AAIB Bulletin:6/2022	G-BTFT	AAIB-27767
ACCIDENT		
Aircraft Type and Registration:	Beech 58, G-BTFT	
No & Type of Engines:	2 Continental Motors Corp IO-520-CB piston engines	
Year of Manufacture:	1979 (Serial no: TH-979)	
Date & Time (UTC):	14 October 2021 at 0800 hrs	
Location:	Rochester Airport, Kent	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	All propeller blades bent, flap trailing edges distorted and underside of the aircraft fuselage buckled	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	66 years	
Commander's Flying Experience:	1,136 hours (of which 540 were on type) Last 90 days - 3 hours Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot and enquiries made by the AAIB	

Synopsis

The aircraft had flown from Thruxton to Rochester where it landed with its landing gear retracted. All the blades on both propellers were bent and the underside of the fuselage and trailing edges of the flaps were distorted. The pilot and passenger were uninjured. It is not known why the landing gear had not extended.

History of the flight

The aircraft had been flown from Thruxton to Rochester Airport. The pilot called ahead and requested joining instructions with approximately 10 miles to run. Approximately seven minutes later the pilot advised that he was unable to see the airfield but then, four minutes after that, he reported downwind. Soon after, the aircraft was observed turning onto finals. A message was passed to the pilot with wind information and authorising landing, at his discretion, on Runway 20. The aircraft landed and an airport staff witness, who was watching the landing, described it as "smooth", but they "suddenly" noticed the aircraft had landed 'wheels up' and was now sliding to a stop on the runway. An emergency response was initiated, the aircraft was made safe, and the pilot and passenger vacated without injury. All of the blades on both propellers were found bent, the underside of the fuselage was distorted and buckled and both flap trailing edges were damaged.

Discussion

The pilot reported that he could not state exactly why the gear did not extend as he believed it was selected with the flaps downwind. All the landing gear doors were found closed and flush with their surrounding structure prior to the aircraft recovery from the runway. During recovery, the landing gear had to be extended manually as it did not respond to normal selection when power was applied. Later examination by a maintenance organisation found that structural distortion sustained during the landing may have initially prevented the landing gear from lowering correctly after the recovery from the runway. However, after further examination and a 'release' of the distortion, the landing gear was found to operate and indicate correctly.

AAIB Observations

The radio calls and the pilot's initial difficulty in spotting the runway suggest that the pilot may have been concentrating on orientating himself and finding the airfield, distracting him from establishing the aircraft in the circuit. The pilot stated that he believed he did select the landing gear down, supported by the landing gear selector being found in the DOWN position. However, he did not state that he confirmed three green down and locked indicator lights and the movement of the landing gear selector is not dependent on mechanical movement of the landing gear. It is possible that his checks were done in haste, as suggested by the late downwind call and turn on to finals very shortly after, and this may have precluded a complete confirmation of the landing gear status.

Conclusions

It appears that several contributory factors may have combined to cause the aircraft to land with its landing gear retracted. A transient landing gear technical fault, which prevented extension if DOWN was selected, cannot be ruled out.

© Crown copyright 2022