

ACCIDENT

Aircraft Type and Registration:	Parrot (UAS, registration n/a)	
No & Type of Engines:	2 electric motors	
Year of Manufacture:	Unknown (Serial no: D000316)	
Date & Time (UTC):	6 August 2019 at 1557 hrs	
Location:	Industrial Road, Halifax, Yorkshire	
Type of Flight:	Aerial Work	
Persons on Board:	Crew - N/A	Passengers - N/A
Injuries:	Crew - N/A	Passengers - N/A
Nature of Damage:	Damage to propellers and camera mount	
Commander's Licence:	Other	
Commander's Age:	36 years	
Commander's Flying Experience:	22 hours (of which 6 were on type) Last 90 days - 5 hours Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The UAS was being operated by the emergency services in response to a serious incident requiring an urgent search for a missing person along a canal path. An elevated position in a small, quietly populated cul-de sac was chosen from which to operate the UAS, with a good line of sight visibility of the search area. The weather was good, clear and sunny with a wind of about 14 kt, gusting 28 kt and an OAT of 22°C. There were no pedestrians in the operating area and no vehicular traffic.

The UAS made a normal takeoff and responded correctly to the control inputs made by the operator. It was manoeuvred towards the canal area at an altitude of about 60 m, continuing to respond correctly to the control inputs. It was brought to a hover for the operator to survey the general area and select a suitable flight area to clear the canal towpath.

Whilst surveying the area, and approximately 45 seconds into the flight, the operator experienced vibrations from the UAS which were evident in the camera image feed. The operator performed a 360° turn of the UAS in order to check control, which was effective. However, seconds later, control inputs did not have the desired or expected response from the UAS. It continued to vibrate heavily and began to move erratically and manoeuvre itself without control inputs. With the UAS facing away from him, the operator attempted to manoeuvre it backwards towards him, but it flipped uncontrollably resulting in an uncontrolled descent, impacting a small residential street. The total flight time was 1 minute and 21 seconds. There were no injuries to persons or damage to property on the ground, but the UAS suffered extensive damage. No cause for the loss of control was identified.