



PNG ACCIDENT INVESTIGATION COMMISSION

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Safety recommendation: AIC 15-R21/13-1007

Addressed to: PNG National Airports Corporation (NAC)

Date issued: 7 August 2015

Investigation link: AIC 13-1007

Action status: Issued

Safety deficiency description

On 19 October 2013, an Avions de Transport Régional ATR42-320 freighter, registered P2-PXY (PXY) and operated by Air Niugini, taxied to depart from runway 25 at Madang Airport. The take-off roll was normal until the pilot in command tried to rotate at V_R (which the flight crew had calculated to be 102 knots). He subsequently reported that the controls felt very heavy in pitch and he could not pull the control column back in the normal manner. Flight data recorder (FDR) information indicated that approximately 2 seconds later the PIC aborted the takeoff and selected full reverse thrust. He reported later that he had applied full braking. It was not possible to stop the aircraft before the end of the runway and it continued over the embankment at the end of the runway and the right wing struck the perimeter fence.

The investigation found that the aircraft load was in excess of the maximum permissible weight, and cargo zone 'A' at the front cargo area was significantly heavier than the structural limit for the aircraft, which placed the aircraft in a nose heavy configuration. Air Niugini's lack of robust loading supervision and procedures for the ATR 42/72 aircraft, and the inaccurate weights provided by the consignor/client company likely contributed to the overload.

While the airport emergency procedures activated during this accident were effective, the investigation noted that the National Airport's Corporation (NAC), Madang *Airport Emergency Plan* (AEP) manual's procedures did not meet the requirements of ICAO Annex 14, Volume 1.

An area of immediate safety concern is the availability of marine rescue in the event of an aircraft having a runway excursion off the northern end of the runway and coming to rest in the water of the Madang harbour.

Because Fokker F100 passenger aircraft regularly operate into Madang, the possibility of a runway excursion into the harbor involving the need to rescue almost 100 persons from the water cannot be ignored.

The Madang AEP does not meet the ICAO Annex 14, Volume 1, Standards and Recommended Practices.

"To prevent accidents, not to apportion blame or liability"

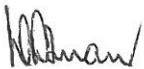
Recommendation number AIC 15-R21/13-1007 to the PNG National Airports Corporation (NAC)

The Accident Investigation Commission recommends that the PNG National Airports Corporation ensure that its:

1. *Airport Emergency Plans* are reviewed to ensure they meet the Standards and Recommended Practices of *ICAO Annex 14, Volume 1*.
2. Airports having water or swampy terrain along the departure and/or arrival paths are equipped, in accordance with the ICAO Annex 14, Paragraph 9.2.2 Standard, with specialist rescue services and fire-fighting equipment appropriate to the hazards and risks.

Action requested

The AIC requests that PNG National Airports Corporation (NAC) note recommendation AIC 15-R21/13-1007 above, and provide a response to the AIC within 60 days of the issue date, and explain (including with evidence) how NAC has addressed the safety deficiencies identified in the AIC investigation report AIC 13-1007.



DAVID INAU, ML
Chief Executive Officer

PNG National Airports Corporation (NAC) response

Despite reminders being sent to the NAC, the AIC did not receive a response from NAC addressing the identified safety deficiency.

PNG Accident Investigation Commission (AIC) assessment of PNG National Airports Corporation (NAC) response

As a result of the AIC not receiving a response from NAC addressing the identified safety deficiency with respect to AIC 15-R21/13-1007 addressed to NAC, the AIC assigned this nil response an **unsatisfactory** rating, and records the **Status of the AIC Recommendation: Active**



DAVID INAU, ML
Chief Executive Officer

13 October 2015