SOUTH AFRICAN CIVIL AVIATION AUTHORITY

Section/division **Accident and Incident Investigations Division** Form Number: CA 12-57

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10470						
Classification	Accident	**Date**	06 July 2024		**Time**	1100Z	
Type of Operation	Private (Part 91)						
Location							
Place of Departure	Mossel Bay Airport (FAMO), Western Cape Province	Place of Intended Landing	Mossel Bay Airport (FAMO), Western Cape Province				
Place of Occurrence	On the right of Runway 10 at Mossel Bay Airport (FAMO), Western Cape Province						
GPS Co-ordinates	Latitude	34° 9'36.66"S	Longitude	22° 3'7.29" E	Elevation	531.2 ft	
Aircraft Information							
Registration	ZS-OHB						
Make; Model; S/N	Beechcraft; King Air B90 (Serial Number: LJ-431)						
Damage to Aircraft	Substantial	Total Aircraft Hours	11265.9				
Pilot-in-command							
Licence Type	Private Pilot Licence (PPL) Aeroplane	Gender	Female	Age	61		
Licence Valid	Yes	Total Hours	2828	Total Hours on Type	40.8		
Total Hours 30 Days	18.3	Total Flying on Type Past 90 Days	5.2				
People On-board	2+0	**Injuries**	0	**Fatalities**	0	**Other (on ground)**	0

What Happened

On Saturday, 6 July 2024, a pilot and a co-pilot were engaged in a private skydiving flight on-board a King Air 90B aircraft with registration ZS-OHB. They took off from Mossel Bay Airfield in the Western Cape province with the intention to land at the same airfield. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.

According to the pilots, the intention was to drop off the parachutists and return to the airfield for a full-stop landing. The take-off and drop-off were uneventful. However, whilst on approach for landing on Runway (RWY) 10 with the aircraft's airspeed between 75 and 80 knots (kts) as per the Pilot's Operating Handbook (POH), and the wind blowing lightly (160˚ at 04 kts), the pilot retarded the throttle control (power) below the required power curve. This resulted in the aircraft losing height rapidly, followed by a stall during the final landing phase. The aircraft landed hard, severed the landing gear, skidded on its belly before it veered to the right and into the thick bush and stopped. The aircraft sustained substantial damage to both propellers, landing gears and the underbelly. No person was injured during the accident sequence.

Figure 1: The aircraft came to rest facing north. Inset: The nose wheel gear that broke off. (Source: Owner)

Figure 2: The accident aircraft skid marks on Runway 10 at FAMO. (Source: Owner)

Figure F

CAUTION

For turbulent air penetration, use an airspeed of 161 knots. Avoid over-action on power levers. Turn off autopilot altitude hold. Keep wings level, maintain attitude and avoid use of trim. Do not chase airspeed and altitude. Penetration should be at an altitude which provides adequate maneuvering margins when severe turbulence is encountered.

Maximum Airspeed for Effective Windshield Anti-icing	226 knots
Landing Final Approach (Flaps Down) at 9600 lbs/4354 kg	101 knots
Balked Landing Climb Speed	101 knots
Intentional One-Engine-Inoperative Speed (V_{SSE})	97 knots
Air Minimum Control Speed (V_{MCA})	80 knots

Figure 3: Indicated airspeed (101 knots) for landing with flaps down. (Source: POH)

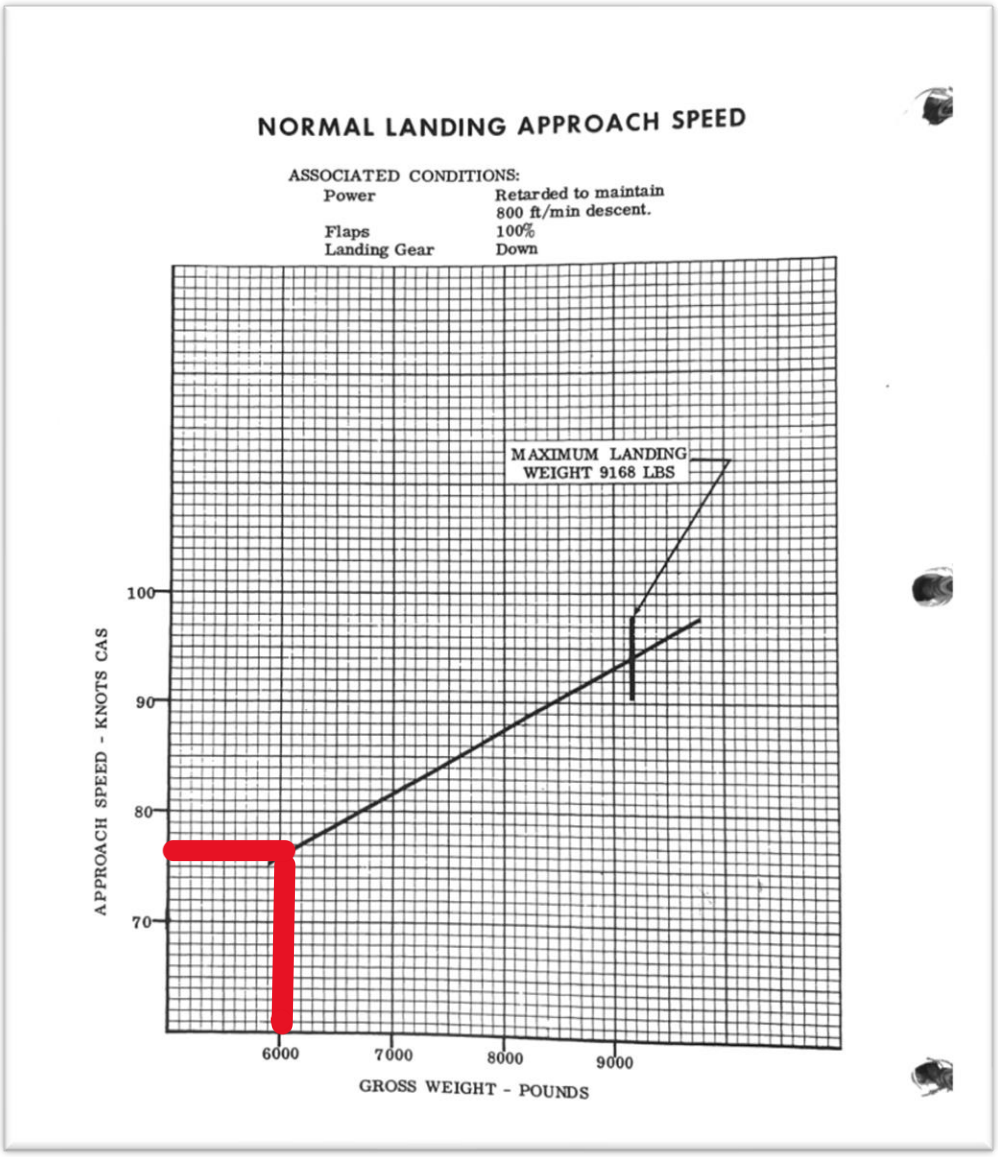
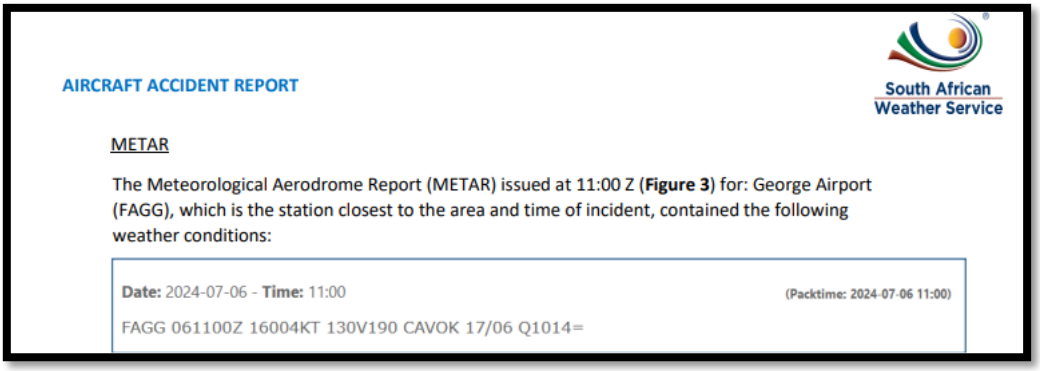


Figure 4: The approach speed changes with weight. At 6000 lb it is 76 knots. (Source: Operator)



AIRCRAFT ACCIDENT REPORT

South African Weather Service

METAR

The Meteorological Aerodrome Report (METAR) issued at 11:00 Z (**Figure 3**) for: George Airport (FAGG), which is the station closest to the area and time of incident, contained the following weather conditions:

Date: 2024-07-06 - **Time:** 11:00 (Packtime: 2024-07-06 11:00)

FAGG 061100Z 16004KT 130V190 CAVOK 17/06 Q1014=

Figure 5: The weather at George Airport, located 18 nautical miles from FAMO, at the time of the accident flight. (Source: SAWS)

On final approach, the aircraft's indicated air speed was between 75 and 80 kts with full flaps down; the wind speed was approximately 160˚ at 04 kts. The pilot reduced power below the required setting and the aircraft stalled before it touched down hard on the runway. The landing gears were severed and, thus, the aircraft skidded before it came to a stop in the bush next to the runway.

Findings

1. Personnel Information

1.1 The pilot had a Private Pilot Licence (PPL) that was initially issued on 5 November 1996. The latest renewed PPL was issued on 16 June 2023 with an expiry date of 31 July 2025.

1.2 The pilot was issued a Class 2 aviation medical certificate on 28 June 2023 with an expiry date of 30 June 2025.

2. Aircraft Information

2.1 The last annual inspection of the aircraft was conducted and certified on 12 December 2023 at 11204.4 airframe hours. The accident occurred at 11265.9 airframe hours; the aircraft was flown a further 61.5 hours since the last inspection. The Certificate of Release to Service (CRS) had an expiry date of 9 December 2024 or at 11404.4 airframe hours, whichever occurs first

2.2 The aircraft had a valid Certificate of Airworthiness (C of A) that was issued by the Regulator on 26 July 2024 with an expiry date of 29 November 2024. The aircraft was airworthy when it was dispatched for the flight.

2.3 The aircraft's Certificate of Registration (C of R) was issued to the present owner on 2 September 2015.

2.4 The Aircraft Maintenance Organisation (AMO) Certificate was issued on 12 December 2023 with an expiry date 30 November 2024.

2.5 On final approach, the aircraft's indicated air speed was between 75 and 80 kts with full flaps down; the wind was approximately 160˚ at 04 knots. The pilot reduced power below the required setting and the aircraft stalled before it touched down hard on the runway. The landing gears were severed and the aircraft skidded before it stopped in the bush next to the runway.

Probable Cause(s)

The aircraft stalled and touched down hard on the runway, which caused failure of the undercarriage; it then skidded and came to a stop in the bush next to the runway.

Contributing Factor(s)

The pilot inadvertently reduced power below the required setting.

Safety Action(s)

None.

Safety Message and/or Safety Recommendation/s

None.

About this Report

The decision to conduct a limited investigation is based on factors including whether the cause is known and the evidence supporting the cause is clear, the level of safety benefit likely to be obtained from an investigation and that will determine the scope of an investigation. For this occurrence, a limited investigation has been conducted, and the Accident and Incident Investigations Division (AIID) has relied on the information submitted by the affected person/s and organisation/s to compile this limited report. The report has been compiled using information supplied in the initial notification, as well as from follow-up desk top enquiries to bring awareness of potential safety issues to the industry in respect of this occurrence, as well as possible safety action/s that the industry might want to consider in preventing a recurrence of a similar occurrence.

All times given in this report are Co-ordinated Universal Time (UTC) and will be denoted by (Z). South African Standard Time is UTC plus 2 hours.

Purpose

In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 2011 and ICAO Annex 13, this report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents and not to apportion blame or liability.

Disclaimer

This report is issued by:

Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa