

**LIMITED SERIOUS INCIDENT INVESTIGATION**

<b>Reference Number</b>	CA18/3/2/1360						
<b>Classification</b>	Serious Incident	<b>Date</b>	4 August 2021	<b>Time</b>	0912Z		
<b>Type of Operation</b>	Private (Part 94)						
<b>Location</b>							
Place of Departure	Krugersdorp Airfield (FAKR)		Place of Intended Landing	Robertson Airfield (FARS)			
Place of Incident	Karoo Gateway, Beaufort West Airfield (FABW), Western Cape						
GPS Co-ordinates	Latitude	32°16'55" S	Longitude	22°36'53" E	Elevation	2 938 ft	
<b>Aircraft Information</b>							
Registration	ZU-ITC						
Model/Make	Piper Super Cub						
Damage to Aircraft	None		Total Aircraft Hours	10 651.8 hours			
<b>Pilot-in-command</b>							
Licence Type	Private Pilot Licence (PPL)	Gender	Male		Age 60		
Licence Valid	Yes						
Total Hours on Type	10.1 hours		Total Flying Hours	1756.6 hours			
People On-board	1+1	Injuries	0	Fatalities	0	Other (on ground)	0
<b>What Happened</b>							
<p>On 4 August 2021 at about 0912Z, a pilot accompanied by a passenger on-board a Piper Cub aircraft with registration ZU-ITC was engaged in a repositioning flight from Krugersdorp Airfield (FAKR), Gauteng province, with the intention to route via Welkom Airfield (FAWM), Tempe Airfield (FATP) and Beaufort West Airfield (FABW) now called Karoo Gateway (for refueling purposes), before heading to Robertson Airfield (FARS). Clear weather conditions prevailed at the time leading to the serious incident.</p> <p>According to available information, FABW had issued a notice to airmen (NOTAM) that the Aerodrome Flight Information Service (AFIS) system was not operational and that Runway 12 (which is a gravel runway) was prohibited for all aircraft landing due to maintenance undertakings. However, normal operations were allowed on all other runways. The pilot stated that he was aware of the NOTAM at FABW.</p>							

The aircraft was issued the proving flight Authority to Fly on 19 July 2021 by the Regulator (South African Civil Aviation Authority). A special flight permit was also issued on 28 July 2021 with an expiry date of 11 August 2021.

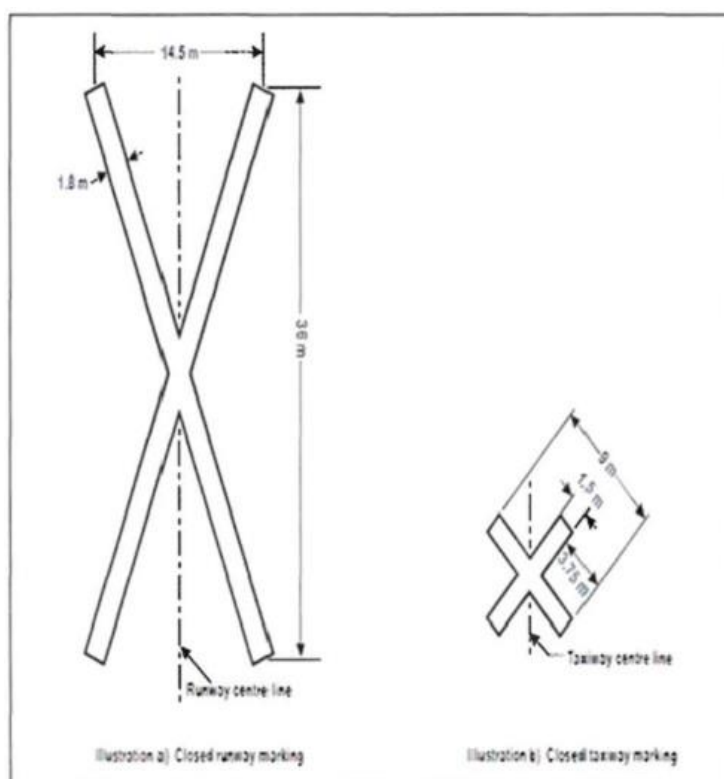
The pilot stated that during approach at FABW, he called Karoo Radio on 125.60-Megahertz (MHz) to establish contact before entering the control zone to inform them of his intended landing and fuel requirements. However, there was no reply on this frequency. The pilot changed frequency to 124.4 MHz, which is the general flying area frequency, to listen out for any traffic in the area. The pilot then asked the passenger (who is also a pilot) to telephone the tower and inform them of their intention, but to no avail. A portable radio that was on-board the aircraft was also used to make contact with the tower, but this was also without success.

The pilot then followed a normal unmanned joining procedure on Runway (RWY) 03. Instead of joining at 2 000 feet (ft), he joined at 3 000ft to have an added safety margin while searching for other traffic on the circuit. One aircraft was identified in the circuit and the pilot could hear their communication on his radio. The pilot made a descent to circuit height level for landing on RWY 03. He stated that RWY 03 was best suited as the wind was favouring that runway. During final approach and after establishing communication with success, the pilot was advised on frequency 125.60 MHz to go around. The pilot did a go-around and, thereafter, was advised not to land on RWY 03 but on any of the other runways. The pilot positioned the aircraft for landing on RWY 35 whereupon a successful landing was achieved. The pilot stated that there was no marking or signage to indicate that RWY 03 was closed.

*South African Civil Aviation Technical Standards (SACATS) Part 139.02.23 12: Closed runways and taxiways, or parts thereof*

- (1) *An aerodrome licence holder shall develop and maintain a procedure to prevent an aircraft entering temporary or permanently closed runways and taxiways –*
  - (a) *closed marking shall be displayed on a runway or taxiway or portion thereof which is temporary/permanently closed to the use of all aircraft;*
  - (b) *on a runway a closed marking shall be placed at each end of the runway, or portion thereof, declared closed, and additional markings shall be so placed that the maximum interval between markings does not exceed 300 m; and*
  - (c) *on a taxiway a closed marking shall be placed at least at each end of the taxiway or portion thereof.*
- (2) *The closed marking shall be of the form and proportion detailed in Diagram 1 when displayed on a runway and on a taxiway.*
- (3) *The marking shall be white when displayed on a runway and shall be yellow when displayed on a taxiway.*
- (4) *When a runway or taxiway or portion thereof is permanently closed, all normal runway and taxiway markings shall be obliterated.*

- (5) Lighting on a closed runway or taxiway or portion thereof shall not be operated, except as required for maintenance purposes.
- (6) In addition to closed markings, when the runway or taxiway or portion thereof closed is intercepted by a usable runway or taxiway which is used at night, unserviceability lights shall be placed across the entrance to the closed area at intervals not exceeding 3m.



**Diagram 1:** Closed runway and taxiway markings.

After shutdown, the pilot made his way to the tower and explained that he had radio problems. The pilot was advised to get the radio checked by a local technician. During troubleshooting, it was found that the headset connection jack had corroded. The headset jack was cleaned and, thereafter, connection was restored for normal radio calls. The aircraft was refueled and, later, the pilot and the passenger departed for FARS where the aircraft landed safely.

#### **Probable cause**

An attempt to land on a closed (inoperative) runway because of intermittent radio transmission and non-availability of signage (on the closed runway).

#### **Contributory factor**

According to the Civil Aviation Regulations (CAR) Part 139.02.23 read together with SA-CATS Part 139.02.23 12, it is a requirement that an X signage/mark, which is visible during the day and lit up at night, be placed on a closed runway.

<b>Safety Action/s</b>	
None.	
<b>Safety Recommendation</b>	
It is recommended to the airfield management to put a signage on the closed runway/s, which should be visible from the air to warn/alert pilots in line with the requirements of SA-CATS Part 139.02.23.12	
<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>	
<p><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></p> <p><i>This report provides an opportunity to share safety message/s in the absence of an investigation.</i></p> <p><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></p>	
<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**