FINAL REPORT

AIC 26-2001

29 June 2026

OPERATOR	:	Adventist Aviation Services PNG
REGISTRATION	:	P2-SDA
MANUFACTURER	:	Pacific Aerospace Limited
MODEL	:	PAC-750 XSTOL
CLASS/CATEGORY	:	Runway Excursion-Landing
LOCATION	:	Kanabea Airstrip, Gulf Province, Papua New Guinea
OCCURRENCE DATE	:	09 January 2026

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TABLE OF CONTENTS

FIGURES

TABLES

DEFINITIONS AND INTERPRETATION

Accident	An occurrence associated with the operation of an aircraft resulting in fatal or serious injury, or substantial damage
Accredited representative	A person designated by a State, on the basis of his or her qualifications, for the purpose of participating in an investigation conducted by another State. The accredited representative would normally be from the State's accident investigation authority.
Contributing Factor	An action, omission, or condition that increased the likelihood or severity of the accident
Safety Recommendation	A proposal of an accident investigation authority based on information derived from an investigation, made with the intention of preventing accidents or incidents and which in no case has the purpose of creating a presumption of blame or liability for an accident or incident.
Serious Incident	An incident involving circumstances indicating that there was a high probability of an accident associated with the operation of an aircraft.
State of Design	The State having jurisdiction over the organization responsible for the type design
State of Manufacture.	The State having jurisdiction over the organization responsible for the final assembly of the aircraft, engine or propeller
State of Occurrence.	The State in the territory of which an accident or incident occurs

ACRONYMS

agl	Above Ground Level
AIC	Accident Investigation Commission (PNG)
amsl	Above Mean Sea Level
AOC	Air Operator Certificate
ATC	Air Traffic Control
ATS	Air Traffic Service
CASA PNG	Civil Aviation Safety Authority of Papua New Guinea
CAR	Civil Aviation Rules
CPL	Commercial Pilot License
CSN	Cycles Since New
CVR	Cockpit Voice Recorder
Deg	degrees
FDR	Flight Data Recorder
Ft	feet
Hrs	hours
ICAO	International Civil Aviation Organization
IIC	Investigator in Charge
Kg	Kilogram(s)
Km	Kilometer(s)
Kts	knots (nm/hours)
Min	minute
MOC	Maintenance Organisation Certificate
MTOW	Maximum Take-off Weight
nm	Nautical Mile(s)
Sec	Second(s)
S/N	Serial Number
TSN	Time Since New
TSO	Time Since Overhaul
TTIS	Total Time in Service
UTC	Coordinated Universal Time
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions

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INTRODUCTION

Investigation AIC 26-2001

On 9 January 2026 at 09:46 am local time (11:46 UTC), the AIC was notified by NiuSky Pacific Ltd about an occurrence which had occurred on the same day at 08:45 local time. The occurrence involved a PAC 750XL aircraft, registered P2-SDA, owned and operated by Adventist Aviation Services (PNG). The Accident Investigation Commission (AIC) commenced an investigation into the occurrence pursuant to Section 247 of the *PNG Civil Aviation Act 2000*, and a team of investigators was deployed to the occurrence site the following day to conduct on-site investigation activities.

The AIC classified the occurrence as a serious incident, with the occurrence type categorized as a runway excursion. In accordance with *ICAO Annex 13, Chapter 4, paragraph 4.1*, the AIC promptly notified relevant foreign authorities of the State of:

- Aircraft manufacturer: New Zealand (TAIC New Zealand)

- Engine manufacturer: Canada (TSB Canada); and

- the International Civil Aviation Organization; the aircraft involved is of a maximum mass of over 2,250 kg.

This investigation was conducted, and other States participation was permitted in line with the *AIC's Investigation Policy and Procedures Manual,* which is fully aligned with *ICAO Annex 13, Chapter 5, paragraph 5.18.*

This Final Report was prepared by the PNG Accident Investigation Commission, P.O. Box 1709, Boroko 121, NCD, Papua New Guinea. It has been authorised for public release by the Commission in accordance with Paragraph 6.5 of the ICAO Annex 13. The report is available on the AIC website at www.aic.gov.pg.

The report is based on the investigation carried out by the AIC under the *Civil Aviation Act 2000,* and *Annex 13 to the Convention on International Civil Aviation*. It contains factual information, analysis of that information, findings and contributing (causal) factors, and safety action. All times in this report are in local time (UTC+10 hours) unless otherwise stated.

AIC investigations explore the areas surrounding an occurrence, and the facts relevant to understanding how and why an accident or serious incident occurred are included in the report. The report may also contain other non-contributing factors which have been identified as safety deficiencies for the purpose of improving safety.

In accordance with *ICAO Annex 13*, it is not the purpose of aircraft accident or serious incident investigation to apportion blame or liability. The sole objective of the investigation and the Final Report is the prevention of accidents and incidents.

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SYNOPSIS

On 9 January 2026, at 08:45 local time (22:45 UTC), a PAC-750 XSTOL[1] aircraft, registered P2-SDA, owned by PNG Union Mission and operated by Adventist Aviation Services (PNG), was conducting a VFR charter flight from Kerema Airport to Kanabea Airstrip, Gulf Province, Papua New Guinea. During the landing roll at Kanabea Airstrip, the aircraft continued beyond the normal stopping area for Runway 02, yawed left then the right landing gear impacted an embankment that swung the aircraft right coming to an abrupt stop.

There were eight persons on board the aircraft: one pilot, one dispatch supervisor, and six passengers. There were no reported injuries, and the occurrence was survivable. The aircraft was also carrying a coffin containing a deceased person.

The aircraft sustained substantial damage to the right main landing gear assembly and right flap assembly.

The pilot informed the investigators that after arriving overhead Kanabea, he had circled around the area for 30 minutes due to the cloud cover and rain. When he noticed that the clouds had cleared, he tracked the aircraft back towards Kanabea Airstrip, descended and joined the right downwind leg of the Kanabea Airstrip circuit for landing on Runway 02.

The pilot said that having decided to land, he increased flaps from 20 deg to full extension and as he proceeded to flare, he encountered a brief sudden swirling weather event, he termed 'cyclonic twisting outburst' that occurred temporarily and quickly disappeared. He described the wind speed of about 30 knots tailwind/crosswind by referencing the movement of vegetation at the northern end of Runway 02 (540 m from Runway 02 threshold). He said that momentary wind picked the aircraft up from behind and pushed it further along the strip after touchdown. He further stated that upon touchdown, he applied reverse thrust, and selected flaps 0 and the fuel lever to ground idle, but despite these actions, the aircraft continued to be pushed down the strip by the gusting cross/tailwind.

The AIC obtained a video recording taken by a witness standing at the left side of Runway 02 about halfway along the strip. The video showed the aircraft's flight path from an extended right base leg of the circuit through final approach, touchdown and landing roll. The video evidence captured the aircraft flying the base leg for 35 seconds before commencing the turn onto final. The turn on the final took a further 11 seconds and from wings level on final to crossing the Runway 02 threshold was 11 seconds. The video evidence showed no obvious movement of vegetation around the airstrip during the approach and landing to support the assertion of a strong tailwind on approach and landing. However, if there was any wind within the circuit area, the investigation could not determine from the video evidence, the direction and strength.

V2 Track recorded data showed that the aircraft landing[2] at Kanabea Airstrip at 08:45:11, at a groundspeed of 42 kt and coming to a stop at 08:45:18.

The witness video showed that 4 seconds after touchdown about 103 metres from the approach end of Runway 02, the aircraft commenced a lateral right drift. One second later reverse thrust was engaged and a further 1 second later the aircraft commenced a left yaw with reverse thrust still engaged. Two seconds later with reverse thrust engaged the left yaw became more pronounced. Two seconds later the right main landing gear struck an embankment bringing the aircraft to an abrupt stop swinging the nose of the aircraft to the right.

1 The PNG Certificate of Airworthiness lists the aircraft manufacturer as Pacific Aerospace and the model PAC 750XL. At the time of manufacture in 2016 the aircraft manufacturer had undergone a name change to New Zealand Aerospace and P2-SDA was a PAC 750 XSTOL and in April 2021 new ownership changed the name of the company to NZSkydive Limited trading as NZAero.

2 The *V2 Track* software recorded data at varying time intervals depending on the interrogation of cellular signals. The data table recorded landing to stop taking 7 seconds. However, the witness video records touchdown to stop as 10 seconds.

The investigators concluded that convergence of a shallow, virtually flat approach and a long landing touchdown with standing water on Runway 02 from recent rain, contributed to a loss of braking effectiveness and right drift through hydroplaning.

While holding over Kanabea and the surrounding area, the pilot was aware of the cloud and rain preventing his landing at Kanabea. It is evident that the pilot did not consider that there was a very high probability of standing water on the strip. The *Adventist Aviation Services Route and Strip Register* cautions that the strip becomes very slippery when wet.

The investigation established from video evidence that the airstrip was contaminated with standing water. However, regardless of this indication, as well as the caution provided in the Operator's Route and Strip Register, that the strip becomes very slippery when wet from localised rainfall, the pilot continued with the approach and landing rather than terminating on observation and diverting back to Kerema.

The video evidence showed no obvious movement of vegetation around the airstrip during the approach and landing to support the assertion of a strong tailwind on approach and landing. However, if there was any wind within the circuit area, the investigation could not determine from the video evidence, the direction and strength.

The Operator's *Route and Strip Register* depicts a windsock adjacent to the Runway 02 end at Kanabea Airstrip. The investigators found that there is an absence of a windsock(s) and cone markers, which are typically used to provide visual indications of wind direction and strip boundary guidance.

Safety Action

On 4 May 2026, Adventist Aviation Services informed the PNG Accident Investigation Commission that they had taken safety action and amended the *Route and Strip Register* to remove the depiction of a windsock at Kanabea Airstrip. The amended Kanabea Data page has been issued to all AAS pilots.

In accordance with ICAO Annex 13 Standards and Recommended Practices, the purpose of the investigation was not to apportion blame or liability, but to identify safety issues and promote the prevention of future accidents and incidents. The investigation report contains the factual information, analysis, findings, contributing factors, and safety recommendations arising from the occurrence.

1. FACTUAL INFORMATION

1.1 History of the Flight

Aircraft Registration	*P2-SDA*
Owner	*PNG Union Mission*
Operator	*Adventist Aviation Services*
Type of Operation	*VFR Charter Operations*
Persons on Board	*8*
Serious Incident Site	*Latitude: 7° 32' 20"S, Longitude 145° 54' 18"E* *Kanabea Airstrip[3], Gulf Province, Papua New Guinea*
Elevation	*4,288 feet*
Time of occurrence	*08:45 local time (22:45 UTC)*

Table 1. Serious Incident Summary.

On 9 January 2026, at 08:45 local time (22:45 UTC), a PAC-750 XSTOL[4] aircraft, registered P2-SDA, owned by PNG Union Mission and operated by Adventist Aviation Services (PNG), was conducting a VFR charter flight from Kerema Airport to Kanabea Airstrip, Gulf Province, Papua New Guinea. During the landing roll at Kanabea Airstrip, the aircraft drifted right, continued beyond the normal stopping area for Runway 02, yawed left as reverse thrust was applied, then the right landing gear impacted an embankment that swung the aircraft right coming to an abrupt stop.

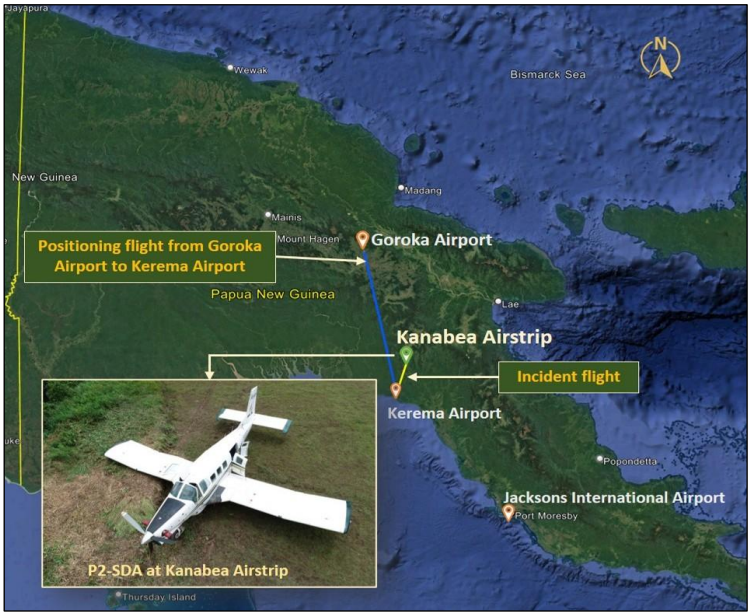

Figure 1. P2-SDA occurrence site, Kanabea Airstrip, Gulf Province, Papua New Guinea.

There were eight persons on board the aircraft: one pilot, one dispatch supervisor, and six passengers. The aircraft was also carrying a coffin containing a deceased person.

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3 An airstrip is a designated area of land used for aircraft takeoff and landing that is typically smaller and less developed than a conventional airport. It usually consists of a short runway, which may be unpaved (such as grass, gravel, or compacted earth), and has limited or no supporting infrastructure like air traffic control, lighting, or navigation aids. Airstrips are commonly located in remote or rural areas and are used to provide access for communities, cargo, medical evacuations, or charter operations. Due to their basic nature, airstrips often present operational challenges such as shorter landing distances, variable surface conditions, and nearby terrain or obstacles, requiring careful aircraft handling and performance management.

4 The PNG Certificate of Airworthiness lists the aircraft manufacturer as Pacific Aerospace and the model PAC 750XL. At the time of manufacture in 2016 the aircraft manufacturer had undergone a name change to New Zealand Aerospace and P2-SDA was a PAC 750 XSTOL and in April 2021 new ownership changed the name of the company to NZSkydive Limited trading as NZAero.

V2 Track[5] recorded data indicated that the aircraft departed Kerema Airport at 07:54 for Kanabea Airstrip. At 08:08, 13 nautical miles (nm) from Kanabea and passing through about 8,100 ft amsl, the pilot manoeuvred the aircraft left of the direct track and conducted an orbit for approximately eight minutes before re-establishing on track towards Kanabea. The pilot stated that this manoeuvre was conducted while waiting for the cloud cover and rain to clear.

At 08:22, the aircraft arrived in the Kanabea area and continued tracking northeast past Kanabea Airstrip while maintaining 13,000 ft amsl. The aircraft subsequently conducted a series of track reversals and manoeuvring south and southeast of the airstrip. The pilot stated that these manoeuvres were conducted while waiting for weather conditions, including cloud and rain, to improve. In total, the pilot manoeuvred in the Kanabea area for approximately 17 minutes due to prevailing weather conditions.

At approximately 08:24, while tracking northeast of Kanabea the aircraft commenced descent from approximately 13,000 ft. The recorded data indicated the aircraft subsequently made multiple track changes with high rates of descent consistent with contour flying[6].

Figure 2. P2-SDA track from Kerema to Kanabea Airstrip. (Source V2 Track data)

The pilot informed the investigators that as the weather conditions appeared to improve, he tracked back towards Kanabea Airstrip, descended and joined the right downwind leg of the Kanabea Airstrip circuit for landing on Runway 02. The pilot reported that he configured the aircraft with flap extended to 20 degrees on approach and then selected full flap. As he proceeded onto the flare, he perceived that the aircraft encountered a brief sudden swirling weather event, he termed 'cyclonic twisting outburst' that occurred temporarily and quickly disappeared. He described the wind speed of about 30 knots tailwind/crosswind by referencing the movement of vegetation at the northern end of Runway 02 (540 m from Runway 02 threshold). He said that momentary wind picked the aircraft up from behind and pushed it further along the strip after touchdown.

[5] The *V2 Track* software recorded data at varying time intervals depending on the interrogation of cellular signals.

[6] Contour flying is a method of visual low level flight where an aircraft follows the contours of terrain, maintaining a relatively constant altitude above the terrain rather than above sea level.

He further stated that upon touchdown, he applied reverse thrust, and selected flaps 0 and the fuel lever to ground idle, but despite these actions, the aircraft continued to be pushed down the strip by the gusting cross/tailwind.

V2 Track recorded data showed the aircraft landing at Kanabea Airstrip at about 08:45, with a groundspeed of 42 kt before coming to a stop at 08:45:18. The investigators derived the touchdown point of the landing phase from the witness video with the time between touchdown and stopping 10 seconds. (See *Appendix 5.2*, landing roll from touchdown showing application of reverse thrust).

Figure 3. P2-SDA landing direction and final resting position at Kanabea Airstrip.

Figure 3. P2-SDA touchdown at Kanabea Runway 02.

1.2 Injuries to Persons

INJURIES	Crew	Passengers	Total in aircraft	Others
Fatal	0	0	0	–
Serious	0	0	0	–
Minor	0	0	0	Not applicable
None	1	7	8	Not applicable
TOTAL	1	7	8	–

Table 2. Injuries to Persons.

The investigators were not informed of any injuries.

1.3 Damage to Aircraft

The aircraft sustained substantial[7] damage to the right main landing gear assembly and the right flap assembly as a result of the aircraft's lateral excursion from the strip surface and subsequent impact with an embankment on the right side of the airstrip.

[7] The ICAO Annex 13 definition states that substantial damage is damage:
"...which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component..."
In this case:
•The damaged MLG cylinder required replacement of a major landing gear component.
•The damaged right flap assembly required replacement of a primary flight control surface.
•These repairs involved maintenance before the aircraft could be released to service.
This is consistent with the Annex 13 threshold for substantial damage, provided the damage adversely affected the aircraft's structural strength, performance, or flight characteristics which damage to the landing gear and flap would reasonably do until repaired.

The right main landing gear was subjected to significant loading when it contacted the embankment. The right-wing flap sustained damage following contact with vegetation and ground surfaces, with the outboard section resting partially over the sloped edge of the embankment.

Figure 4. Damage to aircraft (P2-SDA).

1.4 Other damage

There was no other damage to property and/or the environment.

1.5 Personnel Information

1.5.1 Pilot

Age	*:*	*65 years*
Date of Birth	*:*	*27 November 1960*
Gender	*:*	*Male*
Nationality	*:*	*Papua New Guinean*
Type of licenses	*:*	*ATPL (Aeroplane)*
Type ratings	*:*	*SEAL[8]:<5,700 Kg MTOW* *MEAL[9]: C404; BN2A; EMB110; DHC6; DHC8* *Instrument Rating Multi Engine: Two Pilot*
Total flying time	*:*	*12,718.7 hours*
Total on this type	*:*	4,605.4 Hrs
Total hours last 90 days	*:*	*106.8 hours*
Total hours last 7 days	*:*	*13.1 hours*
Total hours last 24 hours		*6.4 hours*
Last Competency Check	*:*	*26 October 2025*
Medical class	*:*	*One*
Issued	*:*	*30 August 2025*
Valid to	*:*	*02 March 2025*
Medical limitation	*:*	*Nil*

Table 3. Personnel Information.

[8] SEAL: Single-engine aircraft license

[9] MEAL: Multi-engine aircraft license.

The operator's records indicated that the pilot was aircraft *Type Rated* and endorsed to operate the PAC-750 XSTOL aircraft.

The pilot was engaged by Adventist Aviation Services (AAS) on a short-term basis to conduct charter operations on the PAC-750 XSTOL. The pilot was previously employed by AAS and had prior operational experience on the aircraft type.

A review of the pilot's logbook indicated that he commenced flying duties with AAS on 3 September 2025. The logbook further showed that he conducted flights throughout September, October, November, and December 2025, prior to the serious incident on 9 January 2026.

On 26 October 2025, the pilot completed Base and Line Checks conducted by a Flight Examiner from CASA PNG. A *Certificate of Proficiency* was issued upon satisfactory completion of the check.

1.6 Aircraft Information

The PAC-750 XSTOL, (formerly PAC-750 XL) is a utility aircraft of conventional all-metal low-wing monoplane design, with fixed tricycle undercarriage. Combining the engine and wings of the PAC Cresco with a new larger fuselage and modified tail, all versions to date have been powered by a 750 hp (560 kW) Pratt & Whitney Canada PT6 turboprop engine. The aircraft was designed and manufactured in Hamilton, New Zealand, by Pacific Aerospace Limited[10].

The aircraft was certified to accommodate no more than 9 passengers. The right front seat in the cabin may be occupied by a passenger.[11]

1.6.1 Aircraft

Aircraft manufacturer	*:*	*Pacific Aerospace Limited[10]*
Model	*:*	*PAC-750 XSTOL*
Serial number	*:*	*201*
Year of manufacture	*:*	*2016*
Nationality of State of Manufacture	*:*	*New Zealand*
Nationality of State of Registration	*:*	*Papua New Guinea*
Registration	*:*	*P2-SDA*
Name of the owner	*:*	*PNG Union Mission*
Name of the operator	*:*	*Adventist Aviation Services*
Certificate of Airworthiness number	*:*	*391*
Certificate of Airworthiness issued	*:*	*16 June 2016*
Valid to	*:*	*Non-Terminating*
Certificate of Registration number	*:*	*391*
Valid to	*:*	*16 June 2016*
Total airframe hours at 9 January 2026	*:*	*2,690 hours*
Total Cycles Since New	*:*	*6,308*
Total Landings Since New	*:*	*6,342*

Table 4. Aircraft data.

[10] The aircraft manufacturer has undergone changes in ownership and company names in recent years and is now owned by NZSkydive Ltd, trading as NZAero.

[11] The AAS dispatch supervisor occupied the right-hand seat in the cabin.

Over the recorded period 15 January 2025 to 9 January 2026 a total of 360 days, the aircraft accrued 365.2 flight hours, 903 engine cycles and 919 landings.

1.6.2 Engine

Manufacturer	*:*	*Pratt & Whitney Canada*
Type	*:*	PT6A-34
Engine Type	*:*	*Turbo-prop engine*
Time to next overhaul	*:*	*1,310 hrs*
Serial No.	*:*	PCE-RB0920
Part Number	*:*	3020800
Overhaul Interval	*:*	*4,000 hrs*
Total Time Since New (TTSN)	*:*	*2,690 hrs*
Engine Cycles Since New	*:*	6,292
Landings Total Since New (TSN)	*:*	6,326

Table 5. Engine data.

1.6.3 Propeller

Manufacturer	*:*	Hartzell Propeller Inc.
Type	*:*	D3A34C402
Propeller Type	*:*	Constant-speed, full-feathering and reversible pitch
Serial No.	*:*	*BUA32559*
Part Number	*:*	HC-B3TN-3D
Time between overhauls (TBO)	*:*	3,000.0 hours
Time Since Overhaul (TSO)	*:*	1,128.8 hours
Total Time Since New (TTSN)	*:*	1,871.2 hours

Table 6. Propeller data.

1.6.4 Airworthiness & Maintenance

At the time of the occurrence, the aircraft had a valid *Certificate of Airworthiness (CoA)* and *Certificate of Registration (CoR) issued by the PNG Civil Aviation Safety Authority.* The investigator's review of the maintenance records identified no outstanding scheduled maintenance or deferred defects.

The operator (AAS) conducted a scheduled Check 1 inspection (150 hours / 1,500 cycles) commencing on 8 December 2025, with release to service issued on 30 December 2025. The next scheduled Check 2 inspection was due on 24 December 2026.

Post-maintenance operational records indicate that the aircraft was flown on 31 December 2025 and 2, 6, 7, and 8 January 2026, with no reported technical issues.

1.6.5 Aircraft Weight and Balance

A review of the aircraft weight and balance data indicated that the flight was conducted within the approved operating limitations.

1.7 Meteorological Information

1.7.1 PNG National Weather Service Area Forecast for Area 2

The area forecast for Central Papua, Kerema and Port Moresby (Area 2) was issued at 16:35 UTC on 9 January 2026 and was valid from 23:00 UTC to 11:00 UTC. The forecast winds applied to upper-level conditions and were not indicative of surface wind strength or direction at Kanabea Airstrip at the time of landing.

Winds at different levels			
Level	Wind Direction		
7,000 ft	280 degrees at 40 kts		
10,000 ft	270 degrees at 35 kts		
14,000 ft	320 degrees at 35 kts		
Cloud information			
Scattered cumulonimbus between 1,800 ft and 45,000 ft			
Broken stratus between 500 ft and 3,000 ft in precipitation			
Scattered cumulus between 1,500 ft and 10,000 ft			
Scattered stratocumulus between 3,000 ft and 8,000 ft in broken rain and drizzle			
Visibility			
Visibility 500 m in fog, 3,000 m in thunderstorms and rain, 4,000 m in rain showers and rain drizzle			
Weather			
Occasional thunderstorms and rain in area. Scattered showers in area			
Freezing Level and Ice			
Freezing at 16,500 ft. Moderate icing in cumulonimbus including above freezing level			
Turbulence			
Moderate in the vicinity of cumulonimbus and adjacent mountains			
Moderate adjacent mountains and associated with cauliflower[12]			

Table 7: Area Forecast for Central Papua, Kerema and Port Moresby (Area 2).

There was a trough through mainland Papua New Guinea bringing scattered showers and isolated thunderstorms. There was convergence over the Coral, Bismarck & Solomon seas and the Eastern Pacific Ocean affecting the areas with associated clouds and scattered showers and isolated thunderstorms with morning fog over the ranges, plains and valleys.

1.7.2 Reported Weather: Pilot

The pilot reported that the approach was conducted normally until the late stages of final approach.

He said that just prior to the flare, the aircraft encountered what he perceived as a sudden and significant wind shift, resulting in an angular component between crosswind and tailwind that he estimated was approximately 30 knots.

Upon landing, the aircraft continued further along the strip than the pilot anticipated and encountered a layer of standing water on the strip. The pilot said that he applied reverse thrust and braking. He added that braking effectiveness was severely reduced due to hydroplaning[13], and he could not maintain directional control.

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12 Cauliflower cloud is a "nickname" for cumulus clouds, specifically cumulus congestus or towering cumulus, which feature dense, fluffy, rounded tops that resemble the head of a cauliflower.

13 **Hydroplaning** (or aquaplaning) is a condition where a layer of water builds up between an aircraft's tyres and the runway surface, causing the tyres to **lose contact with the ground**. When this happens, braking and steering effectiveness are greatly reduced or completely lost. Hydroplaning occurs when:

- The runway is **wet or contaminated** (standing water, slush, or even very wet grass)

As a result, the aircraft did not decelerate adequately and overran the side of the strip. The right landing gear subsequently impacted an embankment at the far end of the strip, bringing the aircraft to an abrupt stop.

The pilot further stated that wind conditions were assessed visually by observing tree movement.

He noted that no abnormal wind indications were observed prior to final approach, and the angular component between crosswind and tailwind was only encountered during the late stage of the landing.

1.8 Aids to Navigation

There were no ground-based navigation aids at Kanabea Airstrip. On-board navigation aids and their serviceability were not a factor in this serious incident.

While not a navigation aid, there was no aerodrome visual ground aid in the form of a windsock at Kanabea Airstrip.

1.9 Communication

The aircraft was equipped with High Frequency (HF) and Very High Frequency (VHF) two-way radio communication systems. All communications with NiuSky Pacific Air Traffic Services Units were recorded by ground-based stations and were not considered a factor in this serious incident.

The pilot reported that there is no appointed agent or trained personnel on the ground at Kanabea Airstrip to provide weather information or assist with operational communications to inbound aircraft.

1.10 Aerodrome Information

Kanabea Airstrip (AYNB)
Source: Adventist Aviation Services (AAS) PNG Route and Strip Register

Descriptions	**Details**
Airstrip	Kanabea
ICAO Location Indicator	AYNB
Length	540 m
Elevation	4,288 ft
Slope	2.8%
Runway Direction	02/20
Surface	Grass
Remarks	• Right-hand circuit for Runway 02• Possible strong winds, severe turbulence, and wind shear on approach• Surface becomes very slippery when wet• Presence of rough areas at the upper end

Table 8: Kanabea Airstrip Details.

Runway 02 is sloped up at a gradient of 2.8%. It is a one-way strip with Runway 02 for landing and Runway 20 for takeoff.

- The aircraft is moving fast enough that water cannot be displaced by the tires
- Tyre pressure and surface texture are insufficient to maintain contact

The tyre effectively rides on a **thin film of water**, similar to skimming.

The *AAS Route and Strip Register* for Kanabea Airstrip contains operational cautions, including that the surface becomes very slippery when wet and that strong winds, turbulence, and wind shear may be encountered on approach.

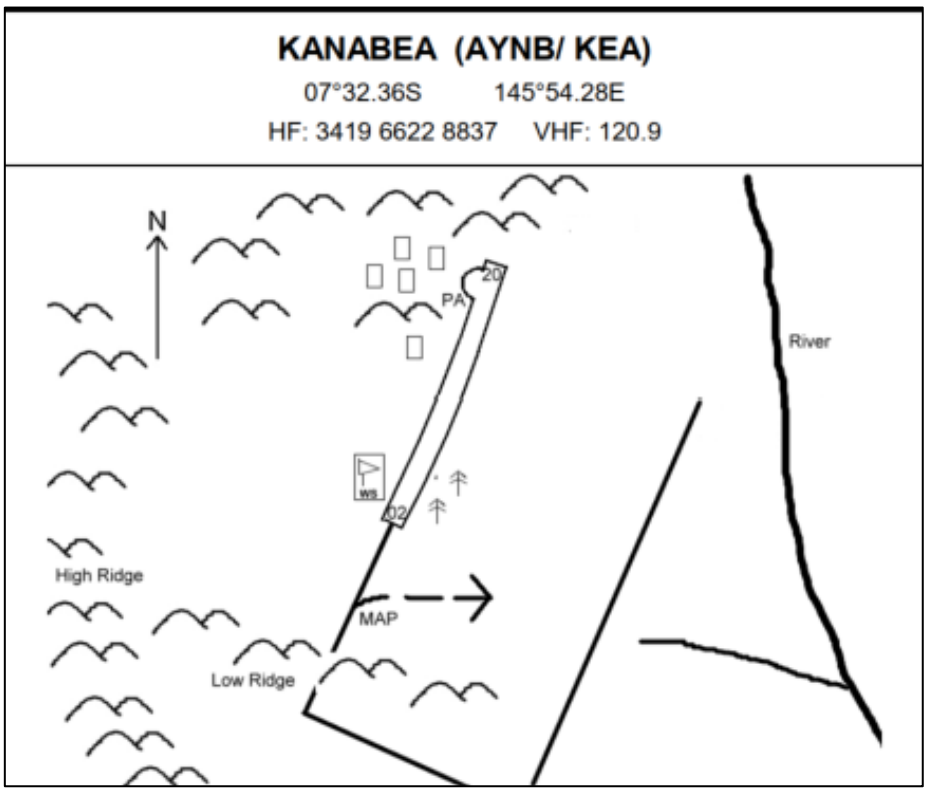

Figure 5. AAS Route and Strip Register sketch of Kanabea Airstrip showing a windsock adjacent to the Runway 02 threshold.

Figure 6. P2-SDA encounters standing water on Runway 02.

Kanabea Airstrip had been subject to rain in the hours preceding the arrival of P2-SDA. There was standing water on the airstrip.

Figure 7. Kanabea Airstrip from Runway 02 end. (Source: AIC Drone imagery).

1.10.1 Onsite Observation

On-site observations at Kanabea Airstrip indicated the absence of a windsock and cone markers, which are typically used to provide visual indications of wind direction and strip boundary guidance.

1.11 Flight Recorders

The aircraft was not fitted with a flight data recorder (FDR) or a cockpit voice recorder (CVR); nor where they required by the *PNG Civil Aviation Rules.*

A cockpit image recorder was not installed on the aircraft, nor was it required by *PNG Civil Aviation Rules.*

1.11.1 Other Electronic Data Recording Device

The aircraft was fitted with a third-party flight monitoring system, the *V2Track*. *V2 Track* is a hybrid dual-mode cellular/satellite GPS tracking system for aircraft, vehicles, marine, and telemetry applications. *V2 Track* uses both satellite and cellular networks, switching to satellite networks, like Iridium, only when out of cellular range. Shifting between cellular and satellite is completely automatic.

The *V2Track* functions primarily for operations monitoring and proactive safety purposes for the Operator. The unit has a cloud-based data storage and relevant parameters from the occurrence flight were analysed to complement the investigation.

The unit recorded the following parameters:

Parameters	**Descriptions**
Time (UTC +10)	The exact time the data was recorded
Aircraft Even ***t***	Aircraft phase of Operation. E.g. *Start Up, Taxiing etc.)*
GPS Alt (ft)	Aircraft altitude above sea level
TRK (°T)	Track over ground in degrees true
ROC (ft/min)	Rate of climb
Ground Speed (kt)	Speed over ground
Position	The name of the place
Latitude & Longitude	The exact location number showing where the aircraft is on Earth
Total Distance	Distance flown from origin
Method	Data source → Satellite tracking (Sat)

Table 8. Parameters recorded by V2 Track.

See *Appendix 5.1* for a table of *V2 Track* data for final 3 minutes and 57 seconds of the flight.

1.12 Wreckage and Impact Information

1.12.1 General Description of the Serious Incident Site

Kanabea Airstrip is short, narrow, and grass covered. Observations made during the site inspection and from aerial drone imagery indicated that the strip surface was uneven and patchy, with visible variations in surface texture and colour.

The embankment where the aircraft came to rest was sloped and covered with dense green vegetation, including tall grasses and shrubs. At the upper edge of the embankment, the grass appeared recently cut or flattened. This is consistent with the pilot's statement that the vegetation in the area surrounding the aircraft was cut and cleared after the occurrence.

There was a shallow drainage ditch along the right edge of the airstrip, between the airstrip and the embankment.

1.13 Medical and Pathological Information

No medical or pathological investigations were conducted as a result of this occurrence, nor were they required.

1.14 Fire

There was no evidence of pre or post-impact fire.

1.15 Survival Aspects

The serious incident was survivable.

The pilot stated that after the aircraft came to rest following impact, he shut down the engine, exited the aircraft, and opened the passenger door to assist in the disembarkation of the passengers. He further stated that, as there was no post-impact fire or other imminent danger, a normal disembarkation was carried out.

1.16 Tests and Research

No tests or research were required to be conducted as a result of this incident.

1.17 Organizational and Management Information

1.17.1 Owner: PNG Union Mission

The Papua New Guinea Union Mission is the administrative headquarters of the Seventh-day Adventist Church in Papua New Guinea.

It is a religious governing body, not a commercial organization or government agency. Its role is to oversee and coordinate the church's activities across the country.

The PNG Union Mission is based in Lae, Morobe Province, Papua New Guinea**,** and serves as the central coordinating body for the Adventist population in the South Pacific region.

1.17.2 Operator: Adventist Aviation Services (PNG)

Adventist Aviation Services (PNG) often shortened to AAS is a mission-based aviation organisation in Papua New Guinea that combines aviation operations with humanitarian and community support. AAS is a non-profit aviation operator run by the Seventh-day Adventist Church. It has been operating in Papua New Guinea since 1964 and is based in Goroka, Eastern Highlands Province.

AAS was issued an *Air Operator's Certificate AOC 119/002* on 31 March 2024. The *Operations Specification OPS/119/002/0* authorised AAS to conduct Commercial operations under VFR by day for: Passenger flights; Cargo; Ferry/Maintenance; RPT Non-Scheduled (Charter); and RPT Scheduled, Emergency.

1.18 Additional Information

The pilot informed the investigators that his normal final approach flight path to Kanabea was a shallow approach until crossing a ridge south of the threshold and then flying a steep short final descent to the threshold. He further stated that he joined the downwind leg for Runway 02 circuit.

The investigators obtained a video recording taken by a witness standing at the left side of Runway 02 about halfway along the strip. The video showed the aircraft's flight path from an extended right base leg of the circuit through final approach, touchdown and landing roll. The video evidence captured the aircraft flying the base leg for 35 seconds before commencing the turn onto final. The turn on the final took a further 11 seconds and from wings level on final to crossing the Runway 02 threshold was 11 seconds. There was no evidence of any wind on or around the airstrip throughout the approach and landing.

The investigators plotted the V2 track data which showed that the aircraft did not join the circuit on downwind leg, but after holding northeast and southeast of Kanabea waiting for the weather to clear, the aircraft joined an extended base leg 1,300 m southeast of Kanabea. See appendix 5.3.

Based on the *V2 Track* data, the aircraft joined the final approach path at a GPS Altitude of 4,321 ft. Ten seconds later the aircraft was at 4,311 ft, and 4 seconds later landing at a GPS altitude of 4,327 ft. The aircraft approach profile from turning final to touchdown was shallow (virtually flat, slightly climbing to the threshold).

The witness video showed that:

- 4 seconds after touchdown, 103 metres from the approach end of Runway 02, the aircraft commenced a lateral right drift;
- 1 second later reverse thrust was engaged;

- 1 second later the aircraft commenced a left yaw with reverse thrust still engaged;
- Two seconds later, with reverse thrust engaged, the left yaw became more pronounced;
- Two seconds later the right main landing gear struck an embankment bringing the aircraft to an abrupt stop swinging the nose of the aircraft to the right.

The landing flare was shallow, and the aircraft touched down about 103 metres from the Runway 02 end.

In an interview with the pilot, he informed the AIC that he held overhead and in the Kanabea area due to cloud and rain. The airstrip had standing water.

As he proceeded onto the flare, he perceived that the aircraft encountered a brief sudden swirling weather event, he termed 'cyclonic twisting outburst' that occurred temporarily and quickly disappeared. He described the wind speed of about 30 knots that picked up from behind the aircraft and pushed it further along the strip after touchdown.

Figure 8. P2-SDA on final approach wings level after turn from base leg.

Figure 9. P2-SDA on short final very shallow approach.

The AAS *SOP, Section 16.17* titled '*Weather and last light considerations*' paragraph 5.7 specifically requires pilots to always maintain situational awareness. It states *loss of awareness to what is going on outside the aircraft can be a hazard to safety.*

1.19 Useful or Effective Investigation Techniques

The investigation was conducted in accordance with the *Civil Aviation Act 2000*, and with the *Standards and Recommended practices of Annex 13 to the Chicago Convention* of *International Civil Aviation*, and the PNG Accident Investigation Commission approved *Investigation Policy and Procedures*.

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2. ANALYSIS

2.1 Flight Operations

2.1.1 Aircraft Handling and Performance

Flight data obtained from the *V2 Track* system indicates that the aircraft operated within the certified performance envelope of the PAC-750 XSTOL throughout all phases of flight. No exceedance of structural or operational limitations was identified.

The aircraft was within the performance envelope in accordance with manufacturers *Pilot Operating Handbook.*

Kanabea Approach Profile: Analysis of the witness video revealed that the aircraft maintained a shallow, virtually flat approach profile from the turn onto final until touchdown.

Excessive Float and Reduced Flare: The shallow profile resulted in a reduced flare and significant "float," causing the aircraft to travel further along the strip than intended.

Late Touchdown Point: Due to the float, the aircraft touched down approximately 103 metres past the approach end of Runway 02, significantly reducing the available landing distance on the 540-metre strip. The aircraft travelled a further 232 metres before impacting the embankment.

***V2 Track* data** showed that the aircraft touched down at 42 knots groundspeed. The approach was flat and aligned with the airstrip.

Environmental Factors

While holding over Kanabea and the surrounding area, it would have been prudent for the pilot to analyse the environmental conditions and their effect on the Kanabea airstrip surface. Given the pilot was aware of the cloud and rain preventing his landing at Kanabea it is unclear why the pilot did not consider that there was a very high probability of standing water on the strip. The *AAS Route and Strip Register* cautions that the strip becomes very slippery when wet.

Pilot Statement on Airstrip Surface Contamination: The pilot's statement confirmed he had been orbiting the area to allow a rain cell to clear.

Actual Airstrip Contamination (From witness video evidence). The airstrip was contaminated with standing water.

Human & Perception Factors

Perceived Wind Shift vs. Reality: The pilot reported encountering a sudden 30-knot wind shift during the flare. The pilot's reference point for calculating the wind was vegetation at the northern end of Runway 02. However, the vegetation of the northern end of the strip was 540 m from the 02 threshold where he said he encountered the brief sudden wind shift which quickly dissipated.

The pilot reported encountering a sudden 30-knot wind shift during the flare. The pilot's reference point for calculating the wind was vegetation at the northern end of Runway 02. However, the vegetation of the northern end of the strip was 540 m from the 02 threshold where he said he encountered the brief sudden wind shift which quickly dissipated. The investigators considered that such a momentary wind shift would not have been visible from a distance of 540 m.

The witness video showed no evidence of wind on or around the airstrip throughout the approach and landing. This suggests the aircraft's increased energy and float were likely due to the shallow, virtually flat approach profile, rather than a meteorological event.

The investigators determined that by not overflying the airstrip and joining the circuit on 1,300 m base leg, the pilot deprived himself of situational awareness of the airstrip actual surface conditions despite knowing that the general area weather had been cloud-covered and raining prior to landing. This likely affected his decision-making regarding continuation of the flight. The AAS *SOP, Section 16.17* titled '*Weather and last light considerations'* paragraph 5.7 specifically requires pilots to always maintain situational awareness. It states *loss of awareness to what is going on outside the aircraft can be a hazard to safety.*

Lack of proper weather reports: There were no trained personnel or agents on the ground at Kanabea to provide the pilot with real-time reports on the wind state or the condition of the wet strip.

Technical Factors

Hydroplaning: As the aircraft landed long and with higher residual inertia (due to the shallow approach), it encountered the standing water, leading to hydroplaning.

Loss of Control: Hydroplaning caused a significant reduction in braking effectiveness and a loss of directional control, preventing the pilot from stopping the aircraft within the remaining strip length.

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3. CONCLUSIONS

3.1. Findings

3.1.1. Aircraft

a) The aircraft was certified, equipped and maintained in accordance with existing regulations and approved procedures.

b) The aircraft had a valid *Certificate of Airworthiness*, *Certificate of Registration* and had been maintained in accordance with the *PNG Civil Aviation Rules*.

c) The aircraft was certified as being airworthy when dispatched for the flight.

d) The mass and the center of gravity of the aircraft were within the prescribed limits.

e) There was no evidence of any defect or malfunction in the aircraft that could have contributed to the occurrence.

f) The aircraft was structurally intact prior to impact with the embankment.

g) The aircraft sustained substantial impact damage to the right flap assembly and right main landing gear assembly.

3.1.2. Pilot

a) The pilot was licensed and qualified for the flight in accordance with the existing *PNG Civil Aviation Rules*.

b) The pilot was properly licensed, certified as medically fit and was adequately rested to operate the flight.

3.1.3. Flight Operations

a) The flight was conducted under Visual Flight Rules (VFR) and remained uneventful up until the landing phase at Kanabea Airstrip.

b) The flight was conducted within the operational and performance limitations of the PAC-750 XSTOL.

c) There was no wind observed prior to, or during the final approach and landing.

d) The pilot was aware of recent rain at Kanabea and surrounding area.

e) The aircraft landed long and with higher residual inertia (due to the shallow approach), and encountered standing water, leading to hydroplaning.

f) The pilot applied reverse thrust and braking; however, braking effectiveness was severely reduced due to hydroplaning, and directional control was not maintained.

g) The aircraft impacted an embankment on the right side of the strip, bringing the aircraft to an abrupt stop.

h) The aircraft sustained impact damage to the right main landing gear and right flap assembly.

3.1.4 Air Traffic Services

a) The aircraft was equipped with High Frequency (HF) and Very High Frequency (VHF) two-way radio communication systems.

b) There is no appointed agent or trained personnel on the ground at Kanabea Airstrip to provide weather information or assist with operational communications to inbound aircraft.

3.1.5 Aerodrome

a) There is an absence of a windsock(s) and cone markers, which are typically used to provide visual indications of wind direction and strip boundary guidance.

3.1.6 Flight Recorders

a) The aircraft was not fitted with a flight data recorder (FDR) or a cockpit voice recorder (CVR); nor where they required by existing *PNG Civil Aviation Rules.*

b) A cockpit image recorder was not installed on the aircraft, nor was it required by *PNG Civil Aviation Rules.*

c) The aircraft was fitted with a third-party flight monitoring system, the *V2Track*. *V2 Track* is a hybrid dual-mode cellular/satellite GPS tracking system for aircraft, vehicles, marine, and telemetry applications.

3.1.7 Medical

a) The pilot was certified as medically fit at the time of the occurrence.

b) There was no evidence that the pilot suffered any sudden illness or incapacitation which might have affected his ability to control the aircraft.

3.1.8 Survivability

a) The occurrence was survivable

b) There were not reported injures to the pilot, dispatch supervisor and passengers.

c) All persons onboard the aircraft disembarked safely.

3.1.9 Safety Oversight

a) The Civil Aviation Safety Authority's safety oversight of the operator's procedures and operations was adequate.

3.2 Causes [Contributing factors]

Convergence of a shallow, virtually flat approach and a long landing touchdown with standing water on Runway 02 from recent rain, contributed to a loss of braking effectiveness through hydroplaning.

While holding over Kanabea and the surrounding area, the pilot was aware of the cloud and rain preventing his landing at Kanabea. It is evident that the pilot did not consider that there was a very high probability of standing water on the strip. The *Adventist Aviation Services Route and Strip Register* cautions that the strip becomes very slippery when wet.

The investigation established from video evidence that the airstrip was contaminated with standing water. However, regardless of this indication, as well as the caution provided in the Operator's caution provided in the Operator's Route and Strip Register, that the strip becomes very slippery when wet from localised rainfall, the pilot continued with the approach and landing rather than terminating on observation and diverting back to Kerema.

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4. SAFETY ACTION

4.1 Safety Action

On 4 May 2026, Adventist Aviation Services informed the PNG Accident Investigation Commission that they had taken safety action and amended the *Route and Strip Register* Kanabea Aerodrome diagram to remove the depiction of a windsock. The amended Kanabea Data page has been issued to all AAS pilots.

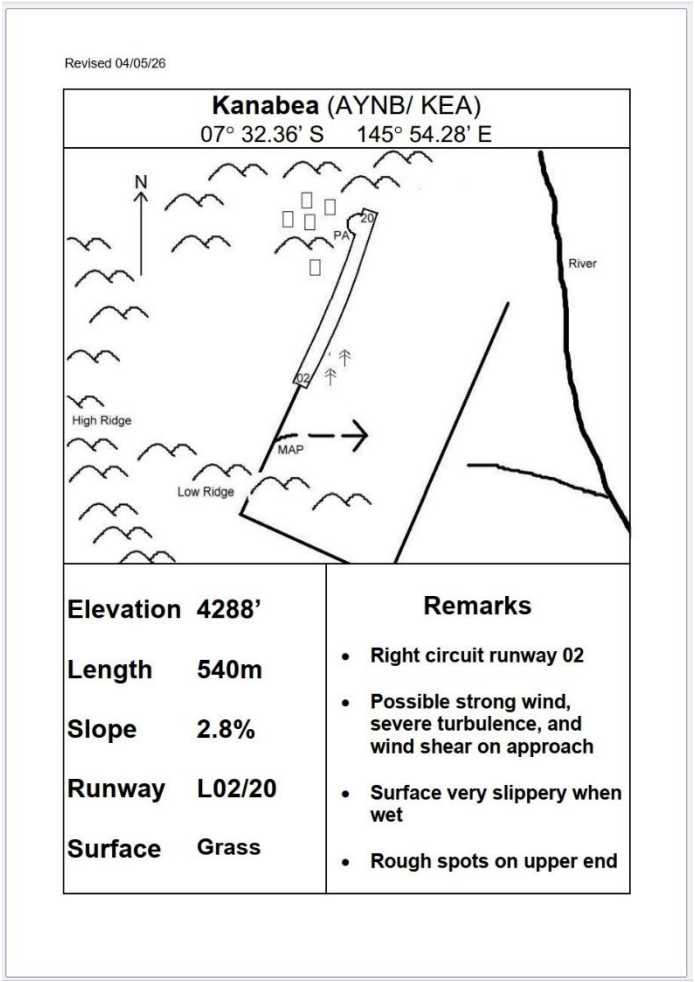

Figure 10:AAS Kanabea Route & Strip Register.

This Final Report is released by;

Accident Investigation Commission

Ministry of Civil Aviation

Papua New Guinea

29 June 2026

ACCIDENT INVESTIGATION COMMISSION
The Common Seal of
PAPUA NEW GUINEA

MARYANNE J. WAL
CHIEF COMMISSIONER / CHAIRMAN

5 APPENDIXES

5.1 *V2 Track* Flight Data

Time (UTC+10)	Event	GPS Alt (ft)	TRK (°T)	ROC (ft/min)	Ground Speed (kt)	Position	Latitude	Longitude	Total Distance	Method
09 Jan 2026, 08:41:21	Enroute	6056	340	196	100	3 nm ESE of Kanabea	7°34'21"S	145°57'32"E	83.48 nm	Sat
09 Jan 2026, 08:42:57	Slowing Down, Possible Approach	5161	309	610	64	1 nm ESE of Kanabea	7°32'42"S	145°55'35"E	86.12 nm	Sat
09 Jan 2026, 08:44:57	Enroute	4321	29	-1279	102	Kanabea	7°32'29"S	145°54'13"E	88.98 nm	Sat
09 Jan 2026, 08:45:07	Slowing Down, Possible Approach	4311	29	-118	64	Kanabea	7°32'15"S	145°54'22"E	89.25 nm	Sat
09 Jan 2026, 08:45:11	Landing	4327	29	236	42	Kanabea	7°32'12"S	145°54'23"E	89.31 nm	Sat
09 Jan 2026, 08:45:18	Stopped Moving	4337		-	0	Kanabea	7°32'10"S	145°54'24"E	89.31 nm	Sat

Figure 11. V2 tracking system recorded data. (From downwind leg of Kanabea Airstrip circuit to touchdown on Runway 02.)

5.2 Landing roll and reverse thrust engagement

The following pictures have been taken from the witness video and show the aircraft from touchdown to stop. Reverse thrust was engaged 5 seconds after touchdown and remained engaged until the aircraft came to an abrupt stop after the right main landing gear impacted the embankment.

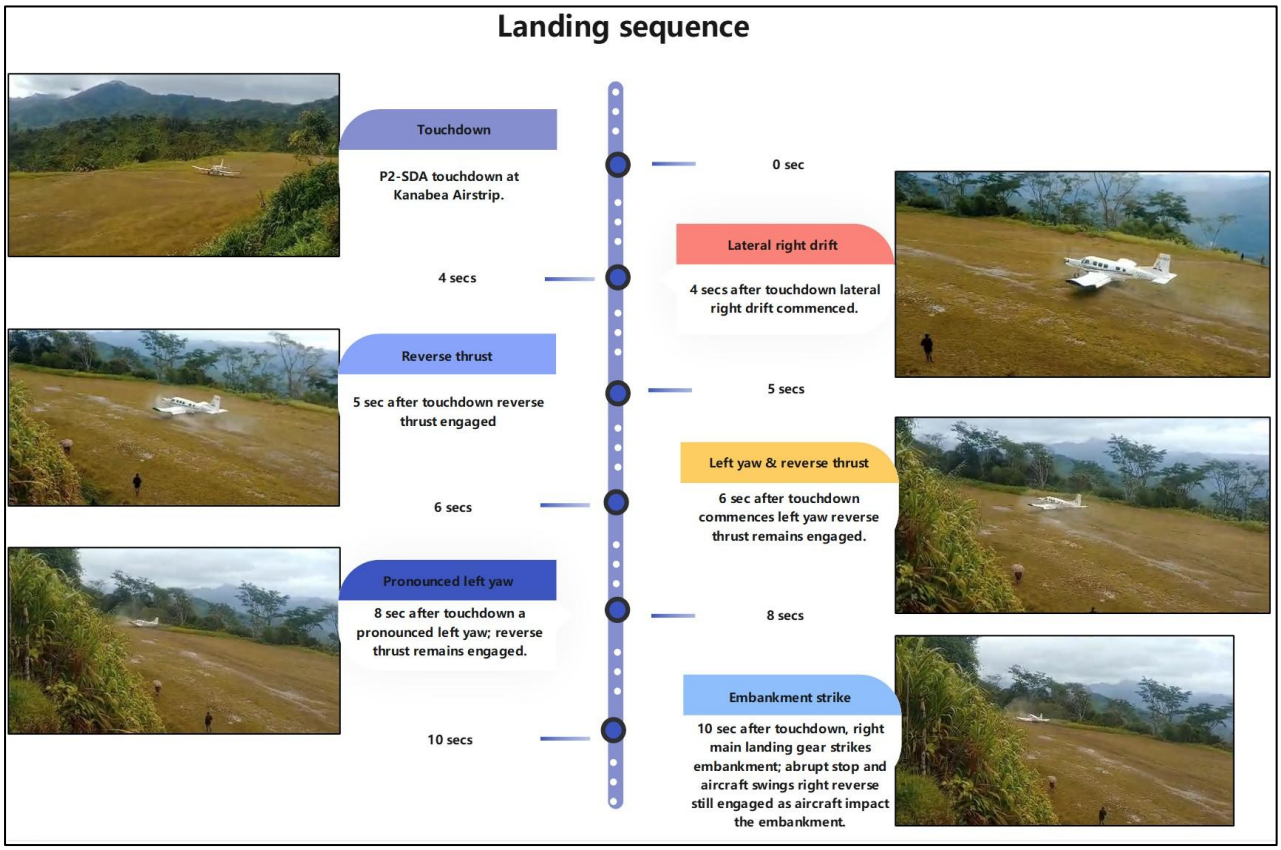

Figure 12:Landing sequence from witness video.

5.3 *V2 Track* Flight Data Plot -Flight Track Direct to Base Leg

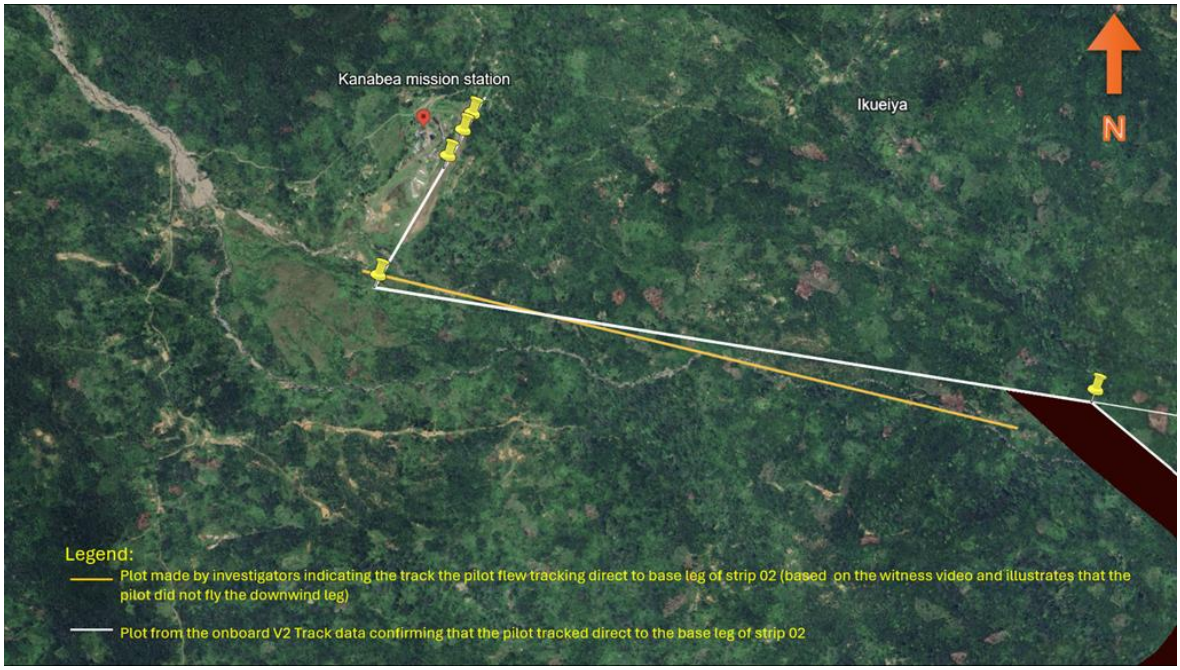

Figure 13:Aircraft Track entering extended base leg.