



PRELIMINARY REPORT

AIC 20 - 1001

Applus Wokman

DJI Matrice 210 RTK

RPA collision with pylon during aerial inspection

PNG ExxonMobil Marine Terminal,
20km Northwest of Port Moresby

PAPUA NEW GUINEA

14 November 2019



ABOUT THE AIC

The Papua New Guinea 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.

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 *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.

The Papua New Guinea Accident Investigation Commission (AIC) was notified of the accident involving the remotely piloted aircraft by Civil Aviation Authority of Papua New Guinea (CASA PNG) on 24 January 2020. The operator notified CASA PNG on 22 January 2020, more than 2 months after the accident. The approach taken by AIC to investigate this occurrence was similar to investigations conducted on manned aircraft.

This *Preliminary Aircraft Accident Investigation Report* was produced by the AIC, PO Box 1709, Boroko 111, NCD, Papua New Guinea. It is publicly released by the Commission in accordance with *Para 7.1 of ICAO Annex 13*. The report is published on the AIC website: www.pngaic.gov.pg.

The report is based on the initial investigation carried out by the AIC in accordance with Papua New Guinea *Civil Aviation Act 2000 (as amended)*, *Chapter 31 of the Commissions of Inquiry Act*, *Annex 13* to the *Convention on International Civil Aviation*, and the *PNG AIC Investigation Policy and Procedures Manual*. It contains factual information. Analysis of that information, findings and contributing (causal) factors, other factors, safety actions, and safety recommendations are reserved for the *Final Report*.

The sole objective of the investigation and the *Preliminary Report* is the AIC's obligation to the *Convention on International Civil Aviation* and in accordance with *ICAO Annex 13*, and thereby promote aviation safety. (Reference: *ICAO Annex 13, Chapter 7*). Readers are advised that in accordance with *Section 219* of the *Civil Aviation Act 2000 (as amended)* and *Annex 13*, it is not the purpose of the Commission's aircraft accident investigation to apportion blame or liability. Fact based statements in the report should not be interpreted as apportioning blame.

Consequently, AIC reports are confined to matters of safety significance and may be misleading if used for any other purpose.

Remotely Piloted Aircraft collided with pylon during Marine Terminal inspection.

Occurrence Details

On 14 November 2019, at 09:42 local time (13 November 2019, 23:42 UTC¹), a DJI² Matrice 210 RTK remotely piloted aircraft (RPA), owned and operated by Applus Wokman (Applus), was being used to conduct an inspection of the underside of the jetty of the PNG LNG Exxon Mobil Marine Terminal, about 20 km (11 nautical miles) North West of Port Moresby, Papua New Guinea, when it collided with one of the jetty's pylons and dropped into the sea.



Figure 1: Area of the RPA operation

The accident occurred during a flight conducted by Applus as part of the contract with ExxonMobil PNG to conduct aerial inspections of ExxonMobil's marine navigational aids and the marine terminal jetty.

The RPA was being operated from a marine vessel (pilot boat).

Notification

The AIC was notified of the occurrence by CASA PNG on 24 January 2020 in accordance with *Section 62 of the PNG Civil Aviation Act 2000 (As Amended)*.

On 22 January 2020 CASA was informed of the occurrence during a meeting with ExxonMobil PNG.

AIC comment

The investigation is continuing and will include an analysis of the forecast and actual weather, operational and maintenance aspects and the delayed notification of the accident.

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, Papua New Guinea Time is UTC + 10 hours.

² Da-Jiang Innovations.

General Details

Date and time	14 November 2019, 09:42	
Occurrence category	Accident	
Location	PNG LNG ExxonMobil Marine Terminal	
	Latitude: 9° 20' 13".93 S	Longitude: 147° 0'10.82" E
Flying Mode	GPS Positioning mode	

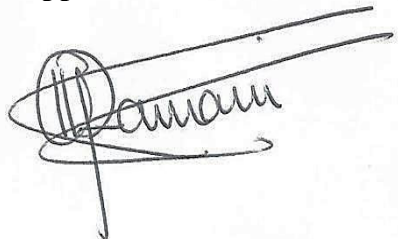
RPA Pilot Details

Nationality	Australia	
Gender/Age	Male / 40-year-old	
RPA Controller Certificate	CASA Australia	Date of Issue: 1 Sep 2016
RPA Class/ Type	Multi rotor below 7 kg	
Licence number	1014498	

Aircraft Details

Aircraft manufacturer and model	DJI Matrice 210 RTK
Max take-off weight	6.14 kg
Max payload (inclusive of 2xTB50 batteries)	1.7 kg
Serial Number	To be confirmed

Approved



Hubert Namani LLB

Chief Commissioner

31 January 2020