

ACCIDENT

Aircraft Type and Registration:	Jodel D120 Paris-Nice, G-BKCW	
No & Type of Engines:	1 Continental Motors Corp C90-14F piston engine	
Year of Manufacture:	1965 (Serial no: 285)	
Date & Time (UTC):	19 June 2019 at 1100 hrs	
Location:	Perth Aerodrome, Perth and Kinross	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to landing gear, propeller, left wing skin and woodwork	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	34 years	
Commander's Flying Experience:	72 hours (of which 10 were on type) Last 90 days - 9 hours Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

During the takeoff from Runway 27, the engine lost power but the pilot managed to climb to 2,400 ft aal. He carried out performance checks, which appeared normal, and returned to the airfield circuit where, once again, power reduced. He turned onto the final approach but, at about 10 ft above the runway, power increased, the aircraft yawed left and, because the pilot was applying right rudder as the aircraft touched down, it departed the right side of the runway.

History of the flight

The weather for the intended flight from Perth to Kingsmuir was good with a surface wind at Perth of 240° at 10 kt, visibility greater than 10 km, clouds FEW at 3,200 ft, OAT +18°C and dew point +12°C, QNH 1006 hPa and 70% humidity. The aircraft started normally, and all the checks were carried out before taxiing to a position just short of holding point Charlie. There was a delay of twenty minutes due to other traffic, during which carburettor heat was selected ON. Once cleared for departure, the carburettor heat was selected OFF and the aircraft entered Runway 27 for departure.

Full power was selected and the aircraft accelerated normally, lifting off at about 45-50 kt. With the aircraft less than 5 ft above the runway, engine rpm reduced and the airspeed decreased. The aircraft drifted left which meant the pilot was unable to abandon the

take off due to other aircraft on the adjacent taxiway Charlie. He set a level attitude and the aircraft accelerated and gradually climbed to 1,000 ft where the engine performance recovered. The climb was continued to 2,400 feet aal, and the aircraft was flown in an orbit to the southwest of the airfield to confirm normal engine operation and that all checks had been correctly completed. The pilot decided to return to Perth to carry out a precautionary landing and joined the circuit at 1,000 feet aal to land on Runway 21.

The engine performance reduced again and it was difficult to maintain height, but the aircraft was positioned onto short finals for Runway 21 and the engine set to idle power. At approximately 10 ft above the runway, engine rpm increased and the aircraft yawed left. The pilot attempted to correct the left yaw by applying right rudder, at which point the aircraft touched down and veered right. It departed the right side of the runway and the landing gear collapsed, which caused the propeller to strike the ground before the aircraft came to rest. The pilot switched off the fuel and electrical power before leaving the aircraft.

Analysis

The temperature of 18°C combined with a dew point of 12°C and 70% humidity meant there was a high possibility of carburettor icing at low power settings. The pilot considered that even using carburettor heating during the 20 minutes holding may not have prevented carburettor icing during the take off in the prevailing conditions. Icing was also a possible reason for the power reduction in the circuit. He thought that increasing power occasionally while holding might have been beneficial. Also, with the reduced and unreliable engine performance, positioning for a glide approach might have been a better option.

Bulletin Correction

In the Synopsis and the first paragraph of the History of Flight the report incorrectly states that the pilot took off from Runway 21, this should have read Runway 27.

The online version of this report was amended prior to publication on the 14 November 2019.