



**PRELIMINARY REPORT
AIC 19-2001**

PNG Air

P2-ATF and P2-ATC

ATR 72-600

Aircraft diverted due to Major Power Failure-Airport Facilities

Jacksons International Airport

National Capital District

PAPUA NEW GUINEA

22 May 2019

About the AIC

The Accident Investigation Commission (AIC) is an independent statutory agency within Papua New Guinea (PNG). The AIC is governed by a Commission and is entirely separate from the judiciary, transport regulators, policy makers and service providers. The AIC's function is to improve safety and public confidence in the aviation mode of transport through excellence in: independent investigation of aviation accidents and other safety occurrences within the aviation system; safety data recording and analysis; and fostering safety awareness, knowledge and action.

The AIC is responsible for investigating accidents and other transport safety matters involving civil aviation, in PNG, as well as participating in overseas investigations involving PNG registered aircraft. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The AIC performs its functions in accordance with the provisions of the *PNG Civil Aviation Act 2000 (As Amended)*, and the *Commissions of Inquiry Act 1951*, and in accordance with *Annex 13* to the *Convention on International Civil Aviation*.

The object of a safety investigation is to identify and reduce safety-related risk. AIC investigations determine and communicate the safety factors related to the transport safety matter being investigated.

It is not a function of the AIC to apportion blame or determine liability. At the same time, an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the AIC endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why it happened, in a fair and unbiased manner.

About this report

Decisions regarding whether to conduct an investigation, and the scope of an investigation, were based on many factors, including the level of safety benefit likely to be obtained from the investigation.

The major power outage occurred at Port Moresby / Jacksons International Airport occurred at 07:11 UTC on 22 May 2019. The AIC commenced an on-site investigation. The power outage resulted in one aircraft landing in daylight hours, but without the aid of the PAPI. It also resulted in the unplanned diversion of two aircraft to Nadzab Airport. The AIC classified the occurrence as a serious incident in accordance with *Annex 13, Attachment C*, to the *Convention on International Civil Aviation*.

This *Preliminary Report* has been produced in accordance with the *PNG Civil Aviation Act 2000 (as amended)*, *ICAO Annex 13* to the *Convention on International Civil Aviation*, and the *PNG Accident Investigation Commission's Investigation Policy and Procedures*.

Aircraft diverted due to major electrical power outage – facilities failure Port Moresby / Jacksons International Airport

Occurrence Details

On 22 May 2019, two ATR 72-600 aircraft operated by PNG Air, registered P2-ATC and P2-ATF, enroute to Jacksons International Airport, Port Moresby from Mt. Hagen and Nadzab Airports respectively, were diverted to Nadzab due to a major power outage at Port Moresby at 07:11 UTC¹ (17:11 local). The power outage affected the following facilities:

- All airfield lighting including the precision Approach Path Indicator (PAPI), Runway, Taxiway, Aerodrome Beacon (ABN) and obstruction lights
- Instrument Landing System (ILS)
- Domestic and International Terminal apron lights.
- Internet/emails, telephones and airport CCTV

At 07:30 a Fokker F70 aircraft registered P2-ANU, on final approach for Runway 14L was informed that the PAPI lights and ILS were unserviceable. The crew continued the approach and landed on runway 14L without PAPI and ILS guidance before last light (08:19).

P2-ATC, enroute from Mt. Hagen at 17,000 ft, was diverted to Nadzab at 08:39 and landed at 09:20.

P2- ATF, enroute from Nadzab at 17,000 ft had an estimated time of arrival at Port Moresby of 08:44. The crew elected to hold 9 nm north west of Port Moresby while awaiting power restoration. However, by 08:47, when the aerodrome power was not restored, the crew diverted to Nadzab and landed at 09:27.

PNG Airservices Limited (ASL) issued five *NOTAMS* in relation to the lost aerodrome approach and landing systems as a result of the power outage (See attachment 1).

At 12:14, the power was partially restored to cater for runway 32R ILS, allowing the Air Niugini Flight, ANG11, from Manila to continue operation.

The *NOTAM A0622* was cancelled at 20:40 on 23 May 2019 following restoration of electrical power to the airport and associated facilities.

According to the *Aeronautical Information Publication (AIP)* of PNG, AYPY AD2.15, current at the time, Jacksons airport had secondary power and emergency lights available which fully conformed with *ICAO Annex 14 chapters 8 and 5* respectively (See Aerodrome Information table).

AIC Comment

The PNG Accident Investigation Commission commenced an investigation into the serious incident on 23 May 2019.

The investigation is continuing and will analyse the power supply system into Port Moresby / Jacksons Airport and conformance with international standards. The AIC is working closely with the National Airports Corporation (NAC) to identify the factors that contributed to the total power failure affecting aerodrome facilities essential to safety of aircraft operations.

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, Vanuatu Time (VUT) is UTC + 10 hours.

General Details

Date and time:	22 May 2019 — 07:11 UTC
Occurrence category:	Serious incident
Primary occurrence type (ICAO):	Failures of more than one system in a redundancy system for flight guidance and navigation.
Location:	Port Moresby / Jackson International Airport

Aerodrome Information

Aerodrome	Port Moresby / Jackson International Airport		
	Latitude: 09°26' 27.66 "S	Longitude: 147° 13'5 .78"E	
Elevation	129ft AMSL		
RWY (LDA)	14L/32R (2,750m)	14R/32L (1,300 m)	
PAPI	14L/32R	ILS	14L/32R
ABN/IBN location, characteristics and hours of operation	ABN RELOCATED AND BEAMING FM NEW LOCATION. COORD S092 26 40.5 E147 12 47.4		
TWY Edge and Centreline LGT	Blue		
Secondary Power supply/switch over time	Conforms fully with the requirements of Annex 14 Chapter 8 for Cat II ops.		
	Emergency lights available to all RWY location and characteristics as required by Annex 14 Chapter 5. Hazard Beacon, Holding point light, Obstruction light, Lighted WDI, RWY THR/Edge lighting.		
<i>NOTE: All information in this table is referenced directly from the Aeronautical Information Publication (AIP) of PNG</i>			

Aircraft Details

Manufacturer and model:	ATR 72 – 600		
Registration:	P2-ATF		
Serial number:	1461		
Type of operation:	Schedule passengers flight		
Persons on board:	Crew: TBA	Passengers: TBA	
Injuries:	Crew: NIL	Passengers: NIL	
Damage	No damage		

Manufacturer and model:	ATR 72 – 600		
Registration:	P2-ATC		
Serial number:	1347		
Type of operation:	Schedule passengers flight		
Persons on board:	Crew: TBA	Passengers: TBA	
Injuries:	Crew: NIL	Passengers: NIL	
Damage	No damage		

Approved



Hubert Namani, LLB

Chief Commissioner

21 June 2019



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MAIN PORTS/NAVAIDS/MINOR PORTS

Thursday 23rd May, 2019

1. PORT MORESBY A0621
1905221020/1905221200 EST.
RWY 14L/32R NOT AVBL DUE NIL LGT.
2. PORT MORESBY A0622
1905221130/1905222000 EST.
AIRFIELD NOT AVBL DUE MAJOR PWR OUTAGE.
RMK/AD NOT AVBL TO NIGHT OPS.
3. PORT MORESBY A0623
1905221130/1905221900.
RWY 14L/32R ILS NOT AVBL.
4. PORT MORESBY A0626
1905222130/1905230600 EST.
RWY 14 ILS NOT AVBL DUE PWR OUTAGE.
5. PORT MORESBY A0628
1905230245/1905230700 EST.
RWY 32R GP NOT AVBL DUE PWR OUTAGE.