





7 June 2022

Background information

- On the 10 September 2021 during a routine flight near the A358, a DJI Matrice M300 RTK drone encountered a sudden unexplained mid-air issue, resulting in an uncontrolled ground impact – see <u>Safety Alert NHa270</u>, which resulted in the drone model being suspended from operation.
- The Company's Drone Governance Hub (DGH) have been working alongside several entities to investigate the incident including:
 - · The drone manufacturer DJI
 - The UK Air Accidents Investigation Branch (AAIB)
 - The UAS Operator and the schemes' Activity Manager
- Our collective interactions have ultimately resulted in several updates being made available by the manufacturer, and the AAIB, including this incident alongside others, involving the same model in their <u>Air accident monthly bulletin (March 2022)</u> for general distribution.
- Related software updates are available for download from the manufacturer and firmware updates have been pushed out to all handsets as of 10 May 2022. Also, associated hardware improvements are fitted as standard on the DJI Matrice M300 RTK as of 1 January 2022. Any model purchased prior to this date will need to be returned to the drone manufacturer for retrofit.



Lessons Learnt

Activities using the DJI Matrice M300 may recommence providing the following actions have been undertaken and evidenced:

- All DJI Matrice M300 models have the updated hardware (collar locks) fitted and the manufacturer instructions on their use implemented
- DJI flight software has been updated to the latest available version
- DJI Matrice M300 RTK is using the latest version of the firmware
- Pictorial (dated) evidence of the above has been provided to the Drones Governance Hub within the GG 104 documentation
- GG 104 provided/updated to included the risks and mitigations in place to prevent this kind of incident occurring again to the DGH

National Highways

