ACCIDENT

Aircraft Type and Registration:	DJI Inspire 2	
No & Type of Engines:	4 Electric Motors	
Year of Manufacture:	2017 (Serial no: 095XDAX00201KM)	
Date & Time (UTC):	20 July 2021 at 0825 hrs	
Location:	Brighton, East Sussex	
Type of Flight:	Commercial Operations (UAS)	
Persons on Board:	Crew - None	Passengers - None
Injuries:	Crew - N/A	Passengers - N/A
Nature of Damage:	Extensive damage to propellers, camera gimbal and arms	
Commander's Licence:	Other	
Commander's Age:	51 years	
Commander's Flying Experience:	160 hours (of which 85 were on type) Last 90 days - not known Last 28 days - not known	
Information Source:	Aircraft Accident Report Form submitted by the pilot and enquiries made by the AAIB	

Synopsis

The UA was being flown under contract to carry out aerial camera work around a tall tower structure of a seaside tourist attraction in Brighton. The UA had flown several times around and over the top of the tower up to approximately 600 ft agl. It had completed a shot directly above the tower when contact with the controller was lost. It then descended and hit the top of the tower. Its descent appeared to be under control, but the UA failed to respond to any flight commands. The flight data recorded a loss of link, but the technical cause of the loss of control of the UA could not be determined.

History of the flight

The UA was being flown under contract to carry out aerial camera work around a tall tower structure of a seaside tourist attraction in Brighton. The UA operator was positioned on the ground several metres away from the base of the tower and had direct line of sight of the UA.

The UA had flown several times around and over the top of the tower up to approximately 600 ft agl. It had completed a top-down shot directly above the tower when contact with the operator was lost. It descended out of line of sight and did not respond or engage its fail safe 'return to home command'. It landed directly on top of the tower within a platform described as a "crow's nest" but did not descend to the ground. During its landing it sustained

substantial damage to its airframe, propellers, and camera gimbal. The UA did not cause any damage to the tower structure and was recovered manually.

There was no indication of power loss or of a propulsion system failure of the UAS. Up until when contact with the operator was lost the UA was responding normally, and there were no indications of any technical issues. The apparent controlled descent and movement of the UA, and its failure to engage its return home feature before striking the tower, could not be explained and was only recorded as a loss of link in the flight data.