

**LIMITED SERIOUS INCIDENT INVESTIGATION REPORT**

<b>Reference Number</b>	CA18/3/2/1364						
<b>Classification</b>	Serious Incident	<b>Date</b>	16 August 2021	<b>Time</b>	1350Z		
<b>Type of Operation</b>	Private (Part 91)						
<b>Location</b>							
<b>Place of Departure</b>	Lanseria International Airport (FALA), Gauteng Province		<b>Place of Intended Landing</b>	Ondangwa Airport (OND), Namibia			
<b>Place of Incident</b>	Overhead North West province during climb to flight level 135						
<b>GPS Co-ordinates</b>	<b>Latitude</b>	S 25°20'2.01"	<b>Longitude</b>	E 027°10'24.61"	<b>Elevation</b>	5280ft	
<b>Aircraft Information</b>							
<b>Registration</b>	ZS-JNE						
<b>Model/Make</b>	421C – Cessna Aircraft Company						
<b>Damage to Aircraft</b>	None		<b>Total Aircraft Hours</b>	903			
<b>Pilot-in-command</b>							
<b>Licence Type</b>	Commercial Pilot Licence		<b>Gender</b>	Male	<b>Age</b>	37	
<b>Licence Valid</b>	Yes						
<b>Total Hours on Type</b>	45		<b>Total Flying Hours</b>	500			
<b>People On-board</b>	1 + 0	<b>Injuries</b>	0	<b>Fatalities</b>	0	<b>Other (on ground)</b>	0
<b>What Happened</b>							

On 16 August 2021 at approximately 1350Z, a pilot on-board a Cessna 421C aircraft with registration ZS-JNE was on a private flight from South Africa to Namibia. The aircraft took off from Lanseria International Airport (FALA) in Gauteng province with the intention to land at Ondangwa Airport (OND) in Namibia. The pilot conducted a pre-flight inspection, followed by an uneventful take-off from Runway 07. The aircraft routed via Hartbeespoort area and towards North West province. The flight was conducted during day light under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.

According to the pilot, he noted that the left wing was dropping and was getting worse whilst climbing to 13 500 feet (ft) or flight level (FL) 135. At this time, the aircraft was flying overhead Pilanesberg Airport (FAPN). The pilot declared an emergency by broadcasting a PAN-PAN call and a Mayday call to FALA air traffic control (ATC). The pilot reported his situation and flight position, thereafter, the ATC diverted the pilot to FAPN as the aircraft was in that vicinity. The pilot executed a 270° turn to the right-side to compensate for left-wing low attitude for a stable approach at FAPN. The pilot landed the aircraft safely, and he did not sustain injuries during this flight.



**Figure 1:** The aircraft post-incident with insets of right- and left-wing fuel tanks.

After the aircraft landed safely, the pilot visually checked the fuel in each tank and noted that the left fuel tank had more fuel than the right fuel tank. The pilot further stated that during flight whilst conducting the checklist in the cockpit, he was distracted by an incoming call on his cellular phone, hence, he missed noting that both engines were selected to feed from the right-side fuel tank as he took off. Following the fuel upliftment in the right tank at FAPN, the aircraft took off to its intended destination (Namibia) as planned.

The pilot was issued a Commercial Pilot Licence by the Regulator (South African Civil Aviation Authority) on 18 November 2020 with an expiry date of 30 November 2021. His Class 1 medical certificate was issued by the Regulator on 19 November 2020 with an expiry date of 30 November 2021. The aircraft type was endorsed on his licence.

The aircraft was issued a Certificate of Airworthiness by the Regulator on 17 March 2021 with an expiry date of 31 March 2022. No other anomalies were reported on any of the aircraft components in the logbooks and defect log packs. The aircraft maintenance organisation (AMO) that serviced the aircraft issued the aircraft a Certificate of Release to Service (CRS) on 2 December 2020 at 5073.7 hours which would lapse on 1 December 2021 or at 5185.5 total hours, whichever occurs first.

**Probable Cause:**

The cause of the aircraft flying with the left-wing low was due to an imbalance of fuel in the fuel tanks, which resulted in the left wing dropping because the left fuel tank had more fuel (heavier) than the right tank.

<b>Contributing factor:</b>	
Cellphone distraction whilst engaged in checklist procedures in the cockpit.	
<b>Safety Action</b>	
None.	
<b>Safety Message and/or Safety Recommendation</b>	
Pilots should ensure that there are no distractions such as active mobile phones during operation of aircraft.	
<b>Purpose of the Investigation</b>	
<i>In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 2011, 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 <b>not to apportion blame or liability</b>.</i>	
<b>About this Report</b>	
<i>Decisions regarding whether to investigate, and the scope of an investigation are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, no 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 brief report. The report has been compiled using information supplied in the initial notification, as well as follow-up information 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 accident.</i>	
<i>This report provides an opportunity to share safety message/s in the absence of an investigation.</i>	
<i>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.</i>	
<b>Disclaimer</b>	
<i>This report is produced without prejudice to the rights of the AIID, which are reserved.</i>	

**This report is issued by:**

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