

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	UAVE Prion Mk 3 (UAS, registration n/a)	
<b>No &amp; Type of Engines:</b>	1 four stroke piston engine	
<b>Year of Manufacture:</b>	2019 (s/n 3-0007)	
<b>Date &amp; Time (UTC):</b>	18 November 2019 at 1417 hrs	
<b>Location:</b>	West Wales Airfield, Aberporth	
<b>Type of Flight:</b>	Aerial Work	
<b>Persons on Board:</b>	Crew - N/A	Passengers - N/A
<b>Injuries:</b>	Crew - N/A	Passengers - N/A
<b>Nature of Damage:</b>	Front and rear landing gear, tail boom and propeller damaged beyond repair	
<b>Commander's Licence:</b>	N/A	
<b>Commander's Age:</b>	37 years	
<b>Commander's Flying Experience:</b>	50 hours (of which 10 were on type) Last 90 days - 17 hours Last 28 days - 10 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

During an autonomous landing at a secure airfield without public access, the UAS was in a left turn to line up on the final approach path. The autopilot was programmed to control airspeed with power and glideslope with pitch, so when the UAS started to accelerate and descend below the predetermined descent profile, the power reduced to slow it and elevator was used to pitch the UAS up. However, there was a limit to the amount of elevator the autopilot could command, which was insufficient to return the UAS back to the desired altitude, resulting in it flying into the ground just short of the runway.

Following an investigation by the manufacturer (and operator) of the UAS, the autopilot's elevator authority has been increased, and the pre-programmed turn onto finals widened and raised to reduce the amount of elevator required during the approach to land.