AIC 18-1004

Action status: Issued

Introduction

On 28 September 2018, the Federated States of Micronesia, Department of Transportation, Communications and Infrastructure (DTC&I) was notified of the aircraft accident referenced in this safety recommendation. DTC&I commenced an investigation and deployed investigators to Chuuk and invited the Papua New Guinea Accident Investigation Commission (AIC) to join the investigation in the capacity of the State of Registry and also a State providing experts and facilities for the investigation.

The AIC team was comprised of an Accredited Representative and Technical Advisers. The US National Transportation Safety Board (NTSB) as the State of Manufacture of the aircraft and in response to FSM National Government's request for assistance also sent a team comprised of an Accredited Representative and Technical Advisers from the Federal Aviation Administration (FAA) and Boeing. Technical Advisers from the US National Weather Service are assisting the US Accredited Representative.

The Transportation Safety Board of Canada (TSBC) as the State of Manufacture of specific components appointed an Accredited Representative and Technical Advisers to download the data from the AFIRS.

Subsequently, on 14 February 2019, the FSM Government delegated the whole of the investigation to the PNG AIC in accordance with *Paragraph 5.1 of Annex 13 to the Convention on International Civil Aviation*. The PNG AIC accepted the delegation and appointed an investigator in charge to manage the investigation in accordance with the *PNG Civil Aviation Act 2000 (as amended)* and *Annex 13 to the Convention on International Civil Aviation*.

The PNG AIC investigation has identified a significant safety enhancement that if implemented would complement the data from FDR, CVR and EGPWS recorded data.

Occurrence

On Friday 28 September 2018, a Boeing 737-8BK aircraft, registered P2-PXE, was being operated by Air Niugini Limited, on a scheduled passenger flight from Pohnpei to Chuuk, Federated States of Micronesia.

At 23:17:19 UTC¹ (09:17:19 local time) the aircraft impacted the water of Chuuk Lagoon about 1,443 ft (440 m) short of the runway 04 threshold, during its approach to runway 04 at Chuuk International Airport. As the aircraft settled in the water, it turned clockwise through 210° and drifted 460 ft (140 m) south east of the runway 04 extended centreline, with the nose of the aircraft pointing about 265°.

There were 12 crew members and 35 passengers on board. Six passengers were seriously injured, and one passenger was fatally injured.

¹ The 24-hour clock, in Coordinated Universal Time (UTC), is used in this report to describe the local time as specific events occurred. Local time in the area of the accident, Pacific/Chuuk Time is UTC + 10 hours.

The 12 crew members and 34 passengers exited the aircraft and were promptly rescued and brought to shore by Chuuk State Government boats, Red Cross, Transco, and more than twenty privately-owned boats, and the U.S. Navy divers using an inflatable boat. Local divers located the fatally injured passenger in the aircraft 3 days after the accident.

Safety deficiency description

In accordance with its *Annex 13* and *19 Standards* (obligations), during the PX073 investigation the PNG Accident Investigation Commission team reviewed the most recent Air Niugini Risk assessment reports conducted by Air Niugini prior to and for the commencement of the new operation into Chuuk, FSM.

Documents supplied by Air Niugini were:

- Risk Assessment RA/003/16 Rev 01 had Review dates: 12/05/2016; 25/05/2016; and 27/05/2016.
- Risk Assessment RA/003/16 Rev 03 had Review dates: 25/05/2016; 07/07/2016; 30/08/2016; and 29/11/2016.
- Risk Assessment RA/018/18 dated 03/10/18.

The investigation found that the Risk Assessments did not meet the ICAO Standards for Safety Management Systems and in general were not in accordance with Risk Assessment audit standards and methodology.

Annex 19, Framework for a Safety Management System lists:

2. *Safety risk management*

2.1 *Hazard identification*

2.2 *Safety risk assessment and mitigation*

Safety deficiencies found during the investigation included that in the Air Niugini *Risk Assessment* documents there was little evidence of hazard identification being completed by Air Niugini during each of the risk assessment exercises. Detailed supporting documents have been supplied to Air Niugini Limited.

The PNG AIC brings these safety concerns of the inadequacy of the Risk Assessment conducted for the Chuuk operation to Air Niugini Limited's attention. These may be an indicator of similar inadequate Risk Assessments throughout the Air Niugini network.


The investigation notes that the Risk Assessments were accepted² by CASA PNG.

Recommendation number **AIC 19-R13/18-1004** to Civil Aviation Safety Authority of PNG

The PNG Accident Investigation Commission recommends that Air Niugini Limited should review the Air Niugini Risk Assessment process and methodology to ensure they meet *ICAO Annex 19 Standards*, and where risk assessments have been made by Air Niugini Limited with respect to aircraft operations that those risk assessments are reviewed to ensure they meet *ICAO Annex 19 Standards*.

Action requested

The PNG Accident Investigation Commission requests that Air Niugini Limited provide a response to the PNG AIC within 90 days, but no later than 9 July 2019, and explain including with evidence how Air Niugini Limited has addressed the safety deficiencies identified in *Safety Recommendation AIC 19-R14/18-1004*.



HUBERT NAMANI, LLB

Chief Commissioner

10 April 2019.

² CASA PNG does not *approve* the Air Niugini manuals, rather it *accepts* the Air Niugini manuals.

Air Niugini Safety Action

On 15 April 2019, Air Niugini Limited informed the PNG Accident Investigation Commission of its safety actions to address the safety deficiencies identified in *Safety Recommendation AIC 19-R14/18-1004*.

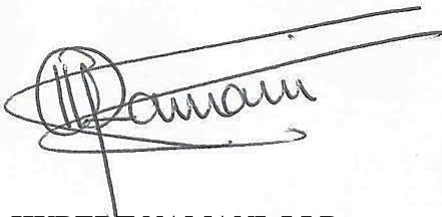
Air Niugini also provided documentary evidence of the safety action taken with the CASA PNG accepted³ amendment of the *Air Niugini Corporate Safety and Management System Manual, Chapter 8 (Hazard Identification and Reporting Program), Section 14, Sub-section 14.9 Steps in managing risks*, and the associated *Risk Assessment templates* to include a hazard identification step before the risk assessment step.

Sub-section 14.11, Identifying Risk, has been amended to include *hazards that present risks*.

PNG Accident Investigation Commission (AIC) assessment of Air Niugini Limited response

The AIC has reviewed the Air Niugini Limited documents providing evidence to the AIC of the safety action taken. The AIC is satisfied that the evidence satisfactorily addresses the safety deficiencies identified in the AIC *Safety Recommendation AIC 19-R14/18-1004*. However, the AIC has not seen evidence of the revised template in use.

Therefore, the AIC has assigned the Air Niugini Limited response a *satisfactory intent* rating, and records the **Status of the AIC Recommendation: CLOSED RESPONSE ACCEPTED**

A handwritten signature in black ink, appearing to read 'Hubert Namani', is written over a horizontal line. The signature is stylized and somewhat cursive.

HUBERT NAMANI, LLB

Chief Commissioner

15 April 2019.

³ CASA PNG does not *approve* the Air Niugini manuals, rather it *accepts* the Air Niugini manuals.