

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Bulldog Series 120 Model 1210, G-BHXB	
<b>No &amp; Type of Engines:</b>	1 Lycoming IO-360-A1B6 piston engine	
<b>Year of Manufacture:</b>	1980 (Serial no: BH120/408)	
<b>Date &amp; Time (UTC):</b>	24 September 2017 at 1550 hrs	
<b>Location:</b>	Embelton, Northumberland	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Damage to propeller, engine, nose landing gear, engine cowling and fuselage.	
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence	
<b>Commander's Age:</b>	55 years	
<b>Commander's Flying Experience:</b>	18,758 hours (of which 6 were on type) Last 90 days - 198 hours Last 28 days - 68 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and additional enquiries made by the AAIB	

Prior to his departure from Eshott, Northumberland on a test flight, following a prolonged period of engine maintenance, the pilot visually confirmed that he had sufficient fuel for 2 hours and 45 minutes. However, at 2,500 ft amsl, having been airborne for approximately 1 hour and 35 minutes, the engine lost power and, despite repeated attempts, could not be restarted. During this time, the pilot confirmed that all engine controls, fuel and ignition selections were correct and noted that each fuel tank had indicated 1/3 full.

The pilot, wearing a full harness, was uninjured during the subsequent forced landing, but the aircraft sustained damage to the nose landing gear, engine and propeller.

The pilot reported that the engineering organisation, who attended the accident site to recover the aircraft, confirmed that the fuel tanks had run dry. He considered that, as the flight involved running in the engine at various power settings and durations, the fuel depleted more quickly than he had calculated. The aircraft was not fitted with a fuel flow meter.

**Safety message**

The UK CAA's publication CAP1535, *The Skyway Code*, published in September 2017 details the importance of having a good working knowledge of your aircraft's fuel burn at different power settings, as well as warning that the fuel gauges in most types of General Aviation aircraft are not very accurate and should not be considered a reliable indicator of fuel level.