

ACCIDENT

Aircraft Type and Registration:	DJI Phantom 4 Pro, (UAS Registration n/a)	
No & Type of Engines:	4 electric motors	
Year of Manufacture:	2018 (Serial no: OAXDDAF0A20120)	
Date & Time (UTC):	15 September 2019 at 1845 hrs	
Location:	Mangersta Stacks, Isle of Lewis	
Type of Flight:	Aerial Work	
Persons on Board:	Crew - N/A	Passengers - N/A
Injuries:	Crew - N/A	Passengers - N/A
Nature of Damage:	Lost at sea	
Commander's Licence:	Other	
Commander's Age:	38 years	
Commander's Flying Experience:	67 hours (of which 67 were on type) Last 90 days - 31 hours Last 28 days - 9 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The UAS was flown at Mangersta Sea Stacks¹, Isle of Lewis in order to capture cinematic shots for a television series. The electronic flight log showed that the UAS was travelling at 6.5 mph at the last recorded data point. Whilst the UAS was being flown near to the Sea Stack, it either drifted or was flown too close to the feature before it struck the Sea Stack and then fell into the sea below it.

The UAS pilot stated that the accident happened very quickly. He and the observer did not know exactly what had happened, but the last recorded images showed the sea stack coming into view before the image recording ended, with the UAS flying sideways towards it. The flight log did not show any errors and there was no suggestion of a technical failure. The obstacle avoidance system did not detect the stack, give warning of an imminent impact or automatically avoid the stack. Prior to impact, the UAS had been holding its position adequately in the air in wind speeds of up to 8 m/s (15.5 kt). The UAS was not recovered so the cause could not be determined.

Footnote

¹ A sea stack is a geological landform consisting of a steep and often vertical column of rock in the sea near a coast, formed by wave erosion.