

AIC Head Office, Level one, NAQIA Haus, Portion 81, Morea Tobo Rd, 6 Mile PO Box 1709, Boroko 111 National Capital District Papua New Guinea Telephone: (675) 327 9000 Facsimile: (675) 323 2139 Email: <u>mwal@aic.gov.pg</u>

Our Ref: AIC 25-R04/24-1002

Safety recommendation: AIC 25-R04/24-1002

Addressed to: Kobio Aviation Limited

Date issued: 25 April 2025

Investigation link: AIC 24-1002

Action status: Issued

Introduction

On 19 October 2024 at 16:05 local time (06:05 UTC), the AIC was notified by NiuSky Pacific about an occurrence that had occurred on the same day at 15:00 local time (05:00 UTC). The occurrence involved a De Havilland Aircraft of Canada Ltd DHC-6-300 Twin Otter aircraft registered P2-KAL, owned by ASHE Aircraft Enterprises Limited, and operated by Kobio Aviation Limited.

The AIC immediately began gathering information pertinent to the occurrence and commenced an investigation into the occurrence.

Occurrence

On 19 October 2024, at 15:00 local time (05:00 UTC), a De Havilland Aircraft of Canada Ltd DHC-6-300 Twin Otter aircraft registered P2-KAL, owned by ASHE Aircraft Enterprises Limited, and operated by Kobio Aviation Limited, was conducting a VFR charter flight from Kairik Airport, Enga Province to Mt. Hagen Airport, Western Highlands Province, Papua New Guinea, when, during the takeoff roll, it experienced a runway excursion and rolled into a drainage ditch which runs along the left side of the runway and impacted the embankment.

Safety deficiency description

According to the Route Guide Manual, Section 2.6.2 "Categorization":

The category of an airport is used for the purpose of determining airport qualification requirements. There are three airport categories—A, B, and C. The categorization is based on the criteria outlined in Chapter 2, Section 2.16 "Airport Categorization." Only primary and alternate airports are categorized.

The Route Guide Manual, Section 2.16.2 "Airport Categorization Criteria," states:

For the purpose of determining the training required by the Pilot-in-Command (PIC) to meet aerodrome approval requirements, airports are categorized in ascending order of difficulty from Category A to Category C. The categories are defined as follows:

Category A airports satisfy all of the following criteria:

- 1. Have a published instrument approach procedure (e.g. LOC, LLZ, ADF, VOR, GPS RNAV)
- 2. Have at least one runway with no performance-limiting procedures for take-off and/or landing
- 3. Have a published circling minimum ceiling no higher than 1,500 feet above airport elevation

Category B airports are those that do not satisfy Category A requirements or require additional considerations, such as:

- 1. Terrain and/or obstructions that abnormally constrain approaches or departures (e.g. turns on approach or departure below 500 ft AGL or greater than 150°)
- 2. Unusual approach or departure procedures
- 3. Known extreme local weather conditions (e.g. turbulence due to surrounding topography)

Category C airports are those that require further considerations beyond those identified for Category B airports.

The operator classified Kairik Airport as a Category C airport. However, the investigation found no recorded data from the operator to verify this classification, as stipulated in Route Guide Manual, Section 2.6.2.

The investigation also found that the pilot ICUS was undergoing command endorsement training on their first day in the left seat, with the accident flight being their first time in command under supervision. Kairik, a Category C aerodrome, classified as the most challenging in the operator's Route Guide Manual, presents additional complexities such as a narrow, sloped runway and minimal infrastructure. Initial command training should begin at simpler aerodromes (Category A or B) to allow pilots transitioning to the left seat to focus on command ability, decision-making, communication, and handling from the left seat, without the added pressure of operational and environmental challenges. Pilots transitioning from the right to the left seat are adjusting to new responsibilities (e.g., ATC communications, aircraft control priority, checklist flow). A simpler aerodrome offers more margin for error during this critical phase—longer runways, better navigation aids, and fewer terrain or wind challenges. Kairik Airport has narrow and sloped runway or minimal infrastructure so introducing these variables too early in a left-seat upgrade could lead to cognitive overload or unsafe situations during the check.

Recommendation number AIC 25-R04/24-1002 to Kobio Aviation Limited

The PNG Accident Investigation Commission recommends that Kobio Aviation Limited implement a phased training approach for pilots undergoing command endorsement, starting with less challenging aerodromes before progressing to Category C aerodromes like Kairik Airport.

Action requested

The AIC requests that Kobio Aviation Limited note recommendation AIC 25-R04/24-1002 and provide a response to the AIC within 90 days of the issue date and explain (including with evidence) how Kobio has addressed the safety deficiency identified in the safety recommendation.

STATUS: ISSUED.

Maryanne J. Wal

Chief Commissioner

28 July 2025

Kobio Aviation Limited's response to Safety Recommendation AIC 25-R04/24-1002

On 4 August 2025, Kobio Aviation Limited provided a response to Safety Recommendation AIC 25-R04/24-1002 via email, accompanied by evidence demonstrating corrective actions taken to address the identified safety deficiencies.

The evidence provided confirmed that Kairik Airport is now classified as a Category B airport, with specified times, fuel requirements, and allowable uplift.

Training and Competency Manual - Section 4.2.2: Endorsement Ground Training

Appendix 14 (Upgrade Training) has been added to the Training and Competency Manual (TCM). The operator has implemented a structured upgrade training program for experienced copilots transitioning to the captain's role. This program addresses technical and operational challenges, including perspective shift, control adaptation, cognitive load, and situational awareness.

Training is conducted under the supervision of experienced captains using a structured approach, including:

- Gradual practice and visual reference adjustments
- Fine motor control exercises
- Debriefs with targeted feedback
- Incremental simulation of operational complexity

Key operational areas reinforced include:

- Clear takeoff briefings
- Precise lineup checks
- Directional control during power application
- Safe use of brakes and reverse thrust on unimproved strips

These measures ensure that trainees develop the competence, confidence, and readiness required for command responsibilities, enhancing overall flight safety.

Route Guide Manual – Section 3: Airport Data (Part C)

Kairik (Pogera) AYKK airport data and fuel burn information has been added to the Route Guide Manual (RGM), and the airport category has been updated to Category B.

The following sections have been removed from the RGM:

- Section 2.16.1(2) Airport Categorization comprising Three Steps (Page 20)
- Section 2 Airport Assessment CFIT Checklist Tables CFIT Checklist (Pages 21–22)

AIC Assessment of Kobio Aviation Limited Response

The AIC has assessed the response provided by Kobio Aviation Limited and notes that the preventative actions taken fully addresse the safety deficiencies identified in the safety recommendation.

The AIC has assigned this response a satisfactory rating.

The AIC has recorded the status of the Safety Recommendation as: CLOSED

Maryanne J. Wal

Chief Commissioner

31 October 2025